Analysis of Variance for Doe Morning

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## Working with Doe Morning that has three sheet

# Import the three sheet as a list into R

# Respiratory rate

# Fit the first model for Respiratory Rate

## [1] "---- RESPRT1 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 145.449 29.090 6.4972 0.0005953 \*\*\*  
## THIregime 1 61.759 61.759 13.7939 0.0010817 \*\*   
## Colour:THIregime 5 11.086 2.217 0.4952 0.7766098   
## Residuals 24 107.455 4.477   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.477273   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.29876 2.1954201 6 48 52.61847  
## BLK 52.81902 2.8176309 6 48 55.76982  
## BRN 56.23474 0.7877978 6 55 57.14853  
## WHT 51.12569 2.5575881 6 48 54.27368  
## WT/BLK 54.68919 3.7316019 6 48 57.84547  
## WT/BR 53.35795 1.4880461 6 52 54.77896  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.777252   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.23474 a  
## WT/BLK 54.68919 ab  
## WT/BR 53.35795 abc  
## BLK 52.81902 abc  
## WHT 51.12569 bc  
## BL/BR 50.29876 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.477273   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.39734 2.012881 18 51.90411 57.84547  
## MornLow 51.77778 3.387790 18 48.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.455707   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.39734 a  
## MornLow 51.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.477273 24 53.08756 3.985786 6.229342  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.26419 0.35721374 3 51.90411 52.61847 52.08706 52.27000  
## BL/BR:MornLow 48.33333 0.57735027 3 48.00000 49.00000 48.00000 48.00000  
## BLK:MornHigh 53.97137 1.87896777 3 52.02110 55.76982 53.07215 54.12321  
## BLK:MornLow 51.66667 3.51188458 3 48.00000 55.00000 50.00000 52.00000  
## BRN:MornHigh 56.46947 0.62149950 3 55.92890 57.14853 56.12994 56.33098  
## BRN:MornLow 56.00000 1.00000000 3 55.00000 57.00000 55.50000 56.00000  
## WHT:MornHigh 52.91804 1.17568424 3 52.17776 54.27368 52.24021 52.30267  
## WHT:MornLow 49.33333 2.30940108 3 48.00000 52.00000 48.00000 48.00000  
## WT/BLK:MornHigh 56.04506 2.82200633 3 52.79270 57.84547 55.14485 57.49700  
## WT/BLK:MornLow 53.33333 4.61880215 3 48.00000 56.00000 52.00000 56.00000  
## WT/BR:MornHigh 54.71590 0.06001307 3 54.65949 54.77896 54.68438 54.70927  
## WT/BR:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 52.44423  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 54.94651  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.73976  
## BRN:MornLow 56.50000  
## WHT:MornHigh 53.28818  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 57.67123  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 54.74411  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.46947 a  
## WT/BLK:MornHigh 56.04506 a  
## BRN:MornLow 56.00000 a  
## WT/BR:MornHigh 54.71590 ab  
## BLK:MornHigh 53.97137 abc  
## WT/BLK:MornLow 53.33333 abc  
## WHT:MornHigh 52.91804 abc  
## BL/BR:MornHigh 52.26419 abc  
## WT/BR:MornLow 52.00000 abc  
## BLK:MornLow 51.66667 abc  
## WHT:MornLow 49.33333 bc  
## BL/BR:MornLow 48.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT2 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 92.598 18.520 5.8352 0.001156 \*\*  
## THIregime 1 40.857 40.857 12.8732 0.001481 \*\*  
## Colour:THIregime 5 8.869 1.774 0.5589 0.730277   
## Residuals 24 76.171 3.174   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.173793   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.27390 2.0137755 6 48.00000 53.70743  
## BLK 52.46700 1.4926746 6 50.00000 53.96255  
## BRN 55.99745 0.1154127 6 55.80828 56.17283  
## WHT 52.00214 2.2121005 6 48.00000 54.09945  
## WT/BLK 51.52703 3.1060073 6 46.00000 54.36080  
## WT/BR 51.79108 2.0837475 6 48.00000 53.73356  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.180229   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.99745 a  
## BLK 52.46700 b  
## WHT 52.00214 b  
## WT/BR 51.79108 b  
## WT/BLK 51.52703 b  
## BL/BR 51.27390 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.173793   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.57509 1.593998 18 50.44055 56.17283  
## MornLow 51.44444 2.812205 18 46.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.225621   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.57509 a  
## MornLow 51.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.173793 24 52.50977 3.392729 5.244749  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.54781 1.1268299 3 51.45691 53.70743 51.96800 52.47908  
## BL/BR:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## BLK:MornHigh 53.60067 0.6174450 3 52.88774 53.96255 53.41973 53.95173  
## BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BRN:MornHigh 55.99489 0.1824298 3 55.80828 56.17283 55.90592 56.00357  
## BRN:MornLow 56.00000 0.0000000 3 56.00000 56.00000 56.00000 56.00000  
## WHT:MornHigh 53.33761 1.2448692 3 51.90104 54.09945 52.95668 54.01233  
## WHT:MornLow 50.66667 2.3094011 3 48.00000 52.00000 50.00000 52.00000  
## WT/BLK:MornHigh 53.05405 2.2633574 3 50.44055 54.36080 52.40068 54.36080  
## WT/BLK:MornLow 50.00000 3.4641016 3 46.00000 52.00000 49.00000 52.00000  
## WT/BR:MornHigh 52.91549 1.3148236 3 51.39883 53.73356 52.50646 53.61409  
## WT/BR:MornLow 50.66667 2.3094011 3 48.00000 52.00000 50.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.09325  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.95714  
## BLK:MornLow 52.00000  
## BRN:MornHigh 56.08820  
## BRN:MornLow 56.00000  
## WHT:MornHigh 54.05589  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.67382  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornLow 56.00000 a  
## BRN:MornHigh 55.99489 a  
## BLK:MornHigh 53.60067 ab  
## WHT:MornHigh 53.33761 ab  
## WT/BLK:MornHigh 53.05405 ab  
## WT/BR:MornHigh 52.91549 ab  
## BL/BR:MornHigh 52.54781 ab  
## BLK:MornLow 51.33333 ab  
## WHT:MornLow 50.66667 b  
## WT/BR:MornLow 50.66667 b  
## BL/BR:MornLow 50.00000 b  
## WT/BLK:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT3 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 33.476 6.695 1.1139 0.379333   
## THIregime 1 61.760 61.760 10.2755 0.003789 \*\*  
## Colour:THIregime 5 4.578 0.916 0.1523 0.977314   
## Residuals 24 144.250 6.010   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 6.010401   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.80864 2.205950 6 48 54.09945  
## BLK 53.34675 2.750632 6 49 56.33280  
## BRN 54.46585 1.748970 6 52 56.59099  
## WHT 51.65955 3.082691 6 46 54.49148  
## WT/BLK 52.45566 2.675036 6 48 55.40620  
## WT/BR 53.12232 3.157171 6 48 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.376439   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 54.46585 a  
## BLK 53.34675 a  
## WT/BR 53.12232 a  
## WT/BLK 52.45566 a  
## BL/BR 51.80864 a  
## WHT 51.65955 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 6.010401   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.11959 1.605208 18 51.16311 56.59099  
## MornLow 51.50000 2.854305 18 46.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.686626   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.11959 a  
## MornLow 51.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 6.010401 24 52.80979 4.642343 7.217506  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.28394 1.141332 3 51.97961 54.09945 52.87619 53.77276  
## BL/BR:MornLow 50.33333 2.081666 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 54.36016 1.870984 3 52.61089 56.33280 53.37384 54.13679  
## BLK:MornLow 52.33333 3.511885 3 49.00000 56.00000 50.50000 52.00000  
## BRN:MornHigh 55.26503 1.182305 3 54.32059 56.59099 54.60205 54.88350  
## BRN:MornLow 53.66667 2.081666 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 53.31910 1.869530 3 51.16311 54.49148 52.73291 54.30272  
## WHT:MornLow 50.00000 3.464102 3 46.00000 52.00000 49.00000 52.00000  
## WT/BLK:MornHigh 54.24464 1.718945 3 52.27000 55.40620 53.66387 55.05773  
## WT/BLK:MornLow 50.66667 2.309401 3 48.00000 52.00000 50.00000 52.00000  
## WT/BR:MornHigh 54.24464 2.267266 3 51.92153 56.45160 53.14117 54.36080  
## WT/BR:MornLow 52.00000 4.000000 3 48.00000 56.00000 50.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.93611  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 55.23480  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.73724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 54.39710  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 55.23197  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 55.40620  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.26503 a  
## BLK:MornHigh 54.36016 a  
## WT/BLK:MornHigh 54.24464 a  
## WT/BR:MornHigh 54.24464 a  
## BRN:MornLow 53.66667 a  
## WHT:MornHigh 53.31910 a  
## BL/BR:MornHigh 53.28394 a  
## BLK:MornLow 52.33333 a  
## WT/BR:MornLow 52.00000 a  
## WT/BLK:MornLow 50.66667 a  
## BL/BR:MornLow 50.33333 a  
## WHT:MornLow 50.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT4 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 62.000 12.400 3.4611 0.017003 \*   
## THIregime 1 50.508 50.508 14.0976 0.000977 \*\*\*  
## Colour:THIregime 5 5.858 1.172 0.3270 0.891681   
## Residuals 24 85.985 3.583   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.582723   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.95783 2.722421 6 48 55.58043  
## BLK 54.19879 1.915130 6 52 56.51978  
## BRN 54.40158 2.027603 6 52 56.89388  
## WHT 51.49278 2.690677 6 47 54.47696  
## WT/BLK 51.46895 2.239664 6 48 54.36080  
## WT/BR 54.58694 1.011870 6 53 55.75467  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.378904   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 54.58694 a  
## BRN 54.40158 a  
## BLK 54.19879 a  
## BL/BR 52.95783 a  
## WHT 51.49278 a  
## WT/BLK 51.46895 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.582723   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.36896 1.492006 18 51.48595 56.89388  
## MornLow 52.00000 2.612189 18 47.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.302188   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.36896 a  
## MornLow 52.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.582723 24 53.18448 3.558949 5.572397  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 54.24900 1.7872528 3 52.21773 55.58043 53.58328 54.94884  
## BL/BR:MornLow 51.66667 3.2145503 3 48.00000 54.00000 50.50000 53.00000  
## BLK:MornHigh 55.06424 1.2605307 3 54.33591 56.51978 54.33648 54.33704  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 55.46983 1.2333432 3 54.74411 56.89388 54.75780 54.77149  
## BRN:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WHT:MornHigh 53.31889 1.3273978 3 51.87029 54.47696 52.73985 53.60942  
## WHT:MornLow 49.66667 2.5166115 3 47.00000 52.00000 48.50000 50.00000  
## WT/BLK:MornHigh 52.93789 1.4376450 3 51.48595 54.36080 52.22644 52.96693  
## WT/BLK:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BR:MornHigh 55.17389 0.7253912 3 54.36080 55.75467 54.88350 55.40620  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.26464  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.42841  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.83269  
## BRN:MornLow 54.00000  
## WHT:MornHigh 54.04319  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.66387  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 55.58043  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.46983 a  
## WT/BR:MornHigh 55.17389 ab  
## BLK:MornHigh 55.06424 ab  
## BL/BR:MornHigh 54.24900 ab  
## WT/BR:MornLow 54.00000 ab  
## BLK:MornLow 53.33333 ab  
## BRN:MornLow 53.33333 ab  
## WHT:MornHigh 53.31889 ab  
## WT/BLK:MornHigh 52.93789 ab  
## BL/BR:MornLow 51.66667 ab  
## WT/BLK:MornLow 50.00000 ab  
## WHT:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT5 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 53.487 10.697 4.2992 0.0062009 \*\*   
## THIregime 1 45.535 45.535 18.3002 0.0002605 \*\*\*  
## Colour:THIregime 5 4.568 0.914 0.3672 0.8659696   
## Residuals 24 59.718 2.488   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.488246   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.01330 2.234236 6 48 54.12849  
## BLK 53.85399 2.121579 6 51 56.33797  
## BRN 55.15897 1.746047 6 52 56.45160  
## WHT 51.58702 2.250678 6 48 54.18657  
## WT/BLK 52.87580 1.393782 6 51 54.36080  
## WT/BR 52.25892 1.553875 6 50 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.815891   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.15897 a  
## BLK 53.85399 ab  
## WT/BLK 52.87580 ab  
## WT/BR 52.25892 b  
## BL/BR 52.01330 b  
## WHT 51.58702 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.488246   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.08267 1.266617 18 51.85184 56.4516  
## MornLow 51.83333 2.307277 18 48.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.08521   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.08267 a  
## MornLow 51.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.488246 24 52.958 2.97862 4.643892  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.35993 1.3061217 3 51.85184 54.12849 52.97565 54.09945  
## BL/BR:MornLow 50.66667 2.3094011 3 48.00000 52.00000 50.00000 52.00000  
## BLK:MornHigh 54.70797 1.4369664 3 53.62427 56.33797 53.89297 54.16168  
## BLK:MornLow 53.00000 2.6457513 3 51.00000 56.00000 51.50000 52.00000  
## BRN:MornHigh 55.65128 1.2495096 3 54.21146 56.45160 55.25111 56.29077  
## BRN:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WHT:MornHigh 53.17405 1.0525851 3 52.08552 54.18657 52.66779 53.25006  
## WHT:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BLK:MornHigh 54.08493 0.3704593 3 53.66387 54.36080 53.94700 54.23013  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.51784 0.5307297 3 53.00178 54.06211 53.24571 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 54.11397  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 55.24982  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.37118  
## BRN:MornLow 56.00000  
## WHT:MornHigh 53.71831  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.29546  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.77587  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.65128 a  
## BLK:MornHigh 54.70797 ab  
## BRN:MornLow 54.66667 ab  
## WT/BLK:MornHigh 54.08493 abc  
## WT/BR:MornHigh 53.51784 abc  
## BL/BR:MornHigh 53.35993 abc  
## WHT:MornHigh 53.17405 abc  
## BLK:MornLow 53.00000 abc  
## WT/BLK:MornLow 51.66667 abc  
## WT/BR:MornLow 51.00000 bc  
## BL/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT6 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 52.138 10.428 2.1479 0.094113 .   
## THIregime 1 62.412 62.412 12.8554 0.001491 \*\*  
## Colour:THIregime 5 5.239 1.048 0.2158 0.952346   
## Residuals 24 116.518 4.855   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.854906   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.07604 4.562464 6 44 56.45160  
## BLK 54.82963 1.693504 6 52 56.70050  
## BRN 55.14283 1.725227 6 52 56.77326  
## WHT 52.02027 2.143317 6 49 54.53503  
## WT/BLK 53.55791 1.714881 6 52 55.40620  
## WT/BR 53.60676 1.624353 6 51 55.25686  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.933323   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.14283 a  
## BLK 54.82963 a  
## WT/BR 53.60676 a  
## WT/BLK 53.55791 a  
## BL/BR 52.07604 a  
## WHT 52.02027 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.854906   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.85559 1.548884 18 50.1792 56.77326  
## MornLow 52.22222 2.798225 18 44.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.515854   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.85559 a  
## MornLow 52.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.854906 24 53.53891 4.115484 6.48673  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.81874 3.2551200 3 50.17920 56.45160 52.50231 54.82542  
## BL/BR:MornLow 50.33333 5.6862407 3 44.00000 55.00000 48.00000 52.00000  
## BLK:MornHigh 55.65927 1.0511946 3 54.59839 56.70050 55.13865 55.67891  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 55.95232 1.0685712 3 54.74411 56.77326 55.54185 56.33959  
## BRN:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WHT:MornHigh 53.70721 0.7835161 3 52.97718 54.53503 53.29330 53.60942  
## WHT:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BLK:MornHigh 55.11581 0.2661458 3 54.88350 55.40620 54.97062 55.05773  
## WT/BLK:MornLow 52.00000 0.0000000 3 52.00000 52.00000 52.00000 52.00000  
## WT/BR:MornHigh 54.88018 0.6309887 3 54.15172 55.25686 54.69184 55.23197  
## WT/BR:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.63851  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.18971  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.55643  
## BRN:MornLow 55.50000  
## WHT:MornHigh 54.07223  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 55.23197  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 55.24441  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.95232 a  
## BLK:MornHigh 55.65927 a  
## WT/BLK:MornHigh 55.11581 a  
## WT/BR:MornHigh 54.88018 a  
## BRN:MornLow 54.33333 a  
## BLK:MornLow 54.00000 a  
## BL/BR:MornHigh 53.81874 a  
## WHT:MornHigh 53.70721 a  
## WT/BR:MornLow 52.33333 a  
## WT/BLK:MornLow 52.00000 a  
## BL/BR:MornLow 50.33333 a  
## WHT:MornLow 50.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT7 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 34.456 6.891 1.3545 0.276113   
## THIregime 1 44.641 44.641 8.7744 0.006788 \*\*  
## Colour:THIregime 5 3.184 0.637 0.1252 0.985326   
## Residuals 24 122.103 5.088   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 5.087626   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.20621 3.959260 6 44 54.65119  
## BLK 54.32225 1.646834 6 52 56.17780  
## BRN 53.22143 1.058477 6 52 54.47281  
## WHT 52.99040 3.073493 6 48 56.13217  
## WT/BLK 52.94840 1.660558 6 51 55.14485  
## WT/BR 51.99269 1.507828 6 50 53.48963  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.026491   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.32225 a  
## BRN 53.22143 a  
## WHT 52.99040 a  
## WT/BLK 52.94840 a  
## WT/BR 51.99269 a  
## BL/BR 51.20621 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 5.087626   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.89379 1.490024 18 49.55196 56.1778  
## MornLow 51.66667 2.678894 18 44.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.55176   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.89379 a  
## MornLow 51.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 5.087626 24 52.78023 4.273526 6.640382  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.74575 2.7830621 3 49.55196 54.65119 51.79304 54.03411  
## BL/BR:MornLow 49.66667 4.9328829 3 44.00000 53.00000 48.00000 52.00000  
## BLK:MornHigh 54.97783 1.0758512 3 54.09945 56.17780 54.37784 54.65624  
## BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BRN:MornHigh 54.10953 0.3184882 3 53.87831 54.47281 53.92790 53.97749  
## BRN:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WHT:MornHigh 53.98080 2.1617630 3 51.80879 56.13217 52.90512 54.00144  
## WHT:MornLow 52.00000 4.0000000 3 48.00000 56.00000 50.00000 52.00000  
## WT/BLK:MornHigh 54.23013 0.7948650 3 53.70743 55.14485 53.77276 53.83810  
## WT/BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.31872 0.2747590 3 53.00178 53.48963 53.23326 53.46474  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 54.34265  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.41702  
## BLK:MornLow 54.50000  
## BRN:MornHigh 54.22515  
## BRN:MornLow 52.50000  
## WHT:MornHigh 55.06681  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 54.49148  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.47719  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.97783 a  
## WT/BLK:MornHigh 54.23013 a  
## BRN:MornHigh 54.10953 a  
## WHT:MornHigh 53.98080 a  
## BLK:MornLow 53.66667 a  
## WT/BR:MornHigh 53.31872 a  
## BL/BR:MornHigh 52.74575 a  
## BRN:MornLow 52.33333 a  
## WHT:MornLow 52.00000 a  
## WT/BLK:MornLow 51.66667 a  
## WT/BR:MornLow 50.66667 a  
## BL/BR:MornLow 49.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT8 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 73.742 14.748 5.1525 0.0023771 \*\*   
## THIregime 1 48.894 48.894 17.0815 0.0003763 \*\*\*  
## Colour:THIregime 5 6.891 1.378 0.4815 0.7865471   
## Residuals 24 68.698 2.862   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.862399   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.16410 2.228553 6 48 53.95426  
## BLK 55.09891 1.705053 6 52 56.26153  
## BRN 54.03761 1.833522 6 52 56.19025  
## WHT 51.22086 2.867646 6 46 53.95426  
## WT/BLK 52.51343 1.853968 6 50 54.88350  
## WT/BR 52.29086 1.414357 6 51 53.62902  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.02019   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.09891 a  
## BRN 54.03761 ab  
## WT/BLK 52.51343 ab  
## WT/BR 52.29086 ab  
## WHT 51.22086 b  
## BL/BR 51.16410 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.862399   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.88637 1.432517 18 50.79414 56.26153  
## MornLow 51.55556 2.594615 18 46.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.163944   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.88637 a  
## MornLow 51.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.862399 24 52.72096 3.209089 4.980816  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.66154 1.1644018 3 51.69503 53.95426 52.01518 52.33534  
## BL/BR:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## BLK:MornHigh 55.53114 1.1722574 3 54.17899 56.26153 55.16595 56.15291  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 54.74188 1.2582405 3 53.91852 56.19025 54.01769 54.11687  
## BRN:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WHT:MornHigh 52.77505 1.7258691 3 50.79414 53.95426 52.18545 53.57675  
## WHT:MornLow 49.66667 3.2145503 3 46.00000 52.00000 48.50000 51.00000  
## WT/BLK:MornHigh 54.02685 0.8494806 3 53.18473 54.88350 53.59853 54.01233  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.58173 0.0450098 3 53.53941 53.62902 53.55808 53.57675  
## WT/BR:MornLow 51.00000 0.0000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.14480  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 56.20722  
## BLK:MornLow 56.00000  
## BRN:MornHigh 55.15356  
## BRN:MornLow 54.00000  
## WHT:MornHigh 53.76550  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.44792  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.60289  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 55.53114 a  
## BRN:MornHigh 54.74188 a  
## BLK:MornLow 54.66667 a  
## WT/BLK:MornHigh 54.02685 ab  
## WT/BR:MornHigh 53.58173 ab  
## BRN:MornLow 53.33333 ab  
## WHT:MornHigh 52.77505 ab  
## BL/BR:MornHigh 52.66154 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## BL/BR:MornLow 49.66667 b  
## WHT:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT9 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 34.719 6.944 1.4739 0.23513   
## THIregime 1 54.016 54.016 11.4656 0.00244 \*\*  
## Colour:THIregime 5 3.282 0.656 0.1393 0.98137   
## Residuals 24 113.068 4.711   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.711172   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.85369 4.010689 6 44 54.99966  
## BLK 53.93708 1.796393 6 52 56.01980  
## BRN 52.12687 2.266886 6 48 54.36080  
## WHT 51.33080 2.049556 6 48 53.77276  
## WT/BLK 52.41905 1.749953 6 50 54.62215  
## WT/BR 51.68208 1.535839 6 50 53.40252  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.87466   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.93708 a  
## WT/BLK 52.41905 a  
## BRN 52.12687 a  
## WT/BR 51.68208 a  
## WHT 51.33080 a  
## BL/BR 50.85369 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.711172   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.28319 1.466673 18 49.39515 56.0198  
## MornLow 50.83333 2.595245 18 44.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.493247   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.28319 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.711172 24 52.05826 4.169412 6.389986  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.37406 2.8189075 3 49.39515 54.99966 51.06126 52.72736  
## BL/BR:MornLow 49.33333 5.0332230 3 44.00000 54.00000 47.00000 50.00000  
## BLK:MornHigh 54.54082 1.2809029 3 53.78832 56.01980 53.80133 53.81434  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 53.25375 1.4273750 3 51.64276 54.36080 52.70022 53.75768  
## BRN:MornLow 51.00000 2.6457513 3 48.00000 53.00000 50.00000 52.00000  
## WHT:MornHigh 52.66160 1.0902390 3 51.59356 53.77276 52.10602 52.61847  
## WHT:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BLK:MornHigh 53.83810 0.7840500 3 53.05405 54.62215 53.44608 53.83810  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.03082 0.3261159 3 52.79270 53.40252 52.84497 52.89724  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.86351  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 54.91707  
## BLK:MornLow 54.00000  
## BRN:MornHigh 54.05924  
## BRN:MornLow 52.50000  
## WHT:MornHigh 53.19561  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.23013  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.14988  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.54082 a  
## WT/BLK:MornHigh 53.83810 a  
## BLK:MornLow 53.33333 a  
## BRN:MornHigh 53.25375 a  
## WT/BR:MornHigh 53.03082 a  
## WHT:MornHigh 52.66160 a  
## BL/BR:MornHigh 52.37406 a  
## BRN:MornLow 51.00000 a  
## WT/BLK:MornLow 51.00000 a  
## WT/BR:MornLow 50.33333 a  
## WHT:MornLow 50.00000 a  
## BL/BR:MornLow 49.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT10 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.554 3.911 2.3385 0.0728 .   
## THIregime 1 46.310 46.310 27.6913 2.142e-05 \*\*\*  
## Colour:THIregime 5 2.045 0.409 0.2446 0.9385   
## Residuals 24 40.137 1.672   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.672361   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.86031 2.119474 6 49 54.82542  
## BLK 54.05604 1.845781 6 52 56.24707  
## BRN 53.10547 1.211004 6 52 54.22141  
## WHT 51.53596 2.093239 6 48 53.67476  
## WT/BLK 52.73786 1.258634 6 51 54.09945  
## WT/BR 52.84282 1.538459 6 51 54.77896  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.308523   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.05604 a  
## BRN 53.10547 ab  
## BL/BR 52.86031 ab  
## WT/BR 52.84282 ab  
## WT/BLK 52.73786 ab  
## WHT 51.53596 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.672361   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.99060 0.9115088 18 51.99328 56.24707  
## MornLow 51.72222 1.6735153 18 48.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8896764   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.99060 a  
## MornLow 51.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.672361 24 52.85641 2.446625 3.807154  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 54.05396 1.27386537 3 52.58362 54.82542 53.66822 54.75283  
## BL/BR:MornLow 51.66667 2.30940108 3 49.00000 53.00000 51.00000 53.00000  
## BLK:MornHigh 54.77874 1.27162796 3 54.03722 56.24707 54.04458 54.05193  
## BLK:MornLow 53.33333 2.30940108 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 54.21095 0.01073116 3 54.19997 54.22141 54.20571 54.21146  
## BRN:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.07191 0.93628537 3 51.99328 53.67476 52.77049 53.54771  
## WHT:MornLow 50.00000 1.73205081 3 48.00000 51.00000 49.50000 51.00000  
## WT/BLK:MornHigh 53.80906 0.42973631 3 53.31540 54.09945 53.66387 54.01233  
## WT/BLK:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 54.01897 0.65864044 3 53.61409 54.77896 53.63898 53.66387  
## WT/BR:MornLow 51.66667 1.15470054 3 51.00000 53.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 54.78912  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 55.14950  
## BLK:MornLow 54.00000  
## BRN:MornHigh 54.21644  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.61123  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.05589  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.22141  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.77874 a  
## BRN:MornHigh 54.21095 a  
## BL/BR:MornHigh 54.05396 a  
## WT/BR:MornHigh 54.01897 a  
## WT/BLK:MornHigh 53.80906 a  
## BLK:MornLow 53.33333 ab  
## WHT:MornHigh 53.07191 ab  
## BRN:MornLow 52.00000 ab  
## BL/BR:MornLow 51.66667 ab  
## WT/BLK:MornLow 51.66667 ab  
## WT/BR:MornLow 51.66667 ab  
## WHT:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT11 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 109.684 21.937 5.4600 0.001709 \*\*  
## THIregime 1 54.622 54.622 13.5953 0.001157 \*\*  
## Colour:THIregime 5 9.389 1.878 0.4674 0.796664   
## Residuals 24 96.424 4.018   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.017687   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.70868 3.432017 6 44 53.77276  
## BLK 54.46806 1.534350 6 52 56.00018  
## BRN 52.67107 1.175991 6 51 53.87295  
## WHT 50.59607 3.588941 6 44 53.90344  
## WT/BLK 54.22457 1.085627 6 53 55.58043  
## WT/BR 52.72220 1.584924 6 51 54.56988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.578139   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.46806 a  
## WT/BLK 54.22457 a  
## WT/BR 52.72220 ab  
## BRN 52.67107 ab  
## WHT 50.59607 b  
## BL/BR 49.70868 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.017687   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.63022 1.765633 18 49.49969 56.00018  
## MornLow 51.16667 3.091735 18 44.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.378971   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.63022 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.017687 24 52.39844 3.825337 5.900971  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.75069 2.1457147 3 49.49969 53.77276 50.73965 51.97961  
## BL/BR:MornLow 47.66667 3.5118846 3 44.00000 51.00000 46.00000 48.00000  
## BLK:MornHigh 54.93612 1.1083043 3 53.78832 56.00018 54.40409 55.01986  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 53.67548 0.3123267 3 53.31540 53.87295 53.57675 53.83810  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.19214 2.3577416 3 49.50276 53.90344 51.33649 53.17021  
## WHT:MornLow 49.00000 4.3588989 3 44.00000 52.00000 47.50000 51.00000  
## WT/BLK:MornHigh 55.11581 0.4798012 3 54.62215 55.58043 54.88350 55.14485  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 54.11107 0.3997253 3 53.83810 54.56988 53.88166 53.92522  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.87619  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 55.51002  
## BLK:MornLow 55.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.53682  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 55.36264  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 54.24755  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 55.11581 a  
## BLK:MornHigh 54.93612 a  
## WT/BR:MornHigh 54.11107 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornHigh 53.67548 ab  
## WT/BLK:MornLow 53.33333 abc  
## WHT:MornHigh 52.19214 abc  
## BL/BR:MornHigh 51.75069 abc  
## BRN:MornLow 51.66667 abc  
## WT/BR:MornLow 51.33333 abc  
## WHT:MornLow 49.00000 bc  
## BL/BR:MornLow 47.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT12 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 118.968 23.794 5.0782 0.002577 \*\*  
## THIregime 1 43.193 43.193 9.2186 0.005693 \*\*  
## Colour:THIregime 5 10.476 2.095 0.4472 0.811062   
## Residuals 24 112.449 4.685   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.685389   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.92040 3.312754 6 45 53.25006  
## BLK 54.87614 1.697566 6 52 56.00000  
## BRN 52.98995 1.321730 6 51 54.54748  
## WHT 50.97976 3.240202 6 45 53.60942  
## WT/BLK 52.21578 1.993186 6 49 54.70927  
## WT/BR 51.92341 1.774478 6 49 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.864043   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.87614 a  
## BRN 52.98995 ab  
## WT/BLK 52.21578 abc  
## WT/BR 51.92341 abc  
## WHT 50.97976 bc  
## BL/BR 48.92040 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.685389   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.07959 1.848923 18 49.49969 55.90617  
## MornLow 50.88889 3.287926 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.489155   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.07959 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.685389 24 51.98424 4.163908 6.372477  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.84080 2.0909393 3 49.49969 53.25006 49.63617 49.77266  
## BL/BR:MornLow 47.00000 3.4641016 3 45.00000 51.00000 45.00000 45.00000  
## BLK:MornHigh 55.08561 1.3188489 3 53.56430 55.90617 54.67533 55.78635  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 53.64657 0.8606085 3 52.83291 54.54748 53.19612 53.55933  
## BRN:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WHT:MornHigh 52.29285 2.1774562 3 49.77949 53.60942 51.63456 53.48963  
## WHT:MornLow 49.66667 4.0414519 3 45.00000 52.00000 48.50000 52.00000  
## WT/BLK:MornHigh 53.43156 1.2237747 3 52.27000 54.70927 52.79270 53.31540  
## WT/BLK:MornLow 51.00000 2.0000000 3 49.00000 53.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.18016 0.8946259 3 52.19533 53.94264 52.79892 53.40252  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 51.51136  
## BL/BR:MornLow 48.00000  
## BLK:MornHigh 55.84626  
## BLK:MornLow 56.00000  
## BRN:MornHigh 54.05340  
## BRN:MornLow 53.00000  
## WHT:MornHigh 53.54953  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.01233  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.67258  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 55.08561 a  
## BLK:MornLow 54.66667 a  
## BRN:MornHigh 53.64657 a  
## WT/BLK:MornHigh 53.43156 a  
## WT/BR:MornHigh 53.18016 ab  
## BRN:MornLow 52.33333 ab  
## WHT:MornHigh 52.29285 ab  
## WT/BLK:MornLow 51.00000 ab  
## BL/BR:MornHigh 50.84080 ab  
## WT/BR:MornLow 50.66667 ab  
## WHT:MornLow 49.66667 ab  
## BL/BR:MornLow 47.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT13 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 61.368 12.274 3.0173 0.029812 \*   
## THIregime 1 49.699 49.699 12.2176 0.001864 \*\*  
## Colour:THIregime 5 6.061 1.212 0.2980 0.909191   
## Residuals 24 97.627 4.068   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.067803   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.73475 2.296097 6 46 52.13933  
## BLK 53.79827 1.734193 6 52 56.00000  
## BRN 52.50823 1.756368 6 50 54.62215  
## WHT 50.71601 3.647646 6 44 53.60942  
## WT/BLK 52.32467 1.646935 6 50 54.36080  
## WT/BR 51.96780 1.815303 6 49 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.600387   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.79827 a  
## BRN 52.50823 ab  
## WT/BLK 52.32467 ab  
## WT/BR 51.96780 ab  
## WHT 50.71601 ab  
## BL/BR 49.73475 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.067803   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.01658 1.515725 18 49.22604 55.69131  
## MornLow 50.66667 2.722456 18 44.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.387545   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.01658 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.067803 24 51.84162 3.890464 5.937661  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.46949 1.0733644 3 50.23147 52.13933 51.13458 52.03769  
## BL/BR:MornLow 48.00000 1.7320508 3 46.00000 49.00000 47.50000 49.00000  
## BLK:MornHigh 54.26321 1.2396510 3 53.46474 55.69131 53.54915 53.63357  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 53.34980 1.1198372 3 52.51393 54.62215 52.71362 52.91332  
## BRN:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## WHT:MornHigh 52.09868 2.4888950 3 49.22604 53.60942 51.34332 53.46059  
## WHT:MornLow 49.33333 4.6188022 3 44.00000 52.00000 48.00000 52.00000  
## WT/BLK:MornHigh 53.64935 0.7188225 3 52.92338 54.36080 53.29362 53.66387  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.26894 0.9089126 3 52.27000 54.04718 52.87982 53.48963  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.08851  
## BL/BR:MornLow 49.00000  
## BLK:MornHigh 54.66244  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.76774  
## BRN:MornLow 52.50000  
## WHT:MornHigh 53.53501  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.01233  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.26321 a  
## WT/BLK:MornHigh 53.64935 ab  
## BRN:MornHigh 53.34980 ab  
## BLK:MornLow 53.33333 ab  
## WT/BR:MornHigh 53.26894 ab  
## WHT:MornHigh 52.09868 ab  
## BRN:MornLow 51.66667 ab  
## BL/BR:MornHigh 51.46949 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 50.66667 ab  
## WHT:MornLow 49.33333 ab  
## BL/BR:MornLow 48.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT14 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 78.438 15.688 6.2864 0.0007327 \*\*\*  
## THIregime 1 44.603 44.603 17.8735 0.0002959 \*\*\*  
## Colour:THIregime 5 7.160 1.432 0.5739 0.7193670   
## Residuals 24 59.892 2.495   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.495489   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.48096 2.289229 6 46 52.03769  
## BLK 53.79827 1.734193 6 52 56.00000  
## BRN 52.69960 1.045500 6 51 53.95011  
## WHT 50.41628 3.022372 6 45 53.51141  
## WT/BLK 52.71608 1.220046 6 51 54.01233  
## WT/BR 52.23403 1.538419 6 50 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.819986   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.79827 a  
## WT/BLK 52.71608 ab  
## BRN 52.69960 ab  
## WT/BR 52.23403 abc  
## WHT 50.41628 bc  
## BL/BR 49.48096 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.495489   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.00397 1.422072 18 49.68725 55.69131  
## MornLow 50.77778 2.556550 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.086788   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.00397 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.495489 24 51.89087 3.044296 4.650646  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.29526 0.9450199 3 50.23147 52.03769 50.92405 51.61663  
## BL/BR:MornLow 47.66667 1.5275252 3 46.00000 49.00000 47.00000 48.00000  
## BLK:MornHigh 54.26321 1.2396510 3 53.46474 55.69131 53.54915 53.63357  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 53.39920 0.5141576 3 52.93209 53.95011 53.12374 53.31540  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 51.83257 1.9542922 3 49.68725 53.51141 50.99314 52.29904  
## WHT:MornLow 49.00000 3.6055513 3 45.00000 52.00000 47.50000 50.00000  
## WT/BLK:MornHigh 53.76550 0.2900257 3 53.44608 54.01233 53.64209 53.83810  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.46806 0.5902000 3 52.86737 54.04718 53.17850 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 51.82716  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 54.66244  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.63275  
## BRN:MornLow 52.50000  
## WHT:MornHigh 52.90523  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.92522  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.26321 a  
## WT/BLK:MornHigh 53.76550 a  
## WT/BR:MornHigh 53.46806 ab  
## BRN:MornHigh 53.39920 ab  
## BLK:MornLow 53.33333 ab  
## BRN:MornLow 52.00000 abc  
## WHT:MornHigh 51.83257 abc  
## WT/BLK:MornLow 51.66667 abc  
## BL/BR:MornHigh 51.29526 abc  
## WT/BR:MornLow 51.00000 abc  
## WHT:MornLow 49.00000 bc  
## BL/BR:MornLow 47.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT15 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 179.264 35.853 18.212 1.786e-07 \*\*\*  
## THIregime 1 46.414 46.414 23.576 5.997e-05 \*\*\*  
## Colour:THIregime 5 15.563 3.113 1.581 0.2034   
## Residuals 24 47.248 1.969   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.968679   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 47.77725 2.3647265 6 45 50.30988  
## BLK 54.79287 1.6897945 6 52 56.00000  
## BRN 53.13182 0.6594565 6 52 53.87295  
## WHT 50.11656 2.7160904 6 46 53.41341  
## WT/BLK 52.32467 1.6469349 6 50 54.36080  
## WT/BR 51.66963 1.6950854 6 49 53.41994  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.504705   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.79287 a  
## BRN 53.13182 ab  
## WT/BLK 52.32467 abc  
## WT/BR 51.66963 bc  
## WHT 50.11656 cd  
## BL/BR 47.77725 d  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.968679   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.77094 1.872006 18 49.29061 55.74709  
## MornLow 50.50000 3.276476 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9652827   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.77094 a  
## MornLow 50.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.968679 24 51.63547 2.717311 4.130693  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 49.88784 0.5317395 3 49.29061 50.30988 49.67683 50.06304  
## BL/BR:MornLow 45.66667 0.5773503 3 45.00000 46.00000 45.50000 46.00000  
## BLK:MornHigh 54.91906 1.3256703 3 53.39007 55.74709 54.50505 55.62003  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 53.59698 0.3236658 3 53.24073 53.87295 53.45900 53.67727  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 51.56645 1.6742126 3 50.14845 53.41341 50.64297 51.13748  
## WHT:MornLow 48.66667 3.0550505 3 46.00000 52.00000 47.00000 48.00000  
## WT/BLK:MornHigh 53.64935 0.7188225 3 52.92338 54.36080 53.29362 53.66387  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.00593 0.7020541 3 52.19533 53.41994 52.79892 53.40252  
## WT/BR:MornLow 50.33333 1.1547005 3 49.00000 51.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 50.18646  
## BL/BR:MornLow 46.00000  
## BLK:MornHigh 55.68356  
## BLK:MornLow 56.00000  
## BRN:MornHigh 53.77511  
## BRN:MornLow 53.00000  
## WHT:MornHigh 52.27544  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 54.01233  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.41123  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.91906 a  
## BLK:MornLow 54.66667 a  
## WT/BLK:MornHigh 53.64935 ab  
## BRN:MornHigh 53.59698 ab  
## WT/BR:MornHigh 53.00593 ab  
## BRN:MornLow 52.66667 abc  
## WHT:MornHigh 51.56645 abc  
## WT/BLK:MornLow 51.00000 abc  
## WT/BR:MornLow 50.33333 bc  
## BL/BR:MornHigh 49.88784 bc  
## WHT:MornLow 48.66667 cd  
## BL/BR:MornLow 45.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT16 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 100.077 20.015 8.2953 0.0001149 \*\*\*  
## THIregime 1 63.203 63.203 26.1940 3.083e-05 \*\*\*  
## Colour:THIregime 5 7.803 1.561 0.6468 0.6665385   
## Residuals 24 57.909 2.413   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.412865   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.66323 2.4695645 6 45 51.39883  
## BLK 52.42699 0.9348479 6 51 53.40630  
## BRN 52.17911 1.7702212 6 49 53.91277  
## WHT 48.85397 3.2315559 6 45 52.95604  
## WT/BLK 52.51312 1.7248125 6 50 54.70927  
## WT/BR 51.98025 1.5028665 6 50 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.772909   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.51312 a  
## BLK 52.42699 a  
## BRN 52.17911 a  
## WT/BR 51.98025 a  
## WHT 48.85397 b  
## BL/BR 48.66323 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.412865   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.42778 1.584450 18 49.51131 54.70927  
## MornLow 49.77778 2.691065 18 45.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.068645   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.42778 a  
## MornLow 49.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.412865 24 51.10278 3.039639 4.573008  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.65979 0.9771090 3 49.55196 51.39883 50.29027 51.02859  
## BL/BR:MornLow 46.66667 1.5275252 3 45.00000 48.00000 46.00000 47.00000  
## BLK:MornHigh 53.18731 0.3424280 3 52.79270 53.40630 53.07781 53.36292  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.02488 1.1639878 3 51.70709 53.91277 52.58094 53.45479  
## BRN:MornLow 51.33333 2.0816660 3 49.00000 53.00000 50.50000 52.00000  
## WHT:MornHigh 50.70795 1.9482595 3 49.51131 52.95604 49.58390 49.65650  
## WHT:MornLow 47.00000 3.4641016 3 45.00000 51.00000 45.00000 45.00000  
## WT/BLK:MornHigh 53.69291 0.9635487 3 52.79270 54.70927 53.18473 53.57675  
## WT/BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.29383 0.3697332 3 52.86737 53.52448 53.17850 53.48963  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 51.21371  
## BL/BR:MornLow 47.50000  
## BLK:MornHigh 53.38461  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.68378  
## BRN:MornLow 52.50000  
## WHT:MornHigh 51.30627  
## WHT:MornLow 48.00000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.50706  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.69291 a  
## WT/BR:MornHigh 53.29383 a  
## BLK:MornHigh 53.18731 a  
## BRN:MornHigh 53.02488 a  
## BLK:MornLow 51.66667 a  
## BRN:MornLow 51.33333 ab  
## WT/BLK:MornLow 51.33333 ab  
## WHT:MornHigh 50.70795 abc  
## WT/BR:MornLow 50.66667 abc  
## BL/BR:MornHigh 50.65979 abc  
## WHT:MornLow 47.00000 bc  
## BL/BR:MornLow 46.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT17 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 119.158 23.832 6.3549 0.0006846 \*\*\*  
## THIregime 1 57.094 57.094 15.2245 0.0006750 \*\*\*  
## Colour:THIregime 5 10.498 2.100 0.5599 0.7295564   
## Residuals 24 90.003 3.750   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.750113   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.68703 1.977815 6 48 52.90886  
## BLK 54.15858 2.383469 6 50 56.00000  
## BRN 53.20139 2.406794 6 49 55.58043  
## WHT 48.82620 3.246220 6 44 52.92338  
## WT/BLK 53.18040 1.293063 6 52 54.36080  
## WT/BR 52.83577 1.980815 6 50 55.33153  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.456936   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.15858 a  
## BRN 53.20139 ab  
## WT/BLK 53.18040 ab  
## WT/BR 52.83577 ab  
## BL/BR 50.68703 bc  
## WHT 48.82620 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.750113   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.40757 1.746954 18 49.56426 55.88138  
## MornLow 50.88889 3.141541 18 44.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.332261   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.40757 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.750113 24 52.14823 3.713493 5.701086  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.37406 0.4911101 3 51.94331 52.90886 52.10666 52.27000  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 54.65050 1.7728613 3 52.61847 55.88138 54.03506 55.45165  
## BLK:MornLow 53.66667 3.2145503 3 50.00000 56.00000 52.50000 55.00000  
## BRN:MornHigh 54.06945 1.6993301 3 52.22979 55.58043 53.31396 54.39814  
## BRN:MornLow 52.33333 3.0550505 3 49.00000 55.00000 51.00000 53.00000  
## WHT:MornHigh 50.98574 1.7380233 3 49.56426 52.92338 50.01692 50.46959  
## WHT:MornLow 46.66667 3.0550505 3 44.00000 50.00000 45.00000 46.00000  
## WT/BLK:MornHigh 54.36080 0.0000000 3 54.36080 54.36080 54.36080 54.36080  
## WT/BLK:MornLow 52.00000 0.0000000 3 52.00000 52.00000 52.00000 52.00000  
## WT/BR:MornHigh 54.00487 1.1727536 3 53.10632 55.33153 53.34154 53.57675  
## WT/BR:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.58943  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 55.66652  
## BLK:MornLow 55.50000  
## BRN:MornHigh 54.98928  
## BRN:MornLow 54.00000  
## WHT:MornHigh 51.69648  
## WHT:MornLow 48.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.45414  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.65050 a  
## WT/BLK:MornHigh 54.36080 a  
## BRN:MornHigh 54.06945 a  
## WT/BR:MornHigh 54.00487 a  
## BLK:MornLow 53.66667 a  
## BL/BR:MornHigh 52.37406 a  
## BRN:MornLow 52.33333 ab  
## WT/BLK:MornLow 52.00000 ab  
## WT/BR:MornLow 51.66667 ab  
## WHT:MornHigh 50.98574 ab  
## BL/BR:MornLow 49.00000 ab  
## WHT:MornLow 46.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT18 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 123.032 24.606 5.3418 0.001938 \*\*  
## THIregime 1 61.844 61.844 13.4258 0.001225 \*\*  
## Colour:THIregime 5 8.929 1.786 0.3877 0.852304   
## Residuals 24 110.552 4.606   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.606347   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.11485 4.114634 6 43 54.25626  
## BLK 53.72709 1.484858 6 52 55.56528  
## BRN 53.49312 2.276693 6 51 56.17283  
## WHT 49.11532 2.646804 6 46 52.43334  
## WT/BLK 53.76782 1.645416 6 51 55.75467  
## WT/BR 52.64587 1.494527 6 51 54.28613  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.831312   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 53.76782 a  
## BLK 53.72709 a  
## BRN 53.49312 a  
## WT/BR 52.64587 ab  
## BL/BR 50.11485 ab  
## WHT 49.11532 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.606347   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.45469 1.878872 18 48.90149 56.17283  
## MornLow 50.83333 3.276476 18 43.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.476541   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.45469 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.606347 24 52.14401 4.115986 6.318497  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.89637 2.7332758 3 48.90149 54.25626 50.71642 52.53135  
## BL/BR:MornLow 48.33333 5.0332230 3 43.00000 53.00000 46.00000 49.00000  
## BLK:MornHigh 54.45418 0.9623029 3 53.88788 55.56528 53.89863 53.90938  
## BLK:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## BRN:MornHigh 54.31957 1.6049689 3 53.39007 56.17283 53.39294 53.39582  
## BRN:MornLow 52.66667 2.8867513 3 51.00000 56.00000 51.00000 51.00000  
## WHT:MornHigh 51.23065 1.0440905 3 50.55671 52.43334 50.62930 50.70190  
## WHT:MornLow 47.00000 1.7320508 3 46.00000 49.00000 46.00000 46.00000  
## WT/BLK:MornHigh 54.86898 0.8930344 3 53.96878 55.75467 54.42614 54.88350  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 53.95840 0.2871409 3 53.75098 54.28613 53.79454 53.83810  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.39381  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.73733  
## BLK:MornLow 53.50000  
## BRN:MornHigh 54.78432  
## BRN:MornLow 53.50000  
## WHT:MornHigh 51.56762  
## WHT:MornLow 47.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 54.06211  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 54.86898 a  
## BLK:MornHigh 54.45418 ab  
## BRN:MornHigh 54.31957 ab  
## WT/BR:MornHigh 53.95840 ab  
## BLK:MornLow 53.00000 abc  
## BRN:MornLow 52.66667 abc  
## WT/BLK:MornLow 52.66667 abc  
## BL/BR:MornHigh 51.89637 abc  
## WT/BR:MornLow 51.33333 abc  
## WHT:MornHigh 51.23065 abc  
## BL/BR:MornLow 48.33333 bc  
## WHT:MornLow 47.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT19 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 202.952 40.590 16.3574 4.741e-07 \*\*\*  
## THIregime 1 55.208 55.208 22.2480 8.533e-05 \*\*\*  
## Colour:THIregime 5 17.276 3.455 1.3924 0.2624   
## Residuals 24 59.555 2.481   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.481469   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.12297 2.409089 6 47 53.83810  
## BLK 53.88571 1.261675 6 52 55.38347  
## BRN 55.08404 1.722551 6 52 56.31221  
## WHT 47.84733 3.142965 6 43 51.45328  
## WT/BLK 53.73878 1.243505 6 52 55.05773  
## WT/BR 51.75135 2.149525 6 48 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.812054   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.08404 a  
## BLK 53.88571 ab  
## WT/BLK 53.73878 ab  
## WT/BR 51.75135 b  
## BL/BR 51.12297 b  
## WHT 47.84733 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.481469   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.47673 1.967124 18 49.10305 56.31221  
## MornLow 51.00000 3.547990 18 43.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.083731   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.47673 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.481469 24 52.23836 3.015538 4.637563  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.57926 1.3466712 3 51.15926 53.83810 51.94985 52.74043  
## BL/BR:MornLow 49.66667 2.5166115 3 47.00000 52.00000 48.50000 50.00000  
## BLK:MornHigh 54.43808 0.8549169 3 53.71930 55.38347 53.96538 54.21146  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 55.50142 1.2498044 3 54.06211 56.31221 55.09603 56.12994  
## BRN:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WHT:MornHigh 50.36133 1.1839102 3 49.10305 51.45328 49.81536 50.52767  
## WHT:MornLow 45.33333 2.0816660 3 43.00000 47.00000 44.50000 46.00000  
## WT/BLK:MornHigh 54.81090 0.2900257 3 54.49148 55.05773 54.68749 54.88350  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 53.16938 1.0887850 3 51.95638 54.06211 52.72301 53.48963  
## WT/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.28927  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.79747  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.22108  
## BRN:MornLow 56.00000  
## WHT:MornHigh 50.99047  
## WHT:MornLow 46.50000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 53.77587  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.50142 a  
## WT/BLK:MornHigh 54.81090 ab  
## BRN:MornLow 54.66667 ab  
## BLK:MornHigh 54.43808 ab  
## BLK:MornLow 53.33333 abc  
## WT/BR:MornHigh 53.16938 abc  
## WT/BLK:MornLow 52.66667 abc  
## BL/BR:MornHigh 52.57926 abc  
## WHT:MornHigh 50.36133 bc  
## WT/BR:MornLow 50.33333 bc  
## BL/BR:MornLow 49.66667 cd  
## WHT:MornLow 45.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT20 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 236.343 47.269 43.339 3.031e-11 \*\*\*  
## THIregime 1 64.211 64.211 58.873 6.555e-08 \*\*\*  
## Colour:THIregime 5 21.410 4.282 3.926 0.009636 \*\*   
## Residuals 24 26.176 1.091   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.090678   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.01354 1.8466159 6 49 54.16479  
## BLK 53.84208 0.7049452 6 53 54.76987  
## BRN 54.39086 1.7010400 6 52 56.37693  
## WHT 46.56874 3.2096065 6 43 49.88518  
## WT/BLK 52.41905 1.7499535 6 50 54.62215  
## WT/BR 52.77893 1.4815863 6 51 54.65949  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.864307   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 54.39086 a  
## BLK 53.84208 ab  
## WT/BR 52.77893 ab  
## WT/BLK 52.41905 b  
## BL/BR 52.01354 b  
## WHT 46.56874 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.090678   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.33773 1.969316 18 49.10305 56.37693  
## MornLow 50.66667 3.580996 18 43.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.718481   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.33773 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.090678 24 52.0022 2.00829 3.074565  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.36041 0.8657084 3 52.44423 54.16479 52.95822 53.47221  
## BL/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BLK:MornHigh 54.35083 0.3640886 3 54.11190 54.76987 54.14131 54.17073  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 55.11505 1.1520237 3 54.11955 56.37693 54.48410 54.84865  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 49.47081 0.3931427 3 49.10305 49.88518 49.26362 49.42419  
## WHT:MornLow 43.66667 0.5773503 3 43.00000 44.00000 43.50000 44.00000  
## WT/BLK:MornHigh 53.83810 0.7840500 3 53.05405 54.62215 53.44608 53.83810  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.89120 0.6655833 3 53.48963 54.65949 53.50706 53.52448  
## WT/BR:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.81850  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.47030  
## BLK:MornLow 53.50000  
## BRN:MornHigh 55.61279  
## BRN:MornLow 54.50000  
## WHT:MornHigh 49.65469  
## WHT:MornLow 44.00000  
## WT/BLK:MornHigh 54.23013  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 54.09198  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.11505 a  
## BLK:MornHigh 54.35083 ab  
## WT/BR:MornHigh 53.89120 abc  
## WT/BLK:MornHigh 53.83810 abc  
## BRN:MornLow 53.66667 abcd  
## BL/BR:MornHigh 53.36041 abcd  
## BLK:MornLow 53.33333 abcd  
## WT/BR:MornLow 51.66667 bcde  
## WT/BLK:MornLow 51.00000 cde  
## BL/BR:MornLow 50.66667 de  
## WHT:MornHigh 49.47081 e  
## WHT:MornLow 43.66667 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT21 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 203.873 40.775 24.1519 1.219e-08 \*\*\*  
## THIregime 1 64.107 64.107 37.9722 2.290e-06 \*\*\*  
## Colour:THIregime 5 16.266 3.253 1.9269 0.127   
## Residuals 24 40.518 1.688   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.688261   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.51465 2.514288 6 45 51.63114  
## BLK 51.81668 1.144038 6 50 53.17285  
## BRN 53.21789 1.791797 6 50 54.60473  
## WHT 46.21372 2.980373 6 42 49.30803  
## WT/BLK 51.50494 1.350569 6 50 53.05405  
## WT/BR 51.73881 1.621904 6 49 53.61409  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.319471   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.21789 a  
## BLK 51.81668 a  
## WT/BR 51.73881 a  
## WT/BLK 51.50494 a  
## BL/BR 48.51465 b  
## WHT 46.21372 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.688261   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.83556 1.912152 18 48.05573 54.60473  
## MornLow 49.16667 3.417085 18 42.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8938957   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.83556 a  
## MornLow 49.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.688261 24 50.50111 2.572876 3.825209  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.36263 1.1071020 3 49.59116 51.63114 49.72837 49.86558  
## BL/BR:MornLow 46.66667 2.0816660 3 45.00000 49.00000 45.50000 46.00000  
## BLK:MornHigh 52.63336 0.5207417 3 52.13364 53.17285 52.36361 52.59358  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.76911 1.3347179 3 52.22979 54.60473 53.35130 54.47281  
## BRN:MornLow 52.66667 2.3094011 3 50.00000 54.00000 52.00000 54.00000  
## WHT:MornHigh 48.76078 0.6408892 3 48.05573 49.30803 48.48715 48.91857  
## WHT:MornLow 43.66667 1.5275252 3 42.00000 45.00000 43.00000 44.00000  
## WT/BLK:MornHigh 52.67654 0.3298184 3 52.44423 53.05405 52.48779 52.53135  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.81095 0.8914173 3 51.85184 53.61409 52.40939 52.96693  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 50.74836  
## BL/BR:MornLow 47.50000  
## BLK:MornHigh 52.88321  
## BLK:MornLow 51.50000  
## BRN:MornHigh 54.53877  
## BRN:MornLow 54.00000  
## WHT:MornHigh 49.11330  
## WHT:MornLow 44.50000  
## WT/BLK:MornHigh 52.79270  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.29051  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.76911 a  
## WT/BR:MornHigh 52.81095 a  
## WT/BLK:MornHigh 52.67654 a  
## BRN:MornLow 52.66667 a  
## BLK:MornHigh 52.63336 a  
## BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 50.66667 ab  
## BL/BR:MornHigh 50.36263 abc  
## WT/BLK:MornLow 50.33333 abc  
## WHT:MornHigh 48.76078 bc  
## BL/BR:MornLow 46.66667 cd  
## WHT:MornLow 43.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT22 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 160.490 32.098 58.4547 1.186e-12 \*\*\*  
## THIregime 1 40.177 40.177 73.1681 9.459e-09 \*\*\*  
## Colour:THIregime 5 11.467 2.293 4.1765 0.007158 \*\*   
## Residuals 24 13.179 0.549   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5491076   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.00944 1.8771639 6 46 49.91785  
## BLK 52.39941 0.8988693 6 51 53.31540  
## BRN 53.94219 1.1183007 6 52 55.00000  
## WHT 48.56877 2.2533208 6 46 51.28994  
## WT/BLK 49.66976 1.1893895 6 48 50.96325  
## WT/BR 51.41565 0.9434408 6 50 52.49401  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.322811   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.94219 a  
## BLK 52.39941 b  
## WT/BR 51.41565 b  
## WT/BLK 49.66976 c  
## WHT 48.56877 cd  
## BL/BR 48.00944 d  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5491076   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.72396 1.695273 18 49.48227 54.95817  
## MornLow 49.61111 2.831314 18 46.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5097952   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.72396 a  
## MornLow 49.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5491076 24 50.66754 1.46251 2.181545  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 49.68554 0.2192388 3 49.48227 49.91785 49.56938 49.65650  
## BL/BR:MornLow 46.33333 0.5773503 3 46.00000 47.00000 46.00000 46.00000  
## BLK:MornHigh 53.13215 0.2754166 3 52.81543 53.31540 53.04052 53.26562  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 54.21771 0.7519441 3 53.45479 54.95817 53.84748 54.24018  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 50.47087 0.7115695 3 50.00497 51.28994 50.06134 50.11771  
## WHT:MornLow 46.66667 1.1547005 3 46.00000 48.00000 46.00000 46.00000  
## WT/BLK:MornHigh 50.67286 0.4297363 3 50.17920 50.96325 50.52767 50.87613  
## WT/BLK:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## WT/BR:MornHigh 52.16463 0.4571069 3 51.64276 52.49401 51.99994 52.35712  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 49.78718  
## BL/BR:MornLow 46.50000  
## BLK:MornHigh 53.29051  
## BLK:MornLow 52.00000  
## BRN:MornHigh 54.59917  
## BRN:MornLow 54.50000  
## WHT:MornHigh 50.70382  
## WHT:MornLow 47.00000  
## WT/BLK:MornHigh 50.91969  
## WT/BLK:MornLow 49.00000  
## WT/BR:MornHigh 52.42557  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.21771 a  
## BRN:MornLow 53.66667 ab  
## BLK:MornHigh 53.13215 ab  
## WT/BR:MornHigh 52.16463 abc  
## BLK:MornLow 51.66667 bcd  
## WT/BLK:MornHigh 50.67286 cde  
## WT/BR:MornLow 50.66667 cde  
## WHT:MornHigh 50.47087 cde  
## BL/BR:MornHigh 49.68554 de  
## WT/BLK:MornLow 48.66667 ef  
## WHT:MornLow 46.66667 fg  
## BL/BR:MornLow 46.33333 g  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT23 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 106.286 21.257 79.121 4.098e-14 \*\*\*  
## THIregime 1 55.787 55.787 207.645 2.593e-13 \*\*\*  
## Colour:THIregime 5 8.910 1.782 6.633 0.0005217 \*\*\*  
## Residuals 24 6.448 0.269   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2686639   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.62634 1.9295205 6 47 51.80538  
## BLK 52.14166 0.9811593 6 51 53.33813  
## BRN 53.24421 0.7579703 6 52 54.08203  
## WHT 48.07661 2.2761143 6 46 50.27721  
## WT/BLK 51.57754 1.4369591 6 50 53.31540  
## WT/BR 51.80270 1.3127097 6 50 53.14117  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9252814   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.24421 a  
## BLK 52.14166 b  
## WT/BR 51.80270 b  
## WT/BLK 51.57754 b  
## BL/BR 49.62634 c  
## WHT 48.07661 d  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2686639   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.32302 1.309326 18 50.03401 54.08203  
## MornLow 49.83333 2.332633 18 46.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3565921   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.32302 a  
## MornLow 49.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2686639 24 51.07818 1.014774 1.525949  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.25267 0.6105100 3 50.59736 51.80538 50.97632 51.35528  
## BL/BR:MornLow 48.00000 1.0000000 3 47.00000 49.00000 47.50000 48.00000  
## BLK:MornHigh 52.95000 0.3363828 3 52.74292 53.33813 52.75593 52.76894  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.82176 0.3198137 3 53.46474 54.08203 53.69163 53.91852  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 50.15322 0.1216705 3 50.03401 50.27721 50.09123 50.14845  
## WHT:MornLow 46.00000 0.0000000 3 46.00000 46.00000 46.00000 46.00000  
## WT/BLK:MornHigh 52.82174 0.4297363 3 52.53135 53.31540 52.57491 52.61847  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.93872 0.3209360 3 52.56869 53.14117 52.83750 53.10632  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 51.58033  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 53.05353  
## BLK:MornLow 51.50000  
## BRN:MornHigh 54.00027  
## BRN:MornLow 53.00000  
## WHT:MornHigh 50.21283  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 52.96693  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.12374  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.82176 a  
## BLK:MornHigh 52.95000 a  
## WT/BR:MornHigh 52.93872 a  
## WT/BLK:MornHigh 52.82174 ab  
## BRN:MornLow 52.66667 abc  
## BLK:MornLow 51.33333 bcd  
## BL/BR:MornHigh 51.25267 cd  
## WT/BR:MornLow 50.66667 d  
## WT/BLK:MornLow 50.33333 d  
## WHT:MornHigh 50.15322 d  
## BL/BR:MornLow 48.00000 e  
## WHT:MornLow 46.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT24 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 90.403 18.081 10.8258 1.553e-05 \*\*\*  
## THIregime 1 56.021 56.021 33.5423 5.701e-06 \*\*\*  
## Colour:THIregime 5 7.176 1.435 0.8593 0.5223   
## Residuals 24 40.084 1.670   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.670154   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.73391 2.767643 6 47 54.09945  
## BLK 51.62635 1.340939 6 50 53.31540  
## BRN 52.01988 1.330692 6 50 53.57675  
## WHT 47.83884 2.533055 6 45 50.86524  
## WT/BLK 51.41056 1.258078 6 50 52.92338  
## WT/BR 52.85516 1.195116 6 51 54.36080  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.306999   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.85516 a  
## BRN 52.01988 a  
## BLK 51.62635 a  
## WT/BLK 51.41056 a  
## BL/BR 50.73391 a  
## WHT 47.83884 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.670154   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.32823 1.396703 18 49.51131 54.3608  
## MornLow 49.83333 2.479326 18 45.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8890891   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.32823 a  
## MornLow 49.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.670154 24 51.08078 2.530001 3.804641  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.13449 1.7121456 3 50.96325 54.09945 51.15200 51.34076  
## BL/BR:MornLow 49.33333 3.2145503 3 47.00000 53.00000 47.50000 48.00000  
## BLK:MornHigh 52.58603 0.6316508 3 52.22022 53.31540 52.22135 52.22248  
## BLK:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## BRN:MornHigh 53.03975 0.5535378 3 52.47104 53.57675 52.77126 53.07147  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 50.01102 0.7433361 3 49.51131 50.86524 49.58390 49.65650  
## WHT:MornLow 45.66667 1.1547005 3 45.00000 47.00000 45.00000 45.00000  
## WT/BLK:MornHigh 52.48779 0.3772262 3 52.27000 52.92338 52.27000 52.27000  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 53.71033 0.6138686 3 53.14117 54.36080 53.38509 53.62902  
## WT/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 52.72010  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 52.76894  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.32411  
## BRN:MornLow 51.50000  
## WHT:MornHigh 50.26087  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 52.59669  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.99491  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.71033 a  
## BRN:MornHigh 53.03975 ab  
## BLK:MornHigh 52.58603 ab  
## WT/BLK:MornHigh 52.48779 ab  
## BL/BR:MornHigh 52.13449 ab  
## WT/BR:MornLow 52.00000 ab  
## BRN:MornLow 51.00000 ab  
## BLK:MornLow 50.66667 ab  
## WT/BLK:MornLow 50.33333 ab  
## WHT:MornHigh 50.01102 ab  
## BL/BR:MornLow 49.33333 bc  
## WHT:MornLow 45.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT25 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 156.686 31.337 38.4464 1.078e-10 \*\*\*  
## THIregime 1 74.018 74.018 90.8100 1.249e-09 \*\*\*  
## Colour:THIregime 5 11.033 2.207 2.7071 0.04462 \*   
## Residuals 24 19.562 0.815   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8150874   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.03975 2.238865 6 46 50.30988  
## BLK 51.30136 1.138519 6 50 52.62639  
## BRN 52.22369 1.466914 6 50 54.02478  
## WHT 46.98536 2.763420 6 43 49.85977  
## WT/BLK 51.36731 1.695634 6 49 53.57675  
## WT/BR 52.35258 1.396535 6 50 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.611652   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.35258 a  
## BRN 52.22369 a  
## WT/BLK 51.36731 a  
## BLK 51.30136 a  
## BL/BR 48.03975 b  
## WHT 46.98536 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8150874   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.81224 1.686206 18 48.39587 54.02478  
## MornLow 48.94444 2.858881 18 43.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6211109   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.81224 a  
## MornLow 48.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8150874 24 50.37834 1.792083 2.657893  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.07950 0.2226041 3 49.86558 50.30988 49.96431 50.06304  
## BL/BR:MornLow 46.00000 0.0000000 3 46.00000 46.00000 46.00000 46.00000  
## BLK:MornHigh 52.26939 0.3098126 3 52.07088 52.62639 52.09090 52.11092  
## BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BRN:MornHigh 53.11404 0.8173526 3 52.44423 54.02478 52.65867 52.87312  
## BRN:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WHT:MornHigh 49.30405 0.7930441 3 48.39587 49.85977 49.02619 49.65650  
## WHT:MornLow 44.66667 1.5275252 3 43.00000 46.00000 44.00000 45.00000  
## WT/BLK:MornHigh 52.73462 0.7611292 3 52.09577 53.57675 52.31356 52.53135  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.37182 0.6525927 3 52.61847 53.76343 53.17601 53.73356  
## WT/BR:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## Q75  
## BL/BR:MornHigh 50.18646  
## BL/BR:MornLow 46.00000  
## BLK:MornHigh 52.36865  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.44895  
## BRN:MornLow 52.00000  
## WHT:MornHigh 49.75814  
## WHT:MornLow 45.50000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.74849  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.37182 a  
## BRN:MornHigh 53.11404 a  
## WT/BLK:MornHigh 52.73462 ab  
## BLK:MornHigh 52.26939 abc  
## BRN:MornLow 51.33333 abcd  
## WT/BR:MornLow 51.33333 abcd  
## BLK:MornLow 50.33333 bcd  
## BL/BR:MornHigh 50.07950 bcd  
## WT/BLK:MornLow 50.00000 cd  
## WHT:MornHigh 49.30405 d  
## BL/BR:MornLow 46.00000 e  
## WHT:MornLow 44.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT26 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 149.816 29.963 33.836 4.085e-10 \*\*\*  
## THIregime 1 62.688 62.688 70.790 1.278e-08 \*\*\*  
## Colour:THIregime 5 12.796 2.559 2.890 0.03514 \*   
## Residuals 24 21.253 0.886   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8855497   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.33790 1.880253 6 48 52.33534  
## BLK 51.99909 1.309594 6 50 53.54266  
## BRN 53.52560 1.435858 6 51 55.04433  
## WHT 47.50590 2.845635 6 44 50.54816  
## WT/BLK 52.59267 1.100861 6 51 53.83810  
## WT/BR 52.95639 1.651009 6 51 55.10751  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.67987   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.52560 a  
## WT/BR 52.95639 a  
## WT/BLK 52.59267 a  
## BLK 51.99909 ab  
## BL/BR 50.33790 b  
## WHT 47.50590 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8855497   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.80585 1.597159 18 49.30803 55.10751  
## MornLow 50.16667 2.874840 18 44.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6474013   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.80585 a  
## MornLow 50.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8855497 24 51.48626 1.827743 2.770396  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.00913 0.3549413 3 51.63114 52.33534 51.84603 52.06092  
## BL/BR:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## BLK:MornHigh 52.99819 0.5413221 3 52.46007 53.54266 52.72595 52.99182  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 54.38454 0.7794668 3 53.52448 55.04433 54.05465 54.58481  
## BRN:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WHT:MornHigh 50.01180 0.6367878 3 49.30803 50.54816 49.74362 50.17920  
## WHT:MornLow 45.00000 1.0000000 3 44.00000 46.00000 44.50000 45.00000  
## WT/BLK:MornHigh 53.51867 0.3520778 3 53.14117 53.83810 53.35896 53.57675  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.91277 1.0346777 3 53.31540 55.10751 53.31540 53.31540  
## WT/BR:MornLow 52.00000 1.7320508 3 51.00000 54.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.19813  
## BL/BR:MornLow 49.00000  
## BLK:MornHigh 53.26724  
## BLK:MornLow 51.50000  
## BRN:MornHigh 54.81457  
## BRN:MornLow 53.50000  
## WHT:MornHigh 50.36368  
## WHT:MornLow 45.50000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.21146  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.38454 a  
## WT/BR:MornHigh 53.91277 a  
## WT/BLK:MornHigh 53.51867 ab  
## BLK:MornHigh 52.99819 ab  
## BRN:MornLow 52.66667 abc  
## BL/BR:MornHigh 52.00913 abc  
## WT/BR:MornLow 52.00000 abc  
## WT/BLK:MornLow 51.66667 abc  
## BLK:MornLow 51.00000 bcd  
## WHT:MornHigh 50.01180 cd  
## BL/BR:MornLow 48.66667 d  
## WHT:MornLow 45.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT27 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 115.502 23.100 19.4755 9.575e-08 \*\*\*  
## THIregime 1 62.547 62.547 52.7321 1.676e-07 \*\*\*  
## Colour:THIregime 5 8.798 1.760 1.4835 0.2321   
## Residuals 24 28.467 1.186   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.186131   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.26095 2.075010 6 47 52.72736  
## BLK 52.67283 1.024290 6 51 53.88562  
## BRN 51.27145 2.000352 6 48 53.61409  
## WHT 47.55876 2.668406 6 44 50.67115  
## WT/BLK 52.62171 1.120348 6 51 53.83810  
## WT/BR 52.18964 1.493552 6 50 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.944176   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.67283 a  
## WT/BLK 52.62171 a  
## WT/BR 52.18964 ab  
## BRN 51.27145 ab  
## BL/BR 50.26095 b  
## WHT 47.55876 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.186131   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.41400 1.488322 18 49.19914 53.94264  
## MornLow 49.77778 2.602161 18 44.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7492616   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.41400 a  
## MornLow 49.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.186131 24 51.09589 2.131476 3.206283  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.85523 0.8975746 3 50.93421 52.72736 51.41916 51.90411  
## BL/BR:MornLow 48.66667 1.5275252 3 47.00000 50.00000 48.00000 49.00000  
## BLK:MornHigh 53.34567 0.5145919 3 52.86088 53.88562 53.07569 53.29051  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 52.54290 1.0741318 3 51.46585 53.61409 52.00731 52.54877  
## BRN:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WHT:MornHigh 49.78419 0.7810721 3 49.19914 50.67115 49.34070 49.48227  
## WHT:MornLow 45.33333 1.5275252 3 44.00000 47.00000 44.50000 45.00000  
## WT/BLK:MornHigh 53.57675 0.2613500 3 53.31540 53.83810 53.44608 53.57675  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.37929 0.5753219 3 52.79270 53.94264 53.09761 53.40252  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.31574  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 53.58806  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.08143  
## BRN:MornLow 51.00000  
## WHT:MornHigh 50.07671  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.67258  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.57675 a  
## WT/BR:MornHigh 53.37929 a  
## BLK:MornHigh 53.34567 a  
## BRN:MornHigh 52.54290 ab  
## BLK:MornLow 52.00000 ab  
## BL/BR:MornHigh 51.85523 abc  
## WT/BLK:MornLow 51.66667 abc  
## WT/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.00000 bc  
## WHT:MornHigh 49.78419 bc  
## BL/BR:MornLow 48.66667 c  
## WHT:MornLow 45.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT28 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 186.381 37.276 15.6268 7.125e-07 \*\*\*  
## THIregime 1 60.637 60.637 25.4202 3.739e-05 \*\*\*  
## Colour:THIregime 5 14.780 2.956 1.2392 0.3219   
## Residuals 24 57.250 2.385   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.385401   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.38465 2.1931439 6 46 52.00865  
## BLK 53.06541 0.8978942 6 52 54.11190  
## BRN 54.30616 2.7927114 6 51 58.00000  
## WHT 47.50017 2.9908887 6 43 50.51742  
## WT/BLK 52.03428 1.3576901 6 50 53.70743  
## WT/BR 51.82966 1.5261959 6 50 53.75098  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.757083   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 54.30616 a  
## BLK 53.06541 a  
## WT/BLK 52.03428 ab  
## WT/BR 51.82966 ab  
## BL/BR 49.38465 bc  
## WHT 47.50017 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.385401   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.65122 1.901489 18 49.10113 57.21555  
## MornLow 50.05556 3.403670 18 43.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.062546   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.65122 a  
## MornLow 50.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.385401 24 51.35339 3.007541 4.546908  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.10264 0.9148494 3 50.17920 52.00865 50.64963 51.12006  
## BL/BR:MornLow 47.66667 1.5275252 3 46.00000 49.00000 47.00000 48.00000  
## BLK:MornHigh 53.79748 0.2727577 3 53.62427 54.11190 53.64028 53.65629  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 54.94566 1.9844108 3 53.53941 57.21555 53.81072 54.08203  
## BRN:MornLow 53.66667 3.7859389 3 51.00000 58.00000 51.50000 52.00000  
## WHT:MornHigh 50.00034 0.7816555 3 49.10113 50.51742 49.74180 50.38247  
## WHT:MornLow 45.00000 1.7320508 3 43.00000 46.00000 44.50000 46.00000  
## WT/BLK:MornHigh 53.06857 0.6317210 3 52.44423 53.70743 52.74914 53.05405  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.99265 0.6574118 3 52.58362 53.75098 52.61349 52.64336  
## WT/BR:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 51.56436  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 53.88409  
## BLK:MornLow 52.50000  
## BRN:MornHigh 55.64879  
## BRN:MornLow 55.00000  
## WHT:MornHigh 50.44994  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 53.38074  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.19717  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.94566 a  
## BLK:MornHigh 53.79748 ab  
## BRN:MornLow 53.66667 ab  
## WT/BLK:MornHigh 53.06857 ab  
## WT/BR:MornHigh 52.99265 ab  
## BLK:MornLow 52.33333 ab  
## BL/BR:MornHigh 51.10264 abc  
## WT/BLK:MornLow 51.00000 abc  
## WT/BR:MornLow 50.66667 abc  
## WHT:MornHigh 50.00034 bc  
## BL/BR:MornLow 47.66667 cd  
## WHT:MornLow 45.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT29 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 72.206 14.441 6.8874 0.0004089 \*\*\*  
## THIregime 1 72.293 72.293 34.4785 4.673e-06 \*\*\*  
## Colour:THIregime 5 5.304 1.061 0.5060 0.7688185   
## Residuals 24 50.322 2.097   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.096742   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.44838 1.752573 6 49 53.51141  
## BLK 51.89238 1.578529 6 50 53.83810  
## BRN 53.18219 2.808410 6 50 56.53202  
## WHT 48.91713 2.688060 6 45 51.87029  
## WT/BLK 52.88306 1.750441 6 50 54.88350  
## WT/BR 52.51270 1.357805 6 51 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.584888   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.18219 a  
## WT/BLK 52.88306 a  
## WT/BR 52.51270 a  
## BLK 51.89238 a  
## BL/BR 51.44838 ab  
## WHT 48.91713 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.096742   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.22306 1.362402 18 50.40788 56.53202  
## MornLow 50.38889 2.379790 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.996184   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.22306 a  
## MornLow 50.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.096742 24 51.80597 2.79507 4.262927  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.89676 0.6207947 3 52.27000 53.51141 52.58943 52.90886  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.11810 0.6236359 3 52.74725 53.83810 52.75809 52.76894  
## BLK:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## BRN:MornHigh 54.36437 1.8775559 3 53.24571 56.53202 53.28055 53.31540  
## BRN:MornLow 52.00000 3.4641016 3 50.00000 56.00000 50.00000 50.00000  
## WHT:MornHigh 51.16759 0.7328685 3 50.40788 51.87029 50.81624 51.22460  
## WHT:MornLow 46.66667 1.5275252 3 45.00000 48.00000 46.00000 47.00000  
## WT/BLK:MornHigh 54.09945 0.9423108 3 53.05405 54.88350 53.70743 54.36080  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 53.69208 0.3209360 3 53.48963 54.06211 53.50706 53.52448  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.21013  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.30352  
## BLK:MornLow 51.00000  
## BRN:MornHigh 54.92371  
## BRN:MornLow 53.00000  
## WHT:MornHigh 51.54744  
## WHT:MornLow 47.50000  
## WT/BLK:MornHigh 54.62215  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 53.79330  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.36437 a  
## WT/BLK:MornHigh 54.09945 ab  
## WT/BR:MornHigh 53.69208 ab  
## BLK:MornHigh 53.11810 ab  
## BL/BR:MornHigh 52.89676 ab  
## BRN:MornLow 52.00000 ab  
## WT/BLK:MornLow 51.66667 ab  
## WT/BR:MornLow 51.33333 ab  
## WHT:MornHigh 51.16759 ab  
## BLK:MornLow 50.66667 abc  
## BL/BR:MornLow 50.00000 bc  
## WHT:MornLow 46.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT30 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.849 5.770 2.9214 0.0337391 \*   
## THIregime 1 42.350 42.350 21.4433 0.0001062 \*\*\*  
## Colour:THIregime 5 1.389 0.278 0.1407 0.9809670   
## Residuals 24 47.400 1.975   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.974996   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.65031 1.855243 6 49 53.94264  
## BLK 52.43095 1.627723 6 50 54.42898  
## BRN 53.76066 1.646067 6 51 55.52682  
## WHT 51.97100 1.487916 6 50 53.47874  
## WT/BLK 51.00463 2.402414 6 47 53.83810  
## WT/BR 51.35684 1.200606 6 50 52.79270  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.50872   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.76066 a  
## BLK 52.43095 ab  
## WHT 51.97100 ab  
## BL/BR 51.65031 ab  
## WT/BR 51.35684 ab  
## WT/BLK 51.00463 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.974996   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.11369 1.155374 18 50.57123 55.52682  
## MornLow 50.94444 1.797784 18 47.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.96683   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.11369 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.974996 24 52.02907 2.701078 4.137314  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.63395 1.1699657 3 51.68922 53.94264 51.97961 52.27000  
## BL/BR:MornLow 50.66667 2.0816660 3 49.00000 53.00000 49.50000 50.00000  
## BLK:MornHigh 53.52858 0.8222236 3 52.81759 54.42898 53.07837 53.33916  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 54.52131 1.0188469 3 53.48963 55.52682 54.01856 54.54748  
## BRN:MornLow 53.00000 2.0000000 3 51.00000 55.00000 52.00000 53.00000  
## WHT:MornHigh 53.27533 0.3123506 3 52.91569 53.47874 53.17362 53.43156  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.34260 1.6508168 3 50.57123 53.83810 51.59485 52.61847  
## WT/BLK:MornLow 49.66667 2.5166115 3 47.00000 52.00000 48.50000 50.00000  
## WT/BR:MornHigh 52.38035 0.3572137 3 52.16546 52.79270 52.17417 52.18288  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.10632  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.88407  
## BLK:MornLow 52.00000  
## BRN:MornHigh 55.03715  
## BRN:MornLow 54.00000  
## WHT:MornHigh 53.45515  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.22828  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.48779  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.52131 a  
## BLK:MornHigh 53.52858 ab  
## WHT:MornHigh 53.27533 ab  
## BRN:MornLow 53.00000 ab  
## BL/BR:MornHigh 52.63395 ab  
## WT/BR:MornHigh 52.38035 ab  
## WT/BLK:MornHigh 52.34260 ab  
## BLK:MornLow 51.33333 ab  
## BL/BR:MornLow 50.66667 ab  
## WHT:MornLow 50.66667 ab  
## WT/BR:MornLow 50.33333 b  
## WT/BLK:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT31 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 94.902 18.980 9.5670 4.036e-05 \*\*\*  
## THIregime 1 33.601 33.601 16.9366 0.0003935 \*\*\*  
## Colour:THIregime 5 4.547 0.909 0.4583 0.8031130   
## Residuals 24 47.615 1.984   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.983954   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.92999 2.1796704 6 48 54.04718  
## BLK 54.86442 1.6199154 6 52 56.36070  
## BRN 54.62016 0.9991706 6 53 55.85921  
## WHT 51.83020 1.6914195 6 50 53.68436  
## WT/BLK 50.35913 2.1107338 6 47 52.96693  
## WT/BR 51.85943 1.2095699 6 50 53.39007  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.514404   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.86442 a  
## BRN 54.62016 a  
## BL/BR 51.92999 b  
## WT/BR 51.85943 b  
## WHT 51.83020 b  
## WT/BLK 50.35913 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.983954   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.54333 1.623102 18 50.44055 56.3607  
## MornLow 51.61111 2.452823 18 47.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9690203   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.54333 a  
## MornLow 51.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.983954 24 52.57722 2.678972 4.146687  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.85997 1.5108878 3 51.15926 54.04718 52.26637 53.37348  
## BL/BR:MornLow 51.00000 2.6457513 3 48.00000 53.00000 50.00000 52.00000  
## BLK:MornHigh 55.39551 1.1750821 3 54.08700 56.36070 54.91292 55.73883  
## BLK:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## BRN:MornHigh 55.24033 0.5848468 3 54.69682 55.85921 54.93089 55.16495  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 53.32707 0.3115460 3 53.11213 53.68436 53.14843 53.18473  
## WHT:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 51.71826 1.2634420 3 50.44055 52.96693 51.09392 51.74730  
## WT/BLK:MornLow 49.00000 2.0000000 3 47.00000 51.00000 48.00000 49.00000  
## WT/BR:MornHigh 52.71886 0.6646751 3 52.06092 53.39007 52.38325 52.70558  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.71033  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.04976  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.51208  
## BRN:MornLow 54.50000  
## WHT:MornHigh 53.43454  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.35712  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 53.04783  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 55.39551 a  
## BRN:MornHigh 55.24033 a  
## BLK:MornLow 54.33333 ab  
## BRN:MornLow 54.00000 ab  
## WHT:MornHigh 53.32707 ab  
## BL/BR:MornHigh 52.85997 abc  
## WT/BR:MornHigh 52.71886 abc  
## WT/BLK:MornHigh 51.71826 abc  
## BL/BR:MornLow 51.00000 bc  
## WT/BR:MornLow 51.00000 bc  
## WHT:MornLow 50.33333 bc  
## WT/BLK:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT32 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 25.859 5.172 3.1626 0.02475 \*   
## THIregime 1 39.977 39.977 24.4463 4.787e-05 \*\*\*  
## Colour:THIregime 5 1.653 0.331 0.2022 0.95840   
## Residuals 24 39.247 1.635   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.635295   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.99073 1.310048 6 50 53.57675  
## BLK 53.71103 2.054313 6 51 56.02394  
## BRN 52.64564 1.152860 6 51 53.83810  
## WHT 51.36101 1.653366 6 49 53.22828  
## WT/BLK 51.28019 2.061729 6 48 53.83810  
## WT/BR 51.66746 1.387643 6 50 53.46474  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.282797   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.71103 a  
## BRN 52.64564 ab  
## BL/BR 51.99073 ab  
## WT/BR 51.66746 ab  
## WHT 51.36101 b  
## WT/BLK 51.28019 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.635295   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.16313 1.023682 18 51.2246 56.02394  
## MornLow 51.05556 1.696787 18 48.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.879762   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.16313 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.635295 24 52.10934 2.454045 3.764728  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.98145 0.5881719 3 52.40068 53.57675 52.68380 52.96693  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 54.42206 1.4261179 3 53.29051 56.02394 53.62112 53.95173  
## BLK:MornLow 53.00000 2.6457513 3 51.00000 56.00000 51.50000 52.00000  
## BRN:MornHigh 53.62462 0.3379469 3 53.23498 53.83810 53.51787 53.80076  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.72202 0.5262925 3 52.17776 53.22828 52.46890 52.76003  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 52.56039 1.3077176 3 51.22460 53.83810 51.92153 52.61847  
## WT/BLK:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BR:MornHigh 52.66825 0.6897851 3 52.27000 53.46474 52.27000 52.27000  
## WT/BR:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.27184  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.98783  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.99416  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.22828  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.86737  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.42206 a  
## BRN:MornHigh 53.62462 ab  
## BLK:MornLow 53.00000 ab  
## BL/BR:MornHigh 52.98145 ab  
## WHT:MornHigh 52.72202 ab  
## WT/BR:MornHigh 52.66825 ab  
## WT/BLK:MornHigh 52.56039 ab  
## BRN:MornLow 51.66667 ab  
## BL/BR:MornLow 51.00000 ab  
## WT/BR:MornLow 50.66667 ab  
## WHT:MornLow 50.00000 b  
## WT/BLK:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT33 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.688 1.338 1.9690 0.1200   
## THIregime 1 47.538 47.538 69.9738 1.42e-08 \*\*\*  
## Colour:THIregime 5 0.575 0.115 0.1693 0.9715   
## Residuals 24 16.305 0.679   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6793715   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.02969 1.342712 6 50 53.60579  
## BLK 52.15355 1.453062 6 50 53.83810  
## BRN 52.41148 1.250860 6 51 53.83810  
## WHT 52.16314 1.462787 6 50 53.87077  
## WT/BLK 51.07723 1.932112 6 48 53.31540  
## WT/BR 51.72636 1.237715 6 50 53.01671  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.471373   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.41148 a  
## WHT 52.16314 a  
## BLK 52.15355 a  
## BL/BR 52.02969 a  
## WT/BR 51.72636 a  
## WT/BLK 51.07723 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6793715   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.07604 0.6163146 18 51.35528 53.87077  
## MornLow 50.77778 1.0032627 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5670492   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.07604 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6793715 24 51.92691 1.587308 2.426549  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.05937 0.5713366 3 52.46601 53.60579 52.78617 53.10632  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.30710 0.5351935 3 52.76781 53.83810 53.04160 53.31540  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.48963 0.3017810 3 53.31540 53.83810 53.31540 53.31540  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.32629 0.5391169 3 52.79270 53.87077 53.05405 53.31540  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.48779 1.0150120 3 51.35528 53.31540 52.07399 52.79270  
## WT/BLK:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## WT/BR:MornHigh 52.78606 0.3572571 3 52.37454 53.01671 52.67074 52.96693  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.35605  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.57675  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.57675  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.59308  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.99182  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.48963 a  
## WHT:MornHigh 53.32629 ab  
## BLK:MornHigh 53.30710 ab  
## BL/BR:MornHigh 53.05937 abc  
## WT/BR:MornHigh 52.78606 abc  
## WT/BLK:MornHigh 52.48779 abc  
## BRN:MornLow 51.33333 abcd  
## BL/BR:MornLow 51.00000 bcd  
## BLK:MornLow 51.00000 bcd  
## WHT:MornLow 51.00000 bcd  
## WT/BR:MornLow 50.66667 cd  
## WT/BLK:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT34 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.099 2.420 5.0715 0.002596 \*\*   
## THIregime 1 47.091 47.091 98.6968 5.586e-10 \*\*\*  
## Colour:THIregime 5 0.960 0.192 0.4026 0.842162   
## Residuals 24 11.451 0.477   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.477123   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.23373 1.534689 6 49 53.05405  
## BLK 51.53153 1.376739 6 50 53.09139  
## BRN 52.57071 1.078178 6 51 53.69871  
## WHT 51.03018 1.705043 6 49 53.08309  
## WT/BLK 50.88122 1.392810 6 49 52.27000  
## WT/BR 51.94821 1.280678 6 50 53.53941  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.23306   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.57071 a  
## WT/BR 51.94821 ab  
## BLK 51.53153 ab  
## BL/BR 51.23373 b  
## WHT 51.03018 b  
## WT/BLK 50.88122 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.477123   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.67631 0.6054803 18 51.7473 53.69871  
## MornLow 50.38889 1.0369009 18 49.0000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4752063   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.67631 a  
## MornLow 50.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.477123 24 51.5326 1.340396 2.03353  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46746 0.5673518 3 51.92153 53.05405 52.17417 52.42681  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 52.72974 0.3132592 3 52.54271 53.09139 52.54891 52.55511  
## BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BRN:MornHigh 53.47476 0.3477425 3 53.07415 53.69871 53.36279 53.65142  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.39370 0.5975508 3 52.02402 53.08309 52.04901 52.07399  
## WHT:MornLow 49.66667 1.1547005 3 49.00000 51.00000 49.00000 49.00000  
## WT/BLK:MornHigh 52.09577 0.3017810 3 51.74730 52.27000 52.00865 52.27000  
## WT/BLK:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## WT/BR:MornHigh 52.89641 0.6348698 3 52.27000 53.53941 52.57491 52.87982  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.74043  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 52.82325  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.67507  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.57854  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 52.27000  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 53.20962  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.47476 a  
## WT/BR:MornHigh 52.89641 ab  
## BLK:MornHigh 52.72974 ab  
## BL/BR:MornHigh 52.46746 ab  
## WHT:MornHigh 52.39370 ab  
## WT/BLK:MornHigh 52.09577 abc  
## BRN:MornLow 51.66667 abcd  
## WT/BR:MornLow 51.00000 bcd  
## BLK:MornLow 50.33333 cd  
## BL/BR:MornLow 50.00000 d  
## WHT:MornLow 49.66667 d  
## WT/BLK:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT35 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.062 3.012 3.2639 0.02177 \*   
## THIregime 1 41.295 41.295 44.7412 6.426e-07 \*\*\*  
## Colour:THIregime 5 0.869 0.174 0.1882 0.96422   
## Residuals 24 22.152 0.923   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9229795   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.12532 1.428809 6 49 52.79270  
## BLK 52.24098 1.293920 6 50 53.51993  
## BRN 51.97619 1.293110 6 50 53.52448  
## WHT 50.68939 1.843612 6 48 52.90886  
## WT/BLK 50.46772 1.687869 6 48 52.61847  
## WT/BR 51.59320 1.107882 6 50 52.79270  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.715004   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.24098 a  
## BRN 51.97619 ab  
## WT/BR 51.59320 ab  
## BL/BR 51.12532 ab  
## WHT 50.68939 ab  
## WT/BLK 50.46772 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9229795   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.41982 0.7848356 18 50.7019 53.52448  
## MornLow 50.27778 1.2744344 18 48.0000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6609416   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.41982 a  
## MornLow 50.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9229795 24 51.3488 1.870965 2.828339  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.25064 0.5519936 3 51.68922 52.79270 51.97961 52.27000  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.14863 0.6170677 3 52.43631 53.51993 52.96297 53.48963  
## BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BRN:MornHigh 52.95238 0.5669992 3 52.39062 53.52448 52.66633 52.94204  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.04545 0.8045224 3 51.31684 52.90886 51.61374 51.91064  
## WHT:MornLow 49.33333 1.5275252 3 48.00000 51.00000 48.50000 49.00000  
## WT/BLK:MornHigh 51.60211 0.9635487 3 50.70190 52.61847 51.09392 51.48595  
## WT/BLK:MornLow 49.33333 1.5275252 3 48.00000 51.00000 48.50000 49.00000  
## WT/BR:MornHigh 52.51973 0.3997253 3 52.06092 52.79270 52.38325 52.70558  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.53135  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.50478  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.23326  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.40975  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 52.05221  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 52.74914  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.14863 a  
## BRN:MornHigh 52.95238 a  
## WT/BR:MornHigh 52.51973 ab  
## BL/BR:MornHigh 52.25064 ab  
## WHT:MornHigh 52.04545 abc  
## WT/BLK:MornHigh 51.60211 abc  
## BLK:MornLow 51.33333 abc  
## BRN:MornLow 51.00000 abc  
## WT/BR:MornLow 50.66667 abc  
## BL/BR:MornLow 50.00000 bc  
## WHT:MornLow 49.33333 c  
## WT/BLK:MornLow 49.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT36 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.738 6.148 3.2808 0.02131 \*   
## THIregime 1 52.657 52.657 28.1021 1.942e-05 \*\*\*  
## Colour:THIregime 5 2.614 0.523 0.2790 0.92006   
## Residuals 24 44.971 1.874   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.873773   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.88553 1.399058 6 50 53.31540  
## BLK 53.10092 1.386739 6 51 54.79260  
## BRN 51.91062 1.424668 6 50 53.35561  
## WHT 50.02082 2.945388 6 46 53.60579  
## WT/BLK 52.23030 1.545112 6 50 54.09945  
## WT/BR 52.10833 1.753730 6 49 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.443586   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.10092 a  
## WT/BLK 52.23030 ab  
## WT/BR 52.10833 ab  
## BRN 51.91062 ab  
## BL/BR 51.88553 ab  
## WHT 50.02082 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.873773   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.08550 1.038165 18 50.42518 54.7926  
## MornLow 50.66667 1.878673 18 46.00000 54.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9417281   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.08550 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.873773 24 51.87609 2.638708 4.029897  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.10438 0.3212879 3 52.73462 53.31540 52.99888 53.26313  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.86852 0.8406496 3 53.14909 54.79260 53.40648 53.66387  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.15457 0.3140321 3 52.79270 53.35561 53.05405 53.31540  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 51.70830 1.6769506 3 50.42518 53.60579 50.75955 51.09393  
## WHT:MornLow 48.33333 3.2145503 3 46.00000 52.00000 46.50000 47.00000  
## WT/BLK:MornHigh 53.46059 0.6538588 3 52.79270 54.09945 53.14117 53.48963  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.21667 1.0018543 3 52.06092 53.83810 52.90595 53.75098  
## WT/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.28927  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.22823  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.33550  
## BRN:MornLow 51.00000  
## WHT:MornHigh 52.34986  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.79454  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.86852 a  
## WT/BLK:MornHigh 53.46059 a  
## WT/BR:MornHigh 53.21667 a  
## BRN:MornHigh 53.15457 a  
## BL/BR:MornHigh 53.10438 a  
## BLK:MornLow 52.33333 ab  
## WHT:MornHigh 51.70830 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## BL/BR:MornLow 50.66667 ab  
## BRN:MornLow 50.66667 ab  
## WHT:MornLow 48.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT37 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.606 1.321 1.9093 0.1301   
## THIregime 1 41.127 41.127 59.4312 6.04e-08 \*\*\*  
## Colour:THIregime 5 0.134 0.027 0.0386 0.9991   
## Residuals 24 16.608 0.692   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6920115   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.76840 1.276913 6 50 53.05405  
## BLK 52.35183 1.565296 6 50 54.26990  
## BRN 52.36151 1.396340 6 50 53.76343  
## WHT 51.84228 1.352705 6 50 53.19924  
## WT/BLK 51.09144 1.415108 6 49 52.79270  
## WT/BR 51.99757 1.308056 6 50 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.484998   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.36151 a  
## BLK 52.35183 a  
## WT/BR 51.99757 a  
## WHT 51.84228 a  
## BL/BR 51.76840 a  
## WT/BLK 51.09144 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6920115   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.97101 0.6346908 18 51.48595 54.2699  
## MornLow 50.83333 0.9851844 18 49.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5722999   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.97101 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6920115 24 51.90217 1.60277 2.449019  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.87014 0.3185466 3 52.50231 53.05405 52.77818 53.05405  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.37033 0.8246400 3 52.65015 54.26990 52.92055 53.19095  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.38969 0.6079758 3 52.68816 53.76343 53.20282 53.71748  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.01789 0.3082103 3 52.66203 53.19924 52.92722 53.19241  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.18288 0.6577164 3 51.48595 52.79270 51.87798 52.27000  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 52.99514 0.5404463 3 52.44423 53.52448 52.73047 53.01671  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.05405  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.73042  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.74045  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.19583  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.53135  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.27060  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.38969 a  
## BLK:MornHigh 53.37033 a  
## WHT:MornHigh 53.01789 ab  
## WT/BR:MornHigh 52.99514 ab  
## BL/BR:MornHigh 52.87014 ab  
## WT/BLK:MornHigh 52.18288 abc  
## BLK:MornLow 51.33333 abc  
## BRN:MornLow 51.33333 abc  
## WT/BR:MornLow 51.00000 abc  
## BL/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.66667 bc  
## WT/BLK:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT38 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.676 6.535 4.8452 0.003332 \*\*   
## THIregime 1 58.074 58.074 43.0560 8.708e-07 \*\*\*  
## Colour:THIregime 5 1.823 0.365 0.2703 0.924906   
## Residuals 24 32.371 1.349   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.348795   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.41813 1.710226 6 49 53.31540  
## BLK 52.56182 1.790412 6 50 54.72442  
## BRN 51.34775 1.644707 6 49 53.27519  
## WHT 50.78245 2.183325 6 47 53.18473  
## WT/BLK 53.69523 1.427717 6 52 55.58043  
## WT/BR 51.81524 1.677112 6 50 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.073204   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 53.69523 a  
## BLK 52.56182 ab  
## WT/BR 51.81524 ab  
## BL/BR 51.41813 b  
## BRN 51.34775 b  
## WHT 50.78245 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.348795   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.20687 1.053560 18 50.97862 55.58043  
## MornLow 50.66667 1.680336 18 47.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7989875   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.20687 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.348795 24 51.93677 2.236135 3.419073  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.83626 0.5281167 3 52.27000 53.31540 52.59669 52.92338  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.45697 1.1299177 3 52.55511 54.72442 52.82325 53.09139  
## BLK:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## BRN:MornHigh 52.69550 0.5597932 3 52.15799 53.27519 52.40565 52.65331  
## BRN:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WHT:MornHigh 52.23157 1.1331918 3 50.97862 53.18473 51.75499 52.53135  
## WHT:MornLow 49.33333 2.0816660 3 47.00000 51.00000 48.50000 50.00000  
## WT/BLK:MornHigh 54.72379 0.7673358 3 54.09945 55.58043 54.29546 54.49148  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 53.29715 0.3320928 3 53.01671 53.66387 53.11379 53.21086  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.11939  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.90790  
## BLK:MornLow 52.50000  
## BRN:MornHigh 52.96425  
## BRN:MornLow 50.50000  
## WHT:MornHigh 52.85804  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 55.03595  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 53.43736  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 54.72379 a  
## BLK:MornHigh 53.45697 ab  
## WT/BR:MornHigh 53.29715 abc  
## BL/BR:MornHigh 52.83626 abc  
## BRN:MornHigh 52.69550 abcd  
## WT/BLK:MornLow 52.66667 abcd  
## WHT:MornHigh 52.23157 abcd  
## BLK:MornLow 51.66667 abcd  
## WT/BR:MornLow 50.33333 bcd  
## BL/BR:MornLow 50.00000 cd  
## BRN:MornLow 50.00000 cd  
## WHT:MornLow 49.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT39 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 22.163 4.433 4.1019 0.007815 \*\*   
## THIregime 1 44.152 44.152 40.8580 1.31e-06 \*\*\*  
## Colour:THIregime 5 1.741 0.348 0.3222 0.894653   
## Residuals 24 25.935 1.081   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080619   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.35292 1.189315 6 51 53.70743  
## BLK 52.62111 1.518618 6 50 54.31535  
## BRN 52.93108 1.241961 6 51 54.36080  
## WHT 50.57973 2.244373 6 47 53.17021  
## WT/BLK 51.45412 1.499306 6 49 53.05405  
## WT/BR 52.03906 1.348055 6 50 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.85569   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.93108 a  
## BLK 52.62111 a  
## BL/BR 52.35292 ab  
## WT/BR 52.03906 ab  
## WT/BLK 51.45412 ab  
## WHT 50.57973 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080619   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10378 0.8422975 18 51.07086 54.3608  
## MornLow 50.88889 1.4907120 18 47.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7151602   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10378 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.080619 24 51.99634 1.999234 3.060354  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.37251 0.2901032 3 53.19924 53.70743 53.20505 53.21086  
## BL/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BLK:MornHigh 53.57555 0.8362294 3 52.66825 54.31535 53.20566 53.74306  
## BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## BRN:MornHigh 53.86216 0.5054074 3 53.35025 54.36080 53.61284 53.87544  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 52.15947 1.0518342 3 51.07086 53.17021 51.65410 52.23733  
## WHT:MornLow 49.00000 2.0000000 3 47.00000 51.00000 48.00000 49.00000  
## WT/BLK:MornHigh 52.57491 0.7197018 3 51.74730 53.05405 52.33534 52.92338  
## WT/BLK:MornLow 50.33333 1.1547005 3 49.00000 51.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.07811 0.5515661 3 52.56869 53.66387 52.78523 53.00178  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.45914  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.02921  
## BLK:MornLow 52.50000  
## BRN:MornHigh 54.11812  
## BRN:MornLow 52.50000  
## WHT:MornHigh 52.70377  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 52.98871  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.33282  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.86216 a  
## BLK:MornHigh 53.57555 a  
## BL/BR:MornHigh 53.37251 ab  
## WT/BR:MornHigh 53.07811 ab  
## WT/BLK:MornHigh 52.57491 ab  
## WHT:MornHigh 52.15947 ab  
## BRN:MornLow 52.00000 abc  
## BLK:MornLow 51.66667 abc  
## BL/BR:MornLow 51.33333 abc  
## WT/BR:MornLow 51.00000 abc  
## WT/BLK:MornLow 50.33333 bc  
## WHT:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT40 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.896 5.779 6.3323 0.0007001 \*\*\*  
## THIregime 1 43.396 43.396 47.5486 3.938e-07 \*\*\*  
## Colour:THIregime 5 2.282 0.456 0.5000 0.7731152   
## Residuals 24 21.904 0.913   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9126598   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.49502 1.3392003 6 50 53.02501  
## BLK 53.12850 1.8792010 6 51 55.38347  
## BRN 53.38737 0.9015854 6 52 54.36080  
## WHT 51.36101 1.6533659 6 49 53.22828  
## WT/BLK 52.20126 1.5181114 6 50 54.09945  
## WT/BR 51.01438 1.5297988 6 49 52.53135  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.70539   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.38737 a  
## BLK 53.12850 ab  
## WT/BLK 52.20126 abc  
## BL/BR 51.49502 bc  
## WHT 51.36101 c  
## WT/BR 51.01438 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9126598   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.19585 0.8772258 18 52.06092 55.38347  
## MornLow 51.00000 1.5339300 18 49.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6572363   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.19585 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9126598 24 52.09792 1.833724 2.812483  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.65670 0.3190326 3 52.46601 53.02501 52.47255 52.47908  
## BL/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.92368 1.2642258 3 53.19095 55.38347 53.19378 53.19660  
## BLK:MornLow 52.33333 2.3094011 3 51.00000 55.00000 51.00000 51.00000  
## BRN:MornHigh 54.10807 0.3749444 3 53.67727 54.36080 53.98170 54.28613  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 52.72202 0.5262925 3 52.17776 53.22828 52.46890 52.76003  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.40252 0.6577164 3 52.79270 54.09945 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.36209 0.2614922 3 52.06092 52.53135 52.27747 52.49401  
## WT/BR:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 52.75205  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.29004  
## BLK:MornLow 53.00000  
## BRN:MornHigh 54.32346  
## BRN:MornLow 53.00000  
## WHT:MornHigh 52.99416  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 52.51268  
## WT/BR:MornLow 50.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.10807 a  
## BLK:MornHigh 53.92368 a  
## WT/BLK:MornHigh 53.40252 ab  
## WHT:MornHigh 52.72202 abc  
## BRN:MornLow 52.66667 abc  
## BL/BR:MornHigh 52.65670 abc  
## WT/BR:MornHigh 52.36209 abcd  
## BLK:MornLow 52.33333 abcd  
## WT/BLK:MornLow 51.00000 bcd  
## BL/BR:MornLow 50.33333 cd  
## WHT:MornLow 50.00000 cd  
## WT/BR:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT41 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.320 3.064 4.6617 0.004093 \*\*   
## THIregime 1 47.296 47.296 71.9596 1.101e-08 \*\*\*  
## Colour:THIregime 5 1.470 0.294 0.4474 0.810892   
## Residuals 24 15.774 0.657   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6572611   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.88553 1.399058 6 50 53.31540  
## BLK 53.14436 1.418248 6 51 54.88350  
## BRN 52.64564 1.152860 6 51 53.83810  
## WHT 51.10783 1.925160 6 48 53.31540  
## WT/BLK 52.50586 1.355173 6 51 54.09945  
## WT/BR 51.92134 1.437898 6 50 53.41994  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.447232   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.14436 a  
## BRN 52.64564 a  
## WT/BLK 52.50586 ab  
## WT/BR 51.92134 ab  
## BL/BR 51.88553 ab  
## WHT 51.10783 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6572611   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.34796 0.6695047 18 51.65506 54.8835  
## MornLow 51.05556 1.2113300 18 48.00000 54.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5577454   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.34796 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6572611 24 52.20176 1.553044 2.386736  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.10438 0.3212879 3 52.73462 53.31540 52.99888 53.26313  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.95539 0.8496714 3 53.21584 54.88350 53.49133 53.76682  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.62462 0.3379469 3 53.23498 53.83810 53.51787 53.80076  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.54900 0.8374865 3 51.65506 53.31540 52.16580 52.67654  
## WHT:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## WT/BLK:MornHigh 53.67839 0.3653018 3 53.44608 54.09945 53.46785 53.48963  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.17601 0.3360491 3 52.79270 53.41994 53.05405 53.31540  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.28927  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.32516  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.99597  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.36767  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.95539 a  
## WT/BLK:MornHigh 53.67839 ab  
## BRN:MornHigh 53.62462 ab  
## WT/BR:MornHigh 53.17601 ab  
## BL/BR:MornHigh 53.10438 ab  
## WHT:MornHigh 52.54900 abc  
## BLK:MornLow 52.33333 abc  
## BRN:MornLow 51.66667 abcd  
## WT/BLK:MornLow 51.33333 bcd  
## BL/BR:MornLow 50.66667 cd  
## WT/BR:MornLow 50.66667 cd  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT42 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.995 3.199 4.3023 0.006179 \*\*   
## THIregime 1 37.813 37.813 50.8535 2.268e-07 \*\*\*  
## Colour:THIregime 5 0.577 0.115 0.1553 0.976339   
## Residuals 24 17.845 0.744   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.743558   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.96362 1.275451 6 50 53.44608  
## BLK 52.05478 1.359216 6 50 53.63898  
## BRN 51.74826 1.254631 6 50 53.01671  
## WHT 52.28821 1.122898 6 51 53.57675  
## WT/BLK 50.25023 1.573631 6 48 52.27000  
## WT/BR 51.84408 1.568920 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.539312   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.28821 a  
## BLK 52.05478 a  
## BL/BR 51.96362 a  
## WT/BR 51.84408 a  
## BRN 51.74826 ab  
## WT/BLK 50.25023 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.743558   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.71640 0.7828243 18 50.87613 53.8381  
## MornLow 50.66667 1.1881771 18 48.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5932319   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.71640 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.743558 24 51.69153 1.668161 2.538592  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.92725 0.5303103 3 52.38616 53.44608 52.66783 52.94951  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.10957 0.5300552 3 52.57887 53.63898 52.84487 53.11087  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 52.82984 0.3039879 3 52.47908 53.01671 52.73641 52.99374  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.24309 0.2890410 3 53.06942 53.57675 53.07626 53.08309  
## WHT:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BLK:MornHigh 51.50047 0.7081858 3 50.87613 52.27000 51.11570 51.35528  
## WT/BLK:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## WT/BR:MornHigh 52.68816 1.0081473 3 51.95638 53.83810 52.11319 52.27000  
## WT/BR:MornLow 51.00000 1.7320508 3 50.00000 53.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.19779  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.37492  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.00523  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.32992  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 51.81264  
## WT/BLK:MornLow 49.50000  
## WT/BR:MornHigh 53.05405  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.24309 a  
## BLK:MornHigh 53.10957 ab  
## BL/BR:MornHigh 52.92725 ab  
## BRN:MornHigh 52.82984 ab  
## WT/BR:MornHigh 52.68816 ab  
## WT/BLK:MornHigh 51.50047 abc  
## WHT:MornLow 51.33333 abc  
## BL/BR:MornLow 51.00000 abc  
## BLK:MornLow 51.00000 abc  
## WT/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.66667 bc  
## WT/BLK:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT43 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.339 1.468 1.4439 0.2449   
## THIregime 1 50.558 50.558 49.7340 2.726e-07 \*\*\*  
## Colour:THIregime 5 0.719 0.144 0.1414 0.9807   
## Residuals 24 24.398 1.017   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.016567   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.22594 1.525737 6 50 54.01233  
## BLK 52.93041 1.611145 6 51 54.95168  
## BRN 51.94138 1.455506 6 50 53.39007  
## WHT 51.93022 1.767329 6 49 53.93611  
## WT/BLK 51.67917 1.851117 6 49 54.01233  
## WT/BR 52.73662 1.242027 6 51 54.01233  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.799853   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.93041 a  
## WT/BR 52.73662 a  
## BL/BR 52.22594 a  
## BRN 51.94138 a  
## WHT 51.93022 a  
## WT/BLK 51.67917 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.016567   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.42569 0.6646994 18 52.27 54.95168  
## MornLow 51.05556 1.2113300 18 49.00 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6936414   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.42569 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.016567 24 52.24062 1.93001 2.96827  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.45188 0.5575694 3 52.89724 54.01233 53.17166 53.44608  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.86083 0.9447057 3 53.31540 54.95168 53.31540 53.31540  
## BLK:MornLow 52.00000 1.7320508 3 51.00000 54.00000 51.00000 51.00000  
## BRN:MornHigh 53.21609 0.2970381 3 52.87312 53.39007 53.12910 53.38509  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.19376 0.8280260 3 52.30075 53.93611 52.82259 53.34444  
## WHT:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## WT/BLK:MornHigh 53.02501 0.8940960 3 52.27000 54.01233 52.53135 52.79270  
## WT/BLK:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.80657 0.2980767 3 53.46474 54.01233 53.70369 53.94264  
## WT/BR:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.72920  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.13354  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.38758  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.64027  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.40252  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.97749  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.86083 a  
## WT/BR:MornHigh 53.80657 a  
## BL/BR:MornHigh 53.45188 ab  
## BRN:MornHigh 53.21609 abc  
## WHT:MornHigh 53.19376 abc  
## WT/BLK:MornHigh 53.02501 abc  
## BLK:MornLow 52.00000 abc  
## WT/BR:MornLow 51.66667 abc  
## BL/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.66667 bc  
## WHT:MornLow 50.66667 bc  
## WT/BLK:MornLow 50.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT44 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.391 1.478 5.8400 0.00115 \*\*   
## THIregime 1 50.919 50.919 201.1545 3.652e-13 \*\*\*  
## Colour:THIregime 5 0.546 0.109 0.4311 0.82239   
## Residuals 24 6.075 0.253   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2531331   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.69998 1.554084 6 50 53.43156  
## BLK 52.17753 1.475736 6 50 53.88355  
## BRN 52.97435 1.067512 6 52 53.97749  
## WHT 51.96071 1.478168 6 50 53.44608  
## WT/BLK 52.81046 1.321652 6 51 54.18657  
## WT/BR 52.51270 1.357805 6 51 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.8981392   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.97435 a  
## WT/BLK 52.81046 ab  
## WT/BR 52.51270 abc  
## BLK 52.17753 abc  
## WHT 51.96071 bc  
## BL/BR 51.69998 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2531331   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.54525 0.4545371 18 52.81646 54.18657  
## MornLow 51.16667 0.7859052 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3461318   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.54525 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2531331 24 52.35596 0.9609668 1.481187  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.06663 0.3184539 3 52.84497 53.43156 52.88417 52.92338  
## BL/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.35506 0.5336185 3 52.81646 53.88355 53.09082 53.36518  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.94870 0.0295107 3 53.91852 53.97749 53.93431 53.95011  
## BRN:MornLow 52.00000 0.0000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.25476 0.3247332 3 52.87982 53.44608 53.15910 53.43839  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.95426 0.3298184 3 53.57675 54.18657 53.83810 54.09945  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.69208 0.3209360 3 53.48963 54.06211 53.50706 53.52448  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.17747  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.62437  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.96380  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.44223  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.79330  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.95426 a  
## BRN:MornHigh 53.94870 a  
## WT/BR:MornHigh 53.69208 a  
## BLK:MornHigh 53.35506 ab  
## WHT:MornHigh 53.25476 ab  
## BL/BR:MornHigh 53.06663 abc  
## BRN:MornLow 52.00000 bcd  
## WT/BLK:MornLow 51.66667 cde  
## WT/BR:MornLow 51.33333 de  
## BLK:MornLow 51.00000 de  
## WHT:MornLow 50.66667 de  
## BL/BR:MornLow 50.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT45 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.076 2.215 3.8183 0.01097 \*   
## THIregime 1 43.264 43.264 74.5717 7.947e-09 \*\*\*  
## Colour:THIregime 5 0.817 0.163 0.2816 0.91861   
## Residuals 24 13.924 0.580   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5801672   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.05026 1.356830 6 50 53.66387  
## BLK 52.82335 1.541684 6 51 54.74714  
## BRN 51.77950 1.287825 6 50 53.07415  
## WHT 50.99453 1.512736 6 49 52.53135  
## WT/BLK 51.75872 1.270441 6 50 53.05405  
## WT/BR 51.50452 1.349934 6 50 53.05405  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.359708   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.82335 a  
## BL/BR 52.05026 ab  
## BRN 51.77950 ab  
## WT/BLK 51.75872 ab  
## WT/BR 51.50452 ab  
## WHT 50.99453 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5801672   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.91474 0.6042015 18 51.96253 54.74714  
## MornLow 50.72222 1.0740553 18 49.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5240149   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.91474 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5801672 24 51.81848 1.469914 2.242395  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.10051 0.5416200 3 52.58362 53.66387 52.81884 53.05405  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.64670 0.9530264 3 53.09139 54.74714 53.09648 53.10157  
## BLK:MornLow 52.00000 1.7320508 3 51.00000 54.00000 51.00000 51.00000  
## BRN:MornHigh 52.89233 0.3126170 3 52.53135 53.07415 52.80141 53.07147  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 52.32238 0.3129931 3 51.96253 52.53135 52.21790 52.47327  
## WHT:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## WT/BLK:MornHigh 52.85078 0.3520778 3 52.44423 53.05405 52.74914 53.05405  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.67571 0.3277330 3 52.47908 53.05405 52.48655 52.49401  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.35896  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.92436  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.07281  
## BRN:MornLow 51.00000  
## WHT:MornHigh 52.50231  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.77403  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.64670 a  
## BL/BR:MornHigh 53.10051 ab  
## BRN:MornHigh 52.89233 abc  
## WT/BLK:MornHigh 52.85078 abc  
## WT/BR:MornHigh 52.67571 abc  
## WHT:MornHigh 52.32238 abcd  
## BLK:MornLow 52.00000 abcd  
## BL/BR:MornLow 51.00000 bcde  
## BRN:MornLow 50.66667 cde  
## WT/BLK:MornLow 50.66667 cde  
## WT/BR:MornLow 50.33333 de  
## WHT:MornLow 49.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT46 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.484 0.897 2.4432 0.06329 .   
## THIregime 1 50.961 50.961 138.8451 1.821e-11 \*\*\*  
## Colour:THIregime 5 0.503 0.101 0.2741 0.92282   
## Residuals 24 8.809 0.367   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3670365   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.87464 1.386443 6 50 53.26313  
## BLK 51.38085 1.672758 6 49 53.26995  
## BRN 52.46098 1.303261 6 51 53.95011  
## WHT 51.94018 1.455495 6 50 53.41341  
## WT/BLK 52.33889 1.191875 6 51 53.83810  
## WT/BR 52.14318 1.448015 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.081493   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.46098 a  
## WT/BLK 52.33889 a  
## WT/BR 52.14318 a  
## WHT 51.94018 a  
## BL/BR 51.87464 a  
## BLK 51.38085 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3670365   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.21290 0.4402843 18 52.22248 53.95011  
## MornLow 50.83333 0.7859052 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4167942   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.21290 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3670365 24 52.02312 1.16455 1.78357  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.08260 0.3076627 3 52.72736 53.26313 52.99234 53.25732  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 52.76171 0.5244202 3 52.22248 53.26995 52.50759 52.79270  
## BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BRN:MornHigh 53.58862 0.3132886 3 53.39582 53.95011 53.40788 53.41994  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.21369 0.3119744 3 52.85419 53.41341 53.11384 53.37348  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.34444 0.4297363 3 53.05405 53.83810 53.09761 53.14117  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.28636 0.5668165 3 52.70558 53.83810 53.01049 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.26023  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.03132  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.68502  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.39344  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.48963  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.58862 a  
## WT/BLK:MornHigh 53.34444 a  
## WT/BR:MornHigh 53.28636 a  
## WHT:MornHigh 53.21369 a  
## BL/BR:MornHigh 53.08260 ab  
## BLK:MornHigh 52.76171 abc  
## BRN:MornLow 51.33333 bcd  
## WT/BLK:MornLow 51.33333 bcd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 50.66667 d  
## WHT:MornLow 50.66667 d  
## BLK:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT47 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.620 0.524 0.9104 0.4908   
## THIregime 1 45.861 45.861 79.6787 4.304e-09 \*\*\*  
## Colour:THIregime 5 0.091 0.018 0.0317 0.9994   
## Residuals 24 13.814 0.576   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5755711   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.73912 1.246604 6 50 53.00178  
## BLK 51.77325 1.634090 6 49 53.58811  
## BRN 52.07026 1.374524 6 50 53.68876  
## WHT 51.81146 1.320908 6 50 53.14117  
## WT/BLK 51.50494 1.350569 6 50 53.05405  
## WT/BR 51.20635 1.506884 6 49 52.96693  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.354312   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.07026 a  
## WHT 51.81146 a  
## BLK 51.77325 a  
## BL/BR 51.73912 a  
## WT/BLK 51.50494 a  
## WT/BR 51.20635 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5755711   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.81291 0.4899223 18 51.85184 53.68876  
## MornLow 50.55556 0.8555853 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5219351   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.81291 a  
## MornLow 50.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5755711 24 51.68423 1.467883 2.233495  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81158 0.3181945 3 52.44423 53.00178 52.71647 52.98871  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 52.87983 0.8177484 3 51.98489 53.58811 52.52569 53.06650  
## BLK:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BRN:MornHigh 53.14053 0.5356248 3 52.61847 53.68876 52.86641 53.11436  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.95626 0.3114387 3 52.59669 53.14117 52.86380 53.13092  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.67654 0.3298184 3 52.44423 53.05405 52.48779 52.53135  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.41271 0.5575763 3 51.85184 52.96693 52.13559 52.41934  
## WT/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 52.99525  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.32730  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.40156  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.13604  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.79270  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.69314  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.14053 a  
## WHT:MornHigh 52.95626 a  
## BLK:MornHigh 52.87983 ab  
## BL/BR:MornHigh 52.81158 ab  
## WT/BLK:MornHigh 52.67654 ab  
## WT/BR:MornHigh 52.41271 abc  
## BRN:MornLow 51.00000 abcd  
## BL/BR:MornLow 50.66667 bcd  
## BLK:MornLow 50.66667 bcd  
## WHT:MornLow 50.66667 bcd  
## WT/BLK:MornLow 50.33333 cd  
## WT/BR:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT48 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.322 0.864 1.1803 0.3479   
## THIregime 1 47.447 47.447 64.7866 2.832e-08 \*\*\*  
## Colour:THIregime 5 0.421 0.084 0.1150 0.9879   
## Residuals 24 17.577 0.732   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7323555   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.15891 1.782980 6 49 53.90344  
## BLK 52.91473 1.234251 6 51 54.38353  
## BRN 51.89189 1.405029 6 50 53.31540  
## WHT 51.86797 1.554580 6 50 53.78002  
## WT/BLK 52.23030 1.545112 6 50 54.09945  
## WT/BR 52.15770 1.268197 6 51 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.527672   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.91473 a  
## WT/BLK 52.23030 a  
## BL/BR 52.15891 a  
## WT/BR 52.15770 a  
## BRN 51.89189 a  
## WHT 51.86797 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7323555   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.35161 0.5623121 18 52.21192 54.38353  
## MornLow 51.05556 0.9983647 18 49.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5887461   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.35161 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7323555 24 52.20358 1.639308 2.519396  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.31782 0.9582925 3 52.21192 53.90344 53.02501 53.83810  
## BL/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## BLK:MornHigh 53.82946 0.5461239 3 53.29164 54.38353 53.55243 53.81321  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 53.11711 0.3137615 3 52.75536 53.31540 53.01796 53.28055  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.06928 0.6156668 3 52.70046 53.78002 52.71391 52.72736  
## WHT:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## WT/BLK:MornHigh 53.46059 0.6538588 3 52.79270 54.09945 53.14117 53.48963  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.31540 0.0000000 3 53.31540 53.31540 53.31540 53.31540  
## WT/BR:MornLow 51.00000 0.0000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.87077  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 54.09837  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.29798  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.25369  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.31540  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.82946 a  
## WT/BLK:MornHigh 53.46059 ab  
## BL/BR:MornHigh 53.31782 ab  
## WT/BR:MornHigh 53.31540 ab  
## BRN:MornHigh 53.11711 abc  
## WHT:MornHigh 53.06928 abc  
## BLK:MornLow 52.00000 abc  
## BL/BR:MornLow 51.00000 bc  
## WT/BLK:MornLow 51.00000 bc  
## WT/BR:MornLow 51.00000 bc  
## BRN:MornLow 50.66667 c  
## WHT:MornLow 50.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT49 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.038 0.408 0.4161 0.8329   
## THIregime 1 48.304 48.304 49.3153 2.923e-07 \*\*\*  
## Colour:THIregime 5 0.136 0.027 0.0278 0.9996   
## Residuals 24 23.508 0.979   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9794908   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.57439 2.026710 6 48 53.68129  
## BLK 51.82858 1.518281 6 50 53.70174  
## BRN 51.83521 1.525945 6 50 53.72609  
## WHT 51.83232 1.342574 6 50 53.18473  
## WT/BLK 52.36792 1.217185 6 51 53.83810  
## WT/BR 51.84501 1.537635 6 50 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.766727   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.36792 a  
## WT/BR 51.84501 a  
## BRN 51.83521 a  
## WHT 51.83232 a  
## BLK 51.82858 a  
## BL/BR 51.57439 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9794908   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.03892 0.5975789 18 51.51499 53.8381  
## MornLow 50.72222 1.0740553 18 48.00000 52.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6808748   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.03892 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9794908 24 51.88057 1.907636 2.913638  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81545 1.1466835 3 51.51499 53.68129 52.38253 53.25006  
## BL/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 52.99050 0.6160171 3 52.62639 53.70174 52.63487 52.64336  
## BLK:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## BRN:MornHigh 53.00376 0.6256518 3 52.63187 53.72609 52.64259 52.65331  
## BRN:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## WHT:MornHigh 52.99797 0.3109882 3 52.63896 53.18473 52.90459 53.17021  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.40252 0.3992187 3 53.05405 53.83810 53.18473 53.31540  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.02335 0.6418719 3 52.61847 53.76343 52.65331 52.68816  
## WT/BR:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.46568  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.17255  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.18970  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.17747  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.22579  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.40252 a  
## WT/BR:MornHigh 53.02335 ab  
## BRN:MornHigh 53.00376 ab  
## WHT:MornHigh 52.99797 ab  
## BLK:MornHigh 52.99050 ab  
## BL/BR:MornHigh 52.81545 ab  
## WT/BLK:MornLow 51.33333 ab  
## BLK:MornLow 50.66667 ab  
## BRN:MornLow 50.66667 ab  
## WHT:MornLow 50.66667 ab  
## WT/BR:MornLow 50.66667 ab  
## BL/BR:MornLow 50.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT50 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.766 1.353 4.0008 0.008811 \*\*   
## THIregime 1 50.802 50.802 150.1927 8.073e-12 \*\*\*  
## Colour:THIregime 5 0.775 0.155 0.4582 0.803196   
## Residuals 24 8.118 0.338   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3382469   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.97995 1.498508 6 49 52.53135  
## BLK 51.28965 1.412766 6 50 52.59358  
## BRN 51.99492 1.309667 6 50 53.55933  
## WHT 51.77580 1.283389 6 50 53.06942  
## WT/BLK 51.04819 1.586828 6 49 52.79270  
## WT/BR 52.03906 1.348055 6 50 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.038212   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.03906 a  
## BRN 51.99492 ab  
## WHT 51.77580 ab  
## BLK 51.28965 ab  
## WT/BLK 51.04819 ab  
## BL/BR 50.97995 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3382469   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.70919 0.4639476 18 51.87798 53.66387  
## MornLow 50.33333 0.8401681 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4001142   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.70919 a  
## MornLow 50.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3382469 24 51.52126 1.128835 1.712192  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.29323 0.32611590 3 51.92153 52.53135 52.17417 52.42681  
## BL/BR:MornLow 49.66667 0.57735027 3 49.00000 50.00000 49.50000 50.00000  
## BLK:MornHigh 52.57929 0.01407337 3 52.56544 52.59358 52.57215 52.57887  
## BLK:MornLow 50.00000 0.00000000 3 50.00000 50.00000 50.00000 50.00000  
## BRN:MornHigh 52.98985 0.56432075 3 52.43083 53.55933 52.70510 52.97938  
## BRN:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.88494 0.30631540 3 52.53135 53.06942 52.79270 53.05405  
## WHT:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.42971 0.48569658 3 51.87798 52.79270 52.24822 52.61847  
## WT/BLK:MornLow 49.66667 0.57735027 3 49.00000 50.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.07811 0.55156606 3 52.56869 53.66387 52.78523 53.00178  
## WT/BR:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.47908  
## BL/BR:MornLow 50.00000  
## BLK:MornHigh 52.58622  
## BLK:MornLow 50.00000  
## BRN:MornHigh 53.26935  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.06174  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.70558  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 53.33282  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.07811 a  
## BRN:MornHigh 52.98985 a  
## WHT:MornHigh 52.88494 a  
## BLK:MornHigh 52.57929 ab  
## WT/BLK:MornHigh 52.42971 ab  
## BL/BR:MornHigh 52.29323 abc  
## BRN:MornLow 51.00000 bcd  
## WT/BR:MornLow 51.00000 bcd  
## WHT:MornLow 50.66667 cd  
## BLK:MornLow 50.00000 d  
## BL/BR:MornLow 49.66667 d  
## WT/BLK:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT51 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.529 1.306 2.7393 0.04277 \*   
## THIregime 1 49.551 49.551 103.9422 3.365e-10 \*\*\*  
## Colour:THIregime 5 0.523 0.105 0.2193 0.95072   
## Residuals 24 11.441 0.477   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4767124   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.98305 1.503775 6 50 53.51141  
## BLK 53.27143 1.110122 6 52 54.58806  
## BRN 52.49844 1.342187 6 51 54.02478  
## WHT 52.22418 1.520099 6 50 53.98329  
## WT/BLK 52.80320 1.510788 6 51 54.75283  
## WT/BR 52.25892 1.553875 6 50 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.23253   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.27143 a  
## WT/BLK 52.80320 ab  
## BRN 52.49844 ab  
## WT/BR 52.25892 ab  
## WHT 52.22418 ab  
## BL/BR 51.98305 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4767124   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.67974 0.5141059 18 52.89724 54.75283  
## MornLow 51.33333 0.9074852 18 50.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4750018   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.67974 a  
## MornLow 51.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4767124 24 52.50654 1.314967 2.032655  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.29943 0.3484757 3 52.89724 53.51141 53.19344 53.48963  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 54.20952 0.3279197 3 54.01233 54.58806 54.02025 54.02817  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 53.66355 0.3129070 3 53.47623 54.02478 53.48293 53.48963  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.44835 0.5300300 3 52.92338 53.98329 53.18088 53.43839  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.93974 0.7055016 3 53.48963 54.75283 53.53319 53.57675  
## WT/BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.51784 0.5307297 3 53.00178 54.06211 53.24571 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.50052  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.30812  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.75721  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.71084  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.16479  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.77587  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.20952 a  
## WT/BLK:MornHigh 53.93974 a  
## BRN:MornHigh 53.66355 ab  
## WT/BR:MornHigh 53.51784 ab  
## WHT:MornHigh 53.44835 ab  
## BL/BR:MornHigh 53.29943 abc  
## BLK:MornLow 52.33333 abcd  
## WT/BLK:MornLow 51.66667 bcd  
## BRN:MornLow 51.33333 cd  
## WHT:MornLow 51.00000 d  
## WT/BR:MornLow 51.00000 d  
## BL/BR:MornLow 50.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT52 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 1.784 0.357 1.0707 0.4011   
## THIregime 1 48.925 48.925 146.8049 1.023e-11 \*\*\*  
## Colour:THIregime 5 0.252 0.050 0.1514 0.9776   
## Residuals 24 7.998 0.333   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3332678   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.59375 1.444610 6 50 53.25006  
## BLK 51.59876 1.446714 6 50 53.22036  
## BRN 51.86645 1.377791 6 50 53.24571  
## WHT 52.12144 1.423468 6 50 53.77661  
## WT/BLK 52.03428 1.357690 6 50 53.70743  
## WT/BR 52.11331 1.219609 6 51 53.24073  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.030542   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.12144 a  
## WT/BR 52.11331 a  
## WT/BLK 52.03428 a  
## BRN 51.86645 a  
## BLK 51.59876 a  
## BL/BR 51.59375 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3332678   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.05378 0.3775941 18 52.44423 53.77661  
## MornLow 50.72222 0.6691132 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3971584   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.05378 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3332678 24 51.888 1.112576 1.699543  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.85417 0.34345878 3 52.63589 53.25006 52.65622 52.67654  
## BL/BR:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 52.86419 0.30853524 3 52.67907 53.22036 52.68610 52.69314  
## BLK:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## BRN:MornHigh 53.06624 0.30654442 3 52.71228 53.24571 52.97651 53.24073  
## BRN:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.24287 0.54110076 3 52.69469 53.77661 52.97601 53.25732  
## WHT:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.06857 0.63172099 3 52.44423 53.70743 52.74914 53.05405  
## WT/BLK:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.22662 0.01500327 3 53.21086 53.24073 53.21957 53.22828  
## WT/BR:MornLow 51.00000 0.00000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.96330  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 52.95675  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.24322  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.51696  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.38074  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.23451  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.24287 a  
## WT/BR:MornHigh 53.22662 a  
## WT/BLK:MornHigh 53.06857 a  
## BRN:MornHigh 53.06624 a  
## BLK:MornHigh 52.86419 a  
## BL/BR:MornHigh 52.85417 a  
## WHT:MornLow 51.00000 b  
## WT/BLK:MornLow 51.00000 b  
## WT/BR:MornLow 51.00000 b  
## BRN:MornLow 50.66667 b  
## BL/BR:MornLow 50.33333 b  
## BLK:MornLow 50.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT53 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.677 0.735 2.5092 0.05796 .   
## THIregime 1 54.535 54.535 186.0745 8.425e-13 \*\*\*  
## Colour:THIregime 5 0.234 0.047 0.1599 0.97478   
## Residuals 24 7.034 0.293   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2930798   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.97337 1.491466 6 50 53.51141  
## BLK 52.44302 1.284221 6 51 53.90938  
## BRN 51.68849 1.543833 6 50 53.43602  
## WHT 52.17855 1.477658 6 50 53.90344  
## WT/BLK 52.55668 1.406699 6 51 54.18657  
## WT/BR 52.54465 1.393269 6 51 54.15172  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9664115   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.55668 a  
## WT/BR 52.54465 a  
## BLK 52.44302 a  
## WHT 52.17855 a  
## BL/BR 51.97337 a  
## BRN 51.68849 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2930798   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.46159 0.4162352 18 52.82345 54.18657  
## MornLow 51.00000 0.6859943 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3724431   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.46159 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2930798 24 52.23079 1.036493 1.59378  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.28007 0.3247177 3 52.90886 53.51141 53.16440 53.41994  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.55271 0.3090180 3 53.36518 53.90938 53.37438 53.38358  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.04365 0.3403905 3 52.82755 53.43602 52.84746 52.86737  
## BRN:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WHT:MornHigh 53.35711 0.5401067 3 52.82345 53.90344 53.08394 53.34444  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.78002 0.3520778 3 53.57675 54.18657 53.57675 53.57675  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.75596 0.3432450 3 53.53941 54.15172 53.55808 53.57675  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.46568  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.64648  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.15170  
## BRN:MornLow 50.50000  
## WHT:MornHigh 53.62394  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.88166  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.86424  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.78002 a  
## WT/BR:MornHigh 53.75596 a  
## BLK:MornHigh 53.55271 a  
## WHT:MornHigh 53.35711 a  
## BL/BR:MornHigh 53.28007 a  
## BRN:MornHigh 53.04365 a  
## BLK:MornLow 51.33333 b  
## WT/BLK:MornLow 51.33333 b  
## WT/BR:MornLow 51.33333 b  
## WHT:MornLow 51.00000 b  
## BL/BR:MornLow 50.66667 b  
## BRN:MornLow 50.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT54 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 23.039 4.608 14.9381 1.060e-06 \*\*\*  
## THIregime 1 47.717 47.717 154.6909 5.934e-12 \*\*\*  
## Colour:THIregime 5 1.792 0.358 1.1622 0.3562   
## Residuals 24 7.403 0.308   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3084651   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.56240 1.866044 6 48 52.79270  
## BLK 52.43113 1.271899 6 51 53.88562  
## BRN 52.36110 1.201713 6 51 53.76841  
## WHT 52.38550 1.226047 6 51 53.80906  
## WT/BLK 53.20187 1.063320 6 52 54.53503  
## WT/BR 51.96573 1.484814 6 50 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9914531   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 53.20187 a  
## BLK 52.43113 ab  
## WHT 52.38550 ab  
## BRN 52.36110 ab  
## WT/BR 51.96573 b  
## BL/BR 50.56240 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3084651   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.30258 0.6959986 18 51.57307 54.53503  
## MornLow 51.00000 1.1881771 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3820939   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.30258 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3084651 24 52.15129 1.064971 1.635078  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.12481 0.6180578 3 51.57307 52.79270 51.79086 52.00865  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 53.52892 0.3090805 3 53.34029 53.88562 53.35057 53.36085  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.38886 0.3287263 3 53.19478 53.76841 53.19908 53.20339  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.43768 0.3216343 3 53.25006 53.80906 53.25198 53.25391  
## WHT:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BLK:MornHigh 54.07041 0.4798012 3 53.57675 54.53503 53.83810 54.09945  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 53.26479 0.3401020 3 52.87982 53.52448 53.13494 53.39007  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.40068  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 53.62324  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.48590  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.53148  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.31724  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 53.45728  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 54.07041 a  
## BLK:MornHigh 53.52892 ab  
## WHT:MornHigh 53.43768 ab  
## BRN:MornHigh 53.38886 ab  
## WT/BR:MornHigh 53.26479 ab  
## WT/BLK:MornLow 52.33333 bc  
## BL/BR:MornHigh 52.12481 bcd  
## BLK:MornLow 51.33333 cd  
## BRN:MornLow 51.33333 cd  
## WHT:MornLow 51.33333 cd  
## WT/BR:MornLow 50.66667 d  
## BL/BR:MornLow 49.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT55 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.332 2.266 1.9773 0.1186   
## THIregime 1 47.866 47.866 41.7578 1.106e-06 \*\*\*  
## Colour:THIregime 5 0.856 0.171 0.1493 0.9783   
## Residuals 24 27.511 1.146   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.146275   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.19259 1.806031 6 49 53.47221  
## BLK 51.81307 1.666342 6 49 53.66387  
## BRN 52.54618 1.045229 6 51 53.61409  
## WHT 50.74106 2.146657 6 47 52.99597  
## WT/BLK 51.78776 1.298102 6 50 53.14117  
## WT/BR 51.50452 1.349934 6 50 53.05405  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.911233   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.54618 a  
## BLK 51.81307 a  
## WT/BLK 51.78776 a  
## WT/BR 51.50452 a  
## BL/BR 51.19259 a  
## WHT 50.74106 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.146275   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.75062 0.7378194 18 50.88638 53.66387  
## MornLow 50.44444 1.3382263 18 47.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7365656   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.75062 a  
## MornLow 50.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.146275 24 51.59753 2.074987 3.151953  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.38519 0.9420886 3 51.80538 53.47221 51.84168 51.87798  
## BL/BR:MornLow 50.00000 1.7320508 3 49.00000 52.00000 49.00000 49.00000  
## BLK:MornHigh 52.95947 0.8158963 3 52.06547 53.66387 52.60728 53.14909  
## BLK:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BRN:MornHigh 53.42568 0.2780644 3 53.10632 53.61409 53.33148 53.55665  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.14879 1.1144069 3 50.88638 52.99597 51.72520 52.56402  
## WHT:MornLow 49.33333 2.0816660 3 47.00000 51.00000 48.50000 50.00000  
## WT/BLK:MornHigh 52.90886 0.3298184 3 52.53135 53.14117 52.79270 53.05405  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.67571 0.3277330 3 52.47908 53.05405 52.48655 52.49401  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 52.67509  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.40648  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.58537  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.78000  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.09761  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.77403  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.42568 a  
## BLK:MornHigh 52.95947 ab  
## WT/BLK:MornHigh 52.90886 ab  
## WT/BR:MornHigh 52.67571 ab  
## BL/BR:MornHigh 52.38519 abc  
## WHT:MornHigh 52.14879 abc  
## BRN:MornLow 51.66667 abc  
## BLK:MornLow 50.66667 abc  
## WT/BLK:MornLow 50.66667 abc  
## WT/BR:MornLow 50.33333 abc  
## BL/BR:MornLow 50.00000 bc  
## WHT:MornLow 49.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT56 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.200 0.840 0.6604 0.6568   
## THIregime 1 53.382 53.382 41.9625 1.065e-06 \*\*\*  
## Colour:THIregime 5 0.313 0.063 0.0492 0.9983   
## Residuals 24 30.531 1.272   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.272144   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.40942 1.709944 6 49 53.44608  
## BLK 52.13787 1.437912 6 50 53.81434  
## BRN 52.14567 1.446491 6 50 53.83810  
## WHT 51.86829 2.235397 6 48 54.30272  
## WT/BLK 52.49860 1.702855 6 50 54.62215  
## WT/BR 52.24648 1.365578 6 51 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.013434   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.49860 a  
## WT/BR 52.24648 a  
## BRN 52.14567 a  
## BLK 52.13787 a  
## WHT 51.86829 a  
## BL/BR 51.40942 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.272144   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.26878 0.7089688 18 51.62431 54.62215  
## MornLow 50.83333 1.2485285 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7759527   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.26878 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.272144 24 52.05105 2.166899 3.320501  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81884 0.59194477 3 52.27000 53.44608 52.50522 52.74043  
## BL/BR:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.27574 0.53361847 3 52.74725 53.81434 53.00643 53.26562  
## BLK:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.29134 0.54144844 3 52.75536 53.83810 53.01796 53.28055  
## BRN:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 53.06992 1.35182712 3 51.62431 54.30272 52.45352 53.28273  
## WHT:MornLow 50.66667 2.51661148 3 48.00000 53.00000 49.50000 51.00000  
## WT/BLK:MornHigh 53.66387 0.91783104 3 52.79270 54.62215 53.18473 53.57675  
## WT/BLK:MornLow 51.33333 1.52752523 3 50.00000 53.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.49295 0.03000653 3 53.46474 53.52448 53.47719 53.48963  
## WT/BR:MornLow 51.00000 0.00000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.09325  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.53998  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.55933  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.79273  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.09945  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.50706  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.66387 a  
## WT/BR:MornHigh 53.49295 a  
## BRN:MornHigh 53.29134 ab  
## BLK:MornHigh 53.27574 ab  
## WHT:MornHigh 53.06992 ab  
## BL/BR:MornHigh 52.81884 ab  
## WT/BLK:MornLow 51.33333 ab  
## BLK:MornLow 51.00000 ab  
## BRN:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## WHT:MornLow 50.66667 ab  
## BL/BR:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT57 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.816 1.563 1.8052 0.1499   
## THIregime 1 49.374 49.374 57.0202 8.634e-08 \*\*\*  
## Colour:THIregime 5 0.541 0.108 0.1249 0.9854   
## Residuals 24 20.782 0.866   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8659106   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.06682 2.139110 6 48 53.68129  
## BLK 52.09822 1.203045 6 51 53.20177  
## BRN 52.34907 1.388365 6 50 53.73356  
## WHT 52.10603 1.409080 6 50 53.74586  
## WT/BLK 52.50586 1.355173 6 51 54.09945  
## WT/BR 52.23403 1.538419 6 50 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.661138   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.50586 a  
## BRN 52.34907 a  
## WT/BR 52.23403 a  
## WHT 52.10603 a  
## BLK 52.09822 a  
## BL/BR 51.06682 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8659106   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.23112 0.658003 18 51.51499 54.09945  
## MornLow 50.88889 1.131833 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6401822   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.23112 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8659106 24 52.06 1.787444 2.739504  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46698 1.106717291 3 51.51499 53.68129 51.85983 52.20466  
## BL/BR:MornLow 49.66667 2.081665999 3 48.00000 52.00000 48.50000 49.00000  
## BLK:MornHigh 53.19644 0.005412836 3 53.19095 53.20177 53.19378 53.19660  
## BLK:MornLow 51.00000 0.000000000 3 51.00000 51.00000 51.00000 51.00000  
## BRN:MornHigh 53.36480 0.624837877 3 52.64336 53.73356 53.18042 53.71748  
## BRN:MornLow 51.33333 1.154700538 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.21206 0.542099106 3 52.66203 53.74586 52.94515 53.22828  
## WHT:MornLow 51.00000 1.000000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.67839 0.365301835 3 53.44608 54.09945 53.46785 53.48963  
## WT/BLK:MornLow 51.33333 0.577350269 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.46806 0.590200027 3 52.86737 54.04718 53.17850 53.48963  
## WT/BR:MornLow 51.00000 1.000000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.94298  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.19919  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.72552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.48707  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.67839 a  
## WT/BR:MornHigh 53.46806 a  
## BRN:MornHigh 53.36480 a  
## WHT:MornHigh 53.21206 a  
## BLK:MornHigh 53.19644 a  
## BL/BR:MornHigh 52.46698 a  
## BRN:MornLow 51.33333 ab  
## WT/BLK:MornLow 51.33333 ab  
## BLK:MornLow 51.00000 ab  
## WHT:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## BL/BR:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT58 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.437 1.287 1.6188 0.1932   
## THIregime 1 53.087 53.087 66.7576 2.168e-08 \*\*\*  
## Colour:THIregime 5 0.599 0.120 0.1506 0.9779   
## Residuals 24 19.085 0.795   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7952268   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.07857 1.387551 6 50 53.73356  
## BLK 52.12995 1.430700 6 50 53.79265  
## BRN 52.41729 1.258864 6 51 53.87295  
## WHT 51.10210 2.164537 6 48 53.75098  
## WT/BLK 51.94748 1.471614 6 50 53.57675  
## WT/BR 51.61072 1.465115 6 50 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.591896   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.41729 a  
## BLK 52.12995 a  
## BL/BR 52.07857 a  
## WT/BLK 51.94748 a  
## WT/BR 51.61072 a  
## WHT 51.10210 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7952268   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.09537 0.600050 18 51.62431 53.87295  
## MornLow 50.66667 1.084652 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6134972   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.09537 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7952268 24 51.88102 1.718846 2.625312  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.15714 0.5686045 3 52.59669 53.73356 52.86893 53.14117  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.25990 0.5356355 3 52.72142 53.79265 52.99352 53.26562  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.50125 0.3218997 3 53.31540 53.87295 53.31540 53.31540  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.53754 1.0946588 3 51.62431 53.75098 51.93082 52.23733  
## WHT:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## WT/BLK:MornHigh 53.22828 0.3992187 3 52.79270 53.57675 53.05405 53.31540  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.88811 0.3713467 3 52.64336 53.31540 52.67447 52.70558  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.43736  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.52913  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.59417  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.99416  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.44608  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.01049  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.50125 a  
## BLK:MornHigh 53.25990 ab  
## WT/BLK:MornHigh 53.22828 ab  
## BL/BR:MornHigh 53.15714 ab  
## WT/BR:MornHigh 52.88811 abc  
## WHT:MornHigh 52.53754 abc  
## BRN:MornLow 51.33333 abcd  
## BL/BR:MornLow 51.00000 abcd  
## BLK:MornLow 51.00000 abcd  
## WT/BLK:MornLow 50.66667 bcd  
## WT/BR:MornLow 50.33333 cd  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT59 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.826 2.965 8.1489 0.0001303 \*\*\*  
## THIregime 1 50.601 50.601 139.0605 1.792e-11 \*\*\*  
## Colour:THIregime 5 1.306 0.261 0.7177 0.6164512   
## Residuals 24 8.733 0.364   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3638752   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.60246 1.4494639 6 50 53.21086  
## BLK 52.89490 0.9804487 6 52 53.81537  
## BRN 52.39186 1.4288034 6 50 53.83810  
## WHT 50.84377 1.7090090 6 49 52.76003  
## WT/BLK 51.90392 1.4165829 6 50 53.31540  
## WT/BR 52.14318 1.4480147 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.076826   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.89490 a  
## BRN 52.39186 ab  
## WT/BR 52.14318 ab  
## WT/BLK 51.90392 abc  
## BL/BR 51.60246 bc  
## WHT 50.84377 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3638752   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.14892 0.5817556 18 52.12481 53.8381  
## MornLow 50.77778 1.0602750 18 49.00000 52.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4149954   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.14892 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3638752 24 51.96335 1.160858 1.775872  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.87159 0.29491395 3 52.67654 53.21086 52.70195 52.72736  
## BL/BR:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.78979 0.02598161 3 53.76343 53.81537 53.77701 53.79058  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.45038 0.63948446 3 52.71228 53.83810 53.25652 53.80076  
## BRN:MornLow 51.33333 1.15470054 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 52.35420 0.35245730 3 52.12481 52.76003 52.15128 52.17776  
## WHT:MornLow 49.33333 0.57735027 3 49.00000 50.00000 49.00000 49.00000  
## WT/BLK:MornHigh 53.14117 0.30178099 3 52.79270 53.31540 53.05405 53.31540  
## WT/BLK:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.28636 0.56681650 3 52.70558 53.83810 53.01049 53.31540  
## WT/BR:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.96911  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.80298  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.46890  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 53.31540  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.78979 a  
## BRN:MornHigh 53.45038 ab  
## WT/BR:MornHigh 53.28636 ab  
## WT/BLK:MornHigh 53.14117 ab  
## BL/BR:MornHigh 52.87159 abc  
## WHT:MornHigh 52.35420 abcd  
## BLK:MornLow 52.00000 bcde  
## BRN:MornLow 51.33333 cde  
## WT/BR:MornLow 51.00000 def  
## WT/BLK:MornLow 50.66667 def  
## BL/BR:MornLow 50.33333 ef  
## WHT:MornLow 49.33333 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT60 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 26.286 5.257 6.4368 0.0006316 \*\*\*  
## THIregime 1 43.847 43.847 53.6848 1.442e-07 \*\*\*  
## Colour:THIregime 5 1.924 0.385 0.4711 0.7939874   
## Residuals 24 19.602 0.817   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8167543   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.23046 1.770211 6 48 52.07399  
## BLK 52.62526 1.340351 6 51 54.31535  
## BRN 52.29287 1.339503 6 50 53.62902  
## WHT 52.85168 1.180823 6 51 54.27368  
## WT/BLK 51.82406 1.700941 6 49 53.70743  
## WT/BR 52.13074 1.436198 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.613299   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.85168 a  
## BLK 52.62526 a  
## BRN 52.29287 a  
## WT/BR 52.13074 a  
## WT/BLK 51.82406 ab  
## BL/BR 50.23046 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8167543   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.09613 0.8413819 18 51.32914 54.31535  
## MornLow 50.88889 1.4507154 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6217457   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.09613 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8167543 24 51.99251 1.738221 2.66061  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.79425 0.4055485 3 51.32914 52.07399 51.65438 51.97961  
## BL/BR:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## BLK:MornHigh 53.58385 0.6334999 3 53.21584 54.31535 53.21810 53.22036  
## BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## BRN:MornHigh 53.25241 0.6246616 3 52.53135 53.62902 53.06410 53.59685  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.70337 0.5565612 3 53.16166 54.27368 53.41821 53.67476  
## WHT:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BLK:MornHigh 52.98145 0.9386122 3 51.92153 53.70743 52.61847 53.31540  
## WT/BLK:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.26147 0.5665432 3 52.70558 53.83810 52.97316 53.24073  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.02680  
## BL/BR:MornLow 49.00000  
## BLK:MornHigh 53.76786  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.61294  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.97422  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 53.51141  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.53941  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.70337 a  
## BLK:MornHigh 53.58385 ab  
## WT/BR:MornHigh 53.26147 abc  
## BRN:MornHigh 53.25241 abc  
## WT/BLK:MornHigh 52.98145 abc  
## WHT:MornLow 52.00000 abc  
## BL/BR:MornHigh 51.79425 abc  
## BLK:MornLow 51.66667 abc  
## BRN:MornLow 51.33333 abc  
## WT/BR:MornLow 51.00000 bcd  
## WT/BLK:MornLow 50.66667 cd  
## BL/BR:MornLow 48.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT61 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.681 3.736 10.3013 2.292e-05 \*\*\*  
## THIregime 1 38.210 38.210 105.3525 2.947e-10 \*\*\*  
## Colour:THIregime 5 0.696 0.139 0.3835 0.8551   
## Residuals 24 8.704 0.363   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3626858   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.72823 1.2374098 6 50 53.00178  
## BLK 53.17230 1.4345101 6 51 54.92895  
## BRN 52.86196 0.9446719 6 52 53.76841  
## WHT 52.39607 1.2347786 6 51 53.80543  
## WT/BLK 51.22938 1.3473717 6 50 52.53135  
## WT/BR 51.46014 1.3040222 6 50 52.96693  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.075064   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.17230 a  
## BRN 52.86196 a  
## WHT 52.39607 ab  
## BL/BR 51.72823 bc  
## WT/BR 51.46014 bc  
## WT/BLK 51.22938 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3626858   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.17158 0.6988578 18 52.37454 54.92895  
## MornLow 51.11111 1.0786096 18 50.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4143166   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.17158 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3626858 24 52.14135 1.155003 1.772967  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.78980 0.33743889 3 52.40068 53.00178 52.68380 52.96693  
## BL/BR:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 54.01127 0.83643127 3 53.29164 54.92895 53.55243 53.81321  
## BLK:MornLow 52.33333 1.52752523 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.72392 0.04560745 3 53.67727 53.76841 53.70168 53.72609  
## BRN:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.45882 0.30017961 3 53.28465 53.80543 53.28551 53.28636  
## WHT:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## WT/BLK:MornHigh 52.45875 0.06653645 3 52.40068 52.53135 52.42245 52.44423  
## WT/BLK:MornLow 50.00000 0.00000000 3 50.00000 50.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.58694 0.32984655 3 52.37454 52.96693 52.39694 52.41934  
## WT/BR:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 52.98436  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.37108  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.74725  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.54590  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 52.48779  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 52.69314  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.01127 a  
## BRN:MornHigh 53.72392 ab  
## WHT:MornHigh 53.45882 ab  
## BL/BR:MornHigh 52.78980 abc  
## WT/BR:MornHigh 52.58694 abc  
## WT/BLK:MornHigh 52.45875 abc  
## BLK:MornLow 52.33333 abcd  
## BRN:MornLow 52.00000 bcde  
## WHT:MornLow 51.33333 cdef  
## BL/BR:MornLow 50.66667 def  
## WT/BR:MornLow 50.33333 ef  
## WT/BLK:MornLow 50.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT62 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.609 6.522 15.1956 9.122e-07 \*\*\*  
## THIregime 1 56.303 56.303 131.1841 3.260e-11 \*\*\*  
## Colour:THIregime 5 2.044 0.409 0.9525 0.4659   
## Residuals 24 10.301 0.429   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.429194   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.78473 1.639624 6 49 52.53135  
## BLK 51.74152 1.248118 6 50 52.99723  
## BRN 52.03861 1.347713 6 50 53.61409  
## WHT 49.68543 1.978071 6 47 51.83442  
## WT/BLK 52.41148 1.250860 6 51 53.83810  
## WT/BR 52.17512 1.479763 6 50 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.169489   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.41148 a  
## WT/BR 52.17512 a  
## BRN 52.03861 a  
## BLK 51.74152 ab  
## BL/BR 50.78473 bc  
## WHT 49.68543 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.429194   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.72341 0.8346433 18 50.82489 53.94264  
## MornLow 50.22222 1.3956047 18 47.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4507066   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.72341 a  
## MornLow 50.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.429194 24 51.47282 1.272767 1.928689  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.23612 0.2606769 3 52.03769 52.53135 52.08851 52.13933  
## BL/BR:MornLow 49.33333 0.5773503 3 49.00000 50.00000 49.00000 49.00000  
## BLK:MornHigh 52.81638 0.3085805 3 52.46007 52.99723 52.72595 52.99182  
## BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BRN:MornHigh 53.07722 0.5519955 3 52.51125 53.61409 52.80878 53.10632  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 51.37086 0.5097858 3 50.82489 51.83442 51.13908 51.45328  
## WHT:MornLow 48.00000 1.0000000 3 47.00000 49.00000 47.50000 48.00000  
## WT/BLK:MornHigh 53.48963 0.3017810 3 53.31540 53.83810 53.31540 53.31540  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.35025 0.5757614 3 52.79270 53.94264 53.05405 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.33534  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 52.99453  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.36020  
## BRN:MornLow 51.50000  
## WHT:MornHigh 51.64385  
## WHT:MornLow 48.50000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.62902  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.48963 a  
## WT/BR:MornHigh 53.35025 a  
## BRN:MornHigh 53.07722 ab  
## BLK:MornHigh 52.81638 abc  
## BL/BR:MornHigh 52.23612 abcd  
## WHT:MornHigh 51.37086 bcd  
## WT/BLK:MornLow 51.33333 bcd  
## BRN:MornLow 51.00000 cde  
## WT/BR:MornLow 51.00000 cde  
## BLK:MornLow 50.66667 de  
## BL/BR:MornLow 49.33333 ef  
## WHT:MornLow 48.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT63 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.589 1.318 2.0341 0.1098   
## THIregime 1 43.499 43.499 67.1436 2.059e-08 \*\*\*  
## Colour:THIregime 5 0.195 0.039 0.0602 0.9973   
## Residuals 24 15.548 0.648   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6478439   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.15460 1.456165 6 49 52.84497  
## BLK 52.04668 1.353125 6 50 53.63357  
## BRN 52.29329 1.514509 6 50 54.11955  
## WHT 51.78609 1.294480 6 50 53.08672  
## WT/BLK 51.48316 1.331628 6 50 53.05405  
## WT/BR 51.16487 1.467774 6 49 52.86737  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.436827   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.29329 a  
## BLK 52.04668 a  
## WHT 51.78609 a  
## WT/BLK 51.48316 a  
## WT/BR 51.16487 a  
## BL/BR 51.15460 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6478439   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.75400 0.5885067 18 51.7473 54.11955  
## MornLow 50.55556 0.9835244 18 49.0000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5537354   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.75400 a  
## MornLow 50.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6478439 24 51.65478 1.558205 2.369576  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.30920 0.5493015 3 51.74730 52.84497 52.04132 52.33534  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.09335 0.5392308 3 52.55511 53.63357 52.82325 53.09139  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.25324 0.7978000 3 52.54877 54.11955 52.82008 53.09139  
## BRN:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WHT:MornHigh 52.90551 0.3107238 3 52.54672 53.08672 52.81491 53.08309  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.63299 0.3653018 3 52.40068 53.05405 52.42245 52.44423  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.32974 0.5613782 3 51.74730 52.86737 52.06092 52.37454  
## WT/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 52.59015  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.36248  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.60547  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.08490  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.74914  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.62096  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.25324 a  
## BLK:MornHigh 53.09335 a  
## WHT:MornHigh 52.90551 ab  
## WT/BLK:MornHigh 52.63299 abc  
## WT/BR:MornHigh 52.32974 abcd  
## BL/BR:MornHigh 52.30920 abcd  
## BRN:MornLow 51.33333 abcd  
## BLK:MornLow 51.00000 abcd  
## WHT:MornLow 50.66667 bcd  
## WT/BLK:MornLow 50.33333 cd  
## BL/BR:MornLow 50.00000 d  
## WT/BR:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT64 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.984 0.997 1.1855 0.3455   
## THIregime 1 48.799 48.799 58.0331 7.421e-08 \*\*\*  
## Colour:THIregime 5 0.330 0.066 0.0786 0.9949   
## Residuals 24 20.181 0.841   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8408893   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.81728 1.675197 6 49 53.68129  
## BLK 51.61463 1.778995 6 49 53.76992  
## BRN 52.67107 1.175991 6 51 53.87295  
## WHT 51.91449 1.429258 6 50 53.34807  
## WT/BLK 51.54850 1.588983 6 49 53.31540  
## WT/BR 52.08635 1.393032 6 50 53.73356  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.636962   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.67107 a  
## WT/BR 52.08635 a  
## WHT 51.91449 a  
## BL/BR 51.81728 a  
## BLK 51.61463 a  
## WT/BLK 51.54850 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8408893   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10633 0.6128515 18 51.92153 53.87295  
## MornLow 50.77778 1.0602750 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6308651   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10633 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8408893 24 51.94205 1.765429 2.699634  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.96790 0.8429802 3 52.03769 53.68129 52.61121 53.18473  
## BL/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BLK:MornHigh 52.89593 0.8084140 3 52.17496 53.76992 52.45894 52.74292  
## BLK:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## BRN:MornHigh 53.67548 0.3123267 3 53.31540 53.87295 53.57675 53.83810  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.16231 0.3200890 3 52.79270 53.34807 53.06942 53.34615  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.76366 0.7409186 3 51.92153 53.31540 52.48779 53.05405  
## WT/BLK:MornLow 50.33333 1.1547005 3 49.00000 51.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.17269 0.5575763 3 52.61847 53.73356 52.89226 53.16606  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.43301  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.25642  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.34711  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.18473  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.44981  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.67548 a  
## WT/BR:MornHigh 53.17269 ab  
## WHT:MornHigh 53.16231 ab  
## BL/BR:MornHigh 52.96790 abc  
## BLK:MornHigh 52.89593 abc  
## WT/BLK:MornHigh 52.76366 abc  
## BRN:MornLow 51.66667 abc  
## WT/BR:MornLow 51.00000 abc  
## BL/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.66667 bc  
## BLK:MornLow 50.33333 c  
## WT/BLK:MornLow 50.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT65 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 8.949 1.790 7.7121 0.0001914 \*\*\*  
## THIregime 1 45.608 45.608 196.5158 4.694e-13 \*\*\*  
## Colour:THIregime 5 1.034 0.207 0.8912 0.5025001   
## Residuals 24 5.570 0.232   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2320824   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.06779 1.591525 6 49 52.72736  
## BLK 51.88427 1.396648 6 50 53.29051  
## BRN 52.62691 1.134090 6 51 53.80325  
## WHT 51.88367 1.396725 6 50 53.28465  
## WT/BLK 52.24451 1.106338 6 51 53.70743  
## WT/BR 52.37954 1.223860 6 51 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.8599838   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.62691 a  
## WT/BR 52.37954 a  
## WT/BLK 52.24451 a  
## BLK 51.88427 ab  
## WHT 51.88367 ab  
## BL/BR 51.06779 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2320824   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.14001 0.4712666 18 52.09577 53.8381  
## MornLow 50.88889 0.8323524 18 49.00000 52.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3314272   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.14001 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2320824 24 52.01445 0.9261836 1.418262  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46892 0.3310529 3 52.09577 52.72736 52.33969 52.58362  
## BL/BR:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## BLK:MornHigh 53.10188 0.3090805 3 52.74518 53.29051 53.00756 53.26995  
## BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BRN:MornHigh 53.58715 0.3403905 3 53.19478 53.80325 53.47910 53.76343  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.10067 0.3170071 3 52.73462 53.28465 53.00868 53.28273  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.15569 0.4856966 3 52.79270 53.70743 52.87982 52.96693  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.42575 0.3572137 3 53.21086 53.83810 53.21957 53.22828  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.65549  
## BL/BR:MornLow 50.00000  
## BLK:MornHigh 53.28023  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.78334  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.28369  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.33718  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.53319  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.58715 a  
## WT/BR:MornHigh 53.42575 a  
## WT/BLK:MornHigh 53.15569 a  
## BLK:MornHigh 53.10188 a  
## WHT:MornHigh 53.10067 a  
## BL/BR:MornHigh 52.46892 ab  
## BRN:MornLow 51.66667 bc  
## WT/BLK:MornLow 51.33333 bc  
## WT/BR:MornLow 51.33333 bc  
## BLK:MornLow 50.66667 cd  
## WHT:MornLow 50.66667 cd  
## BL/BR:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT66 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 9.483 1.897 1.9983 0.1153   
## THIregime 1 52.159 52.159 54.9538 1.183e-07 \*\*\*  
## Colour:THIregime 5 0.766 0.153 0.1614 0.9743   
## Residuals 24 22.779 0.949   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9491366   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.71208 2.136292 6 48 54.09945  
## BLK 52.39923 1.432905 6 50 53.83810  
## BRN 52.71476 1.219390 6 51 53.95011  
## WHT 51.41781 1.713643 6 49 53.41341  
## WT/BLK 52.78142 1.293883 6 51 54.09945  
## WT/BR 52.53013 1.557624 6 50 54.15172  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.739136   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.78142 a  
## BRN 52.71476 a  
## WT/BR 52.53013 a  
## BLK 52.39923 a  
## BL/BR 51.71208 a  
## WHT 51.41781 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9491366   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.46292 0.6895839 18 51.80538 54.15172  
## MornLow 51.05556 1.2113300 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6702417   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.46292 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9491366 24 52.25924 1.864238 2.868136  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.09083 1.1718238 3 51.80538 54.09945 52.58652 53.36767  
## BL/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 53.46512 0.6255572 3 52.74292 53.83810 53.27863 53.81434  
## BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BRN:MornHigh 53.76285 0.2973922 3 53.41994 53.95011 53.66923 53.91852  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.83562 0.5575698 3 52.30075 53.41341 52.54672 52.79270  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.89618 0.3520778 3 53.48963 54.09945 53.79454 54.09945  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.72692 0.6596931 3 52.96693 54.15172 53.51452 54.06211  
## WT/BR:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.73356  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.82622  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.93431  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.10305  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 54.09945  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.10692  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.89618 a  
## BRN:MornHigh 53.76285 a  
## WT/BR:MornHigh 53.72692 a  
## BLK:MornHigh 53.46512 a  
## BL/BR:MornHigh 53.09083 ab  
## WHT:MornHigh 52.83562 abc  
## BRN:MornLow 51.66667 abc  
## WT/BLK:MornLow 51.66667 abc  
## BLK:MornLow 51.33333 abc  
## WT/BR:MornLow 51.33333 abc  
## BL/BR:MornLow 50.33333 bc  
## WHT:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT67 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.707 3.941 3.6190 0.01399 \*   
## THIregime 1 45.686 45.686 41.9500 1.068e-06 \*\*\*  
## Colour:THIregime 5 1.382 0.276 0.2537 0.93374   
## Residuals 24 26.137 1.089   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.089052   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.48424 1.790046 6 48 52.59669  
## BLK 52.10634 2.251687 6 48 54.26990  
## BRN 52.85574 1.185610 6 51 54.29111  
## WHT 51.85769 1.368640 6 50 53.22828  
## WT/BLK 51.48316 1.331628 6 50 53.05405  
## WT/BR 52.30528 1.146518 6 51 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.862917   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.85574 a  
## WT/BR 52.30528 ab  
## BLK 52.10634 ab  
## WHT 51.85769 ab  
## WT/BLK 51.48316 ab  
## BL/BR 50.48424 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.089052   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.97526 0.8265606 18 51.32914 54.29111  
## MornLow 50.72222 1.4473325 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7179453   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.97526 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.089052 24 51.84874 2.012733 3.072273  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.96848 0.6338471 3 51.32914 52.59669 51.65438 51.97961  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 53.21269 1.4153590 3 51.60475 54.26990 52.68409 53.76343  
## BLK:MornLow 51.00000 2.6457513 3 48.00000 53.00000 50.00000 52.00000  
## BRN:MornHigh 53.71148 0.5633043 3 53.16606 54.29111 53.42166 53.67727  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 53.04871 0.3065995 3 52.69469 53.22828 52.95893 53.22316  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.63299 0.3653018 3 52.40068 53.05405 52.42245 52.44423  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 53.27723 0.3447608 3 53.00178 53.66387 53.08392 53.16606  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.28815  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 54.01666  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.98419  
## BRN:MornLow 52.50000  
## WHT:MornHigh 53.22572  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.74914  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.41496  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.71148 a  
## WT/BR:MornHigh 53.27723 ab  
## BLK:MornHigh 53.21269 ab  
## WHT:MornHigh 53.04871 ab  
## WT/BLK:MornHigh 52.63299 ab  
## BRN:MornLow 52.00000 abc  
## BL/BR:MornHigh 51.96848 abc  
## WT/BR:MornLow 51.33333 abc  
## BLK:MornLow 51.00000 abc  
## WHT:MornLow 50.66667 abc  
## WT/BLK:MornLow 50.33333 bc  
## BL/BR:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT68 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.209 0.642 1.0283 0.4234   
## THIregime 1 52.664 52.664 84.3939 2.509e-09 \*\*\*  
## Colour:THIregime 5 0.285 0.057 0.0915 0.9928   
## Residuals 24 14.977 0.624   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6240278   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.94506 1.787748 6 49 53.96878  
## BLK 51.94375 1.459033 6 50 53.41496  
## BRN 52.74019 1.437580 6 51 54.52163  
## WHT 51.96071 1.478168 6 50 53.44608  
## WT/BLK 52.43326 1.281431 6 51 53.96878  
## WT/BR 52.23403 1.538419 6 50 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.410169   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.74019 a  
## WT/BLK 52.43326 a  
## WT/BR 52.23403 a  
## WHT 51.96071 a  
## BL/BR 51.94506 a  
## BLK 51.94375 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6240278   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.419 0.5128088 18 52.27 54.52163  
## MornLow 51.000 0.9074852 18 49.00 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5434618   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.419 a  
## MornLow 51.000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6240278 24 52.2095 1.513047 2.325613  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.22344 0.8682984 3 52.27000 53.96878 52.85078 53.43156  
## BL/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BLK:MornHigh 53.22084 0.3094496 3 52.86398 53.41496 53.12378 53.38358  
## BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BRN:MornHigh 53.81372 0.6130888 3 53.45479 54.52163 53.45976 53.46474  
## BRN:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WHT:MornHigh 53.25476 0.3247332 3 52.87982 53.44608 53.15910 53.43839  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.53319 0.3772262 3 53.31540 53.96878 53.31540 53.31540  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.46806 0.5902000 3 52.86737 54.04718 53.17850 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.70017  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.39927  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.99319  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.44223  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.64209  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.81372 a  
## WT/BLK:MornHigh 53.53319 ab  
## WT/BR:MornHigh 53.46806 ab  
## WHT:MornHigh 53.25476 abc  
## BL/BR:MornHigh 53.22344 abc  
## BLK:MornHigh 53.22084 abc  
## BRN:MornLow 51.66667 abcd  
## WT/BLK:MornLow 51.33333 bcd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 50.66667 d  
## BLK:MornLow 50.66667 d  
## WHT:MornLow 50.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT69 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 25.642 5.128 5.2072 0.00224 \*\*   
## THIregime 1 43.290 43.290 43.9540 7.399e-07 \*\*\*  
## Colour:THIregime 5 2.310 0.462 0.4692 0.79536   
## Residuals 24 23.637 0.985   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9848851   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.55455 2.014537 6 48 53.72194  
## BLK 53.31487 1.100709 6 52 54.72442  
## BRN 52.05782 1.364815 6 50 53.66387  
## WHT 50.49240 1.783390 6 48 52.47327  
## WT/BLK 51.48316 1.331628 6 50 53.05405  
## WT/BR 52.01002 1.327070 6 50 53.61409  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.771585   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.31487 a  
## BRN 52.05782 ab  
## WT/BR 52.01002 ab  
## BL/BR 51.55455 ab  
## WT/BLK 51.48316 b  
## WHT 50.49240 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9848851   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.91538 0.8394338 18 51.43983 54.72442  
## MornLow 50.72222 1.5264552 18 48.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6827471   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.91538 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9848851 24 51.8188 1.915162 2.92165  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.77576 1.1569258 3 51.48595 53.72194 52.30267 53.11939  
## BL/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 53.96308 0.6595885 3 53.56430 54.72442 53.58241 53.60051  
## BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BRN:MornHigh 53.11564 0.5475916 3 52.56869 53.66387 52.84152 53.11436  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 51.98481 0.5190339 3 51.43983 52.47327 51.74057 52.04132  
## WHT:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## WT/BLK:MornHigh 52.63299 0.3653018 3 52.40068 53.05405 52.42245 52.44423  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 53.02003 0.5851398 3 52.44423 53.61409 52.72301 53.00178  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.42067  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.16246  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.38911  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.25730  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 52.74914  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.30793  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.96308 a  
## BRN:MornHigh 53.11564 ab  
## WT/BR:MornHigh 53.02003 ab  
## BL/BR:MornHigh 52.77576 ab  
## BLK:MornLow 52.66667 ab  
## WT/BLK:MornHigh 52.63299 ab  
## WHT:MornHigh 51.98481 ab  
## BRN:MornLow 51.00000 bc  
## WT/BR:MornLow 51.00000 bc  
## BL/BR:MornLow 50.33333 bc  
## WT/BLK:MornLow 50.33333 bc  
## WHT:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT70 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.583 2.717 7.386 0.000257 \*\*\*  
## THIregime 1 44.751 44.751 121.668 7.003e-11 \*\*\*  
## Colour:THIregime 5 1.114 0.223 0.606 0.695988   
## Residuals 24 8.827 0.368   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3678123   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.38982 1.692823 6 49 53.38074  
## BLK 53.19590 1.261746 6 51 54.45170  
## BRN 52.40478 1.245144 6 51 53.83810  
## WHT 51.62476 1.472979 6 50 53.25732  
## WT/BLK 52.06332 1.165573 6 51 53.18473  
## WT/BR 52.67771 1.184215 6 51 53.91277  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.082636   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.19590 a  
## WT/BR 52.67771 ab  
## BRN 52.40478 abc  
## WT/BLK 52.06332 bc  
## WHT 51.62476 bc  
## BL/BR 51.38982 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3678123   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.34099 0.5814508 18 52.16546 54.4517  
## MornLow 51.11111 1.0226200 18 49.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4172345   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.34099 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3678123 24 52.22605 1.161251 1.785454  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.77963 0.60774412 3 52.16546 53.38074 52.47908 52.79270  
## BL/BR:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 54.05847 0.64388665 3 53.31540 54.45170 53.86186 54.40832  
## BLK:MornLow 52.33333 1.15470054 3 51.00000 53.00000 52.00000 53.00000  
## BRN:MornHigh 53.47623 0.31403212 3 53.27519 53.83810 53.29530 53.31540  
## BRN:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.91619 0.29578360 3 52.73121 53.25732 52.74562 52.76003  
## WHT:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 53.12665 0.06653645 3 53.05405 53.18473 53.09761 53.14117  
## WT/BLK:MornLow 51.00000 0.00000000 3 51.00000 51.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.68876 0.32548521 3 53.31540 53.91277 53.57675 53.83810  
## WT/BR:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.08672  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.43001  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.57675  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.00868  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.16295  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.87544  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.05847 a  
## WT/BR:MornHigh 53.68876 a  
## BRN:MornHigh 53.47623 a  
## WT/BLK:MornHigh 53.12665 ab  
## WHT:MornHigh 52.91619 abc  
## BL/BR:MornHigh 52.77963 abcd  
## BLK:MornLow 52.33333 abcd  
## WT/BR:MornLow 51.66667 bcde  
## BRN:MornLow 51.33333 cde  
## WT/BLK:MornLow 51.00000 de  
## WHT:MornLow 50.33333 e  
## BL/BR:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT71 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)  
## Colour 5 72.74 14.5487 0.6418 0.6703  
## THIregime 1 9.80 9.7967 0.4322 0.5175  
## Colour:THIregime 5 100.91 20.1825 0.8903 0.5037  
## Residuals 23 521.40 22.6697   
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 22.66966   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.99931 1.834653 6 48.00000 53.08309  
## BLK 52.04117 1.348398 6 50.00000 53.61409  
## BRN 47.54443 11.851354 5 26.39635 53.68876  
## WHT 51.04023 1.864760 6 48.00000 53.17601  
## WT/BLK 51.27293 1.595320 6 49.00000 53.31540  
## WT/BR 52.02744 1.688823 6 49.00000 53.62902  
##   
## Alpha: 0.05 ; DF Error: 23   
## Critical Value of Studentized Range: 4.38831   
##   
## Groups according to probability of means differences and alpha level( 0.05 )  
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.04117 a  
## WT/BR 52.02744 a  
## WT/BLK 51.27293 a  
## WHT 51.04023 a  
## BL/BR 50.99931 a  
## BRN 47.54443 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 22.66966   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.33381 6.268995 18 26.39635 53.68876  
## MornLow 50.47059 1.374666 17 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 23   
## Critical Value of Studentized Range: 2.925523   
##   
## Groups according to probability of means differences and alpha level( 0.05 )  
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.33381 a  
## MornLow 50.47059 a  
## $statistics  
## MSerror Df Mean CV  
## 22.66966 23 50.91453 9.351489  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.120705 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.33195 0.8681867 3 51.38141 53.08309 51.95638 52.53135  
## BL/BR:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## BLK:MornHigh 53.08233 0.5416240 3 52.53135 53.61409 52.81646 53.10157  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 44.57406 15.7423766 3 26.39635 53.68876 40.01671 53.63706  
## BRN:MornLow 52.00000 0.0000000 2 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 52.41379 0.8366562 3 51.51862 53.17601 52.03267 52.54672  
## WHT:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## WT/BLK:MornHigh 52.54587 0.7081858 3 51.92153 53.31540 52.16110 52.40068  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.05488 0.9815351 3 51.92153 53.62902 52.76781 53.61409  
## WT/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## Q75  
## BL/BR:MornHigh 52.80722  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.35783  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.66291  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.86137  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.85804  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.62155  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.08233 a  
## WT/BR:MornHigh 53.05488 a  
## WT/BLK:MornHigh 52.54587 a  
## WHT:MornHigh 52.41379 a  
## BL/BR:MornHigh 52.33195 a  
## BRN:MornLow 52.00000 a  
## BLK:MornLow 51.00000 a  
## WT/BR:MornLow 51.00000 a  
## WT/BLK:MornLow 50.00000 a  
## BL/BR:MornLow 49.66667 a  
## WHT:MornLow 49.66667 a  
## BRN:MornHigh 44.57406 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT72 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.133 2.427 9.0875 5.926e-05 \*\*\*  
## THIregime 1 40.245 40.245 150.7191 7.784e-12 \*\*\*  
## Colour:THIregime 5 0.579 0.116 0.4333 0.8208   
## Residuals 24 6.408 0.267   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2670169   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.79768 1.3073190 6 50 53.11939  
## BLK 52.89490 0.9804487 6 52 53.81537  
## BRN 52.36110 1.2017126 6 51 53.76841  
## WHT 51.60451 1.4541349 6 50 53.25006  
## WT/BLK 51.09144 1.4151079 6 49 52.79270  
## WT/BR 52.26090 1.1021708 6 51 53.57675  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9224409   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.89490 a  
## BRN 52.36110 ab  
## WT/BR 52.26090 ab  
## BL/BR 51.79768 bc  
## WHT 51.60451 bc  
## WT/BLK 51.09144 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2670169   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.05906 0.6026952 18 51.48595 53.81537  
## MornLow 50.94444 0.8726041 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3554974   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.05906 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2670169 24 52.00175 0.993691 1.521265  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.92870 0.31903265 3 52.56039 53.11939 52.83335 53.10632  
## BL/BR:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.78979 0.02598161 3 53.76343 53.81537 53.77701 53.79058  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.38886 0.32872631 3 53.19478 53.76841 53.19908 53.20339  
## BRN:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.87569 0.32443773 3 52.67654 53.25006 52.68850 52.70046  
## WHT:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 52.18288 0.65771641 3 51.48595 52.79270 51.87798 52.27000  
## WT/BLK:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.18846 0.35000116 3 52.89724 53.57675 52.99431 53.09139  
## WT/BR:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.11285  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.80298  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.48590  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.97526  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.53135  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.33407  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.78979 a  
## BRN:MornHigh 53.38886 ab  
## WT/BR:MornHigh 53.18846 ab  
## BL/BR:MornHigh 52.92870 ab  
## WHT:MornHigh 52.87569 ab  
## WT/BLK:MornHigh 52.18288 bc  
## BLK:MornLow 52.00000 bc  
## BRN:MornLow 51.33333 cd  
## WT/BR:MornLow 51.33333 cd  
## BL/BR:MornLow 50.66667 cd  
## WHT:MornLow 50.33333 d  
## WT/BLK:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT73 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 9.539 1.908 2.8091 0.03904 \*   
## THIregime 1 44.386 44.386 65.3555 2.62e-08 \*\*\*  
## Colour:THIregime 5 0.789 0.158 0.2323 0.94457   
## Residuals 24 16.300 0.679   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6791487   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.56326 1.7424340 6 49 53.72194  
## BLK 52.89490 0.9804487 6 52 53.81537  
## BRN 52.11443 1.4158999 6 50 53.75768  
## WHT 51.84772 1.3586480 6 50 53.21739  
## WT/BLK 51.30197 1.6250676 6 49 53.31540  
## WT/BR 52.27334 1.3438772 6 50 53.68876  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.471132   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.89490 a  
## WT/BR 52.27334 ab  
## BRN 52.11443 ab  
## WHT 51.84772 ab  
## BL/BR 51.56326 ab  
## WT/BLK 51.30197 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6791487   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10965 0.6347546 18 51.87798 53.81537  
## MornLow 50.88889 1.0786096 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5669562   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10965 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6791487 24 51.99927 1.584839 2.426151  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.79318 0.84776689 3 52.06092 53.72194 52.32880 52.59669  
## BL/BR:MornLow 50.33333 1.52752523 3 49.00000 52.00000 49.50000 50.00000  
## BLK:MornHigh 53.78979 0.02598161 3 53.76343 53.81537 53.77701 53.79058  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.22886 0.53486112 3 52.68816 53.75768 52.96444 53.24073  
## BRN:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 53.02878 0.31109747 3 52.66971 53.21739 52.93448 53.19924  
## WHT:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.60395 0.71882249 3 51.87798 53.31540 52.24822 52.61847  
## WT/BLK:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.21335 0.72858552 3 52.37454 53.68876 52.97565 53.57675  
## WT/BR:MornLow 51.33333 1.15470054 3 50.00000 52.00000 51.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.15932  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.80298  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.49921  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.20832  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.96693  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.63275  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.78979 a  
## BRN:MornHigh 53.22886 ab  
## WT/BR:MornHigh 53.21335 ab  
## WHT:MornHigh 53.02878 abc  
## BL/BR:MornHigh 52.79318 abc  
## WT/BLK:MornHigh 52.60395 abcd  
## BLK:MornLow 52.00000 abcde  
## WT/BR:MornLow 51.33333 bcde  
## BRN:MornLow 51.00000 bcde  
## WHT:MornLow 50.66667 cde  
## BL/BR:MornLow 50.33333 de  
## WT/BLK:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT74 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 25.855 5.171 8.0524 0.0001417 \*\*\*  
## THIregime 1 40.903 40.903 63.6949 3.292e-08 \*\*\*  
## Colour:THIregime 5 2.235 0.447 0.6961 0.6315364   
## Residuals 24 15.412 0.642   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6421686   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.69024 1.1938857 6 50 52.90886  
## BLK 53.00178 0.8420298 6 52 54.02817  
## BRN 51.48825 1.3313650 6 50 53.00178  
## WHT 50.17727 1.7091083 6 48 51.91064  
## WT/BLK 50.98255 1.8372498 6 48 53.18473  
## WT/BR 51.38878 1.2274085 6 50 52.79270  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.430519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.00178 a  
## BL/BR 51.69024 ab  
## BRN 51.48825 bc  
## WT/BR 51.38878 bc  
## WT/BLK 50.98255 bc  
## WHT 50.17727 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6421686   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.52073 0.8125592 18 50.7019 54.02817  
## MornLow 50.38889 1.3779306 18 48.0000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5513046   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.52073 a  
## MornLow 50.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6421686 24 51.45481 1.557394 2.359174  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.71381 0.2949139 3 52.37454 52.90886 52.61629 52.85804  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.67023 0.3142218 3 53.43985 54.02817 53.49126 53.54266  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 52.64317 0.3106521 3 52.45668 53.00178 52.46386 52.47104  
## BRN:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WHT:MornHigh 51.68787 0.3514863 3 51.28268 51.91064 51.57648 51.87029  
## WHT:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## WT/BLK:MornHigh 51.96509 1.2419855 3 50.70190 53.18473 51.35528 52.00865  
## WT/BLK:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BR:MornHigh 52.44423 0.3017810 3 52.27000 52.79270 52.27000 52.27000  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 52.88345  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.78542  
## BLK:MornLow 52.50000  
## BRN:MornHigh 52.73641  
## BRN:MornLow 50.50000  
## WHT:MornHigh 51.89047  
## WHT:MornLow 49.00000  
## WT/BLK:MornHigh 52.59669  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.53135  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.67023 a  
## BL/BR:MornHigh 52.71381 ab  
## BRN:MornHigh 52.64317 abc  
## WT/BR:MornHigh 52.44423 abc  
## BLK:MornLow 52.33333 abcd  
## WT/BLK:MornHigh 51.96509 abcd  
## WHT:MornHigh 51.68787 abcd  
## BL/BR:MornLow 50.66667 bcde  
## BRN:MornLow 50.33333 cde  
## WT/BR:MornLow 50.33333 cde  
## WT/BLK:MornLow 50.00000 de  
## WHT:MornLow 48.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT75 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.205 0.641 1.4502 0.2428   
## THIregime 1 45.595 45.595 103.1419 3.631e-10 \*\*\*  
## Colour:THIregime 5 0.260 0.052 0.1176 0.9872   
## Residuals 24 10.610 0.442   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4420647   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.14899 1.450789 6 50 53.83810  
## BLK 52.70870 1.213248 6 51 53.93314  
## BRN 52.65234 1.156821 6 51 53.83810  
## WHT 52.15258 1.452569 6 50 53.83810  
## WT/BLK 52.23030 1.545112 6 50 54.09945  
## WT/BR 51.85953 1.371369 6 50 53.24073  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.186894   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.70870 a  
## BRN 52.65234 a  
## WT/BLK 52.23030 a  
## WHT 52.15258 a  
## BL/BR 52.14899 a  
## WT/BR 51.85953 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4420647   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.41748 0.4585649 18 52.68816 54.09945  
## MornLow 51.16667 0.7859052 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4574146   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.41748 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4420647 24 52.29207 1.271473 1.957394  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.29798 0.5490424 3 52.74043 53.83810 53.02792 53.31540  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.75074 0.2984615 3 53.40630 53.93314 53.65954 53.91277  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.63802 0.3123774 3 53.27806 53.83810 53.53798 53.79789  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.30515 0.5381467 3 52.76195 53.83810 53.03868 53.31540  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.46059 0.6538588 3 52.79270 54.09945 53.14117 53.48963  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.05239 0.3154944 3 52.68816 53.24073 52.95822 53.22828  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.57675  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.92295  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.81800  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.57675  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.23451  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.75074 a  
## BRN:MornHigh 53.63802 a  
## WT/BLK:MornHigh 53.46059 ab  
## WHT:MornHigh 53.30515 ab  
## BL/BR:MornHigh 53.29798 ab  
## WT/BR:MornHigh 53.05239 ab  
## BLK:MornLow 51.66667 bc  
## BRN:MornLow 51.66667 bc  
## BL/BR:MornLow 51.00000 c  
## WHT:MornLow 51.00000 c  
## WT/BLK:MornLow 51.00000 c  
## WT/BR:MornLow 50.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT76 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.380 3.076 3.3965 0.01843 \*   
## THIregime 1 41.405 41.405 45.7188 5.406e-07 \*\*\*  
## Colour:THIregime 5 0.832 0.166 0.1837 0.96602   
## Residuals 24 21.735 0.906   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9056362   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.73912 1.246604 6 50 53.00178  
## BLK 52.86300 1.191908 6 51 54.29262  
## BRN 52.34907 1.388365 6 50 53.73356  
## WHT 51.04047 2.117003 6 48 53.63483  
## WT/BLK 51.06240 1.387607 6 49 52.79270  
## WT/BR 51.71392 1.218589 6 50 52.96693  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.698815   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.86300 a  
## BRN 52.34907 ab  
## BL/BR 51.73912 ab  
## WT/BR 51.71392 ab  
## WT/BLK 51.06240 b  
## WHT 51.04047 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9056362   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.86710 0.7797395 18 51.48595 54.29262  
## MornLow 50.72222 1.2744344 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6547024   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.86710 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9056362 24 51.79466 1.83735 2.80164  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81158 0.3181945 3 52.44423 53.00178 52.71647 52.98871  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.72599 0.5633121 3 53.16606 54.29262 53.44268 53.71930  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 53.36480 0.6248379 3 52.64336 53.73356 53.18042 53.71748  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 52.41427 1.0995132 3 51.50132 53.63483 51.80399 52.10666  
## WHT:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## WT/BLK:MornHigh 52.12481 0.6538588 3 51.48595 52.79270 51.79086 52.09577  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 52.76117 0.2980767 3 52.41934 52.96693 52.65829 52.89724  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.99525  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.00596  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.72552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.87074  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.44423  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.93209  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.72599 a  
## BRN:MornHigh 53.36480 ab  
## BL/BR:MornHigh 52.81158 ab  
## WT/BR:MornHigh 52.76117 abc  
## WHT:MornHigh 52.41427 abcd  
## WT/BLK:MornHigh 52.12481 abcd  
## BLK:MornLow 52.00000 abcd  
## BRN:MornLow 51.33333 abcd  
## BL/BR:MornLow 50.66667 bcd  
## WT/BR:MornLow 50.66667 bcd  
## WT/BLK:MornLow 50.00000 cd  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT77 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.654 2.131 3.0470 0.02869 \*   
## THIregime 1 45.053 45.053 64.4270 2.975e-08 \*\*\*  
## Colour:THIregime 5 1.020 0.204 0.2916 0.91291   
## Residuals 24 16.783 0.699   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6992858   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.38002 1.422593 6 50 53.83810  
## BLK 53.16815 1.434218 6 51 54.92895  
## BRN 52.42351 1.264478 6 51 53.87544  
## WHT 51.38699 1.682826 6 49 53.34807  
## WT/BLK 52.12866 1.441670 6 50 53.83810  
## WT/BR 51.89147 1.407512 6 50 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.492782   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.16815 a  
## BRN 52.42351 ab  
## BL/BR 52.38002 ab  
## WT/BLK 52.12866 ab  
## WT/BR 51.89147 ab  
## WHT 51.38699 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6992858   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.34849 0.6267726 18 52.23925 54.92895  
## MornLow 51.11111 1.1318329 18 49.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5753   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.34849 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6992858 24 52.2298 1.601065 2.461857  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.42672 0.6628780 3 52.66203 53.83810 53.22102 53.78002  
## BL/BR:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BLK:MornHigh 54.00297 0.8475584 3 53.26562 54.92895 53.53998 53.81434  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.51369 0.3137615 3 53.31540 53.87544 53.33282 53.35025  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.77398 0.5554547 3 52.23925 53.34807 52.48694 52.73462  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.25732 0.6118874 3 52.61847 53.83810 52.96693 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.11628 0.3448926 3 52.71803 53.31540 53.01671 53.31540  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.80906  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 54.37165  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.61284  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.04135  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.31540  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.00297 a  
## BRN:MornHigh 53.51369 ab  
## BL/BR:MornHigh 53.42672 abc  
## WT/BLK:MornHigh 53.25732 abc  
## WT/BR:MornHigh 53.11628 abcd  
## WHT:MornHigh 52.77398 abcd  
## BLK:MornLow 52.33333 abcde  
## BL/BR:MornLow 51.33333 bcde  
## BRN:MornLow 51.33333 bcde  
## WT/BLK:MornLow 51.00000 cde  
## WT/BR:MornLow 50.66667 de  
## WHT:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT78 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.567 0.713 0.4433 0.8138   
## THIregime 1 45.994 45.994 28.5795 1.735e-05 \*\*\*  
## Colour:THIregime 5 0.476 0.095 0.0591 0.9974   
## Residuals 24 38.624 1.609   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.609343   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.17827 1.479676 6 50 53.90344  
## BLK 52.91041 2.149432 6 50 55.45165  
## BRN 52.40478 1.245144 6 51 53.83810  
## WHT 51.88883 1.730451 6 49 53.80906  
## WT/BLK 52.25934 1.889875 6 49 54.18657  
## WT/BR 52.14028 1.446678 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.26461   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.91041 a  
## BRN 52.40478 a  
## WT/BLK 52.25934 a  
## BL/BR 52.17827 a  
## WT/BR 52.14028 a  
## WHT 51.88883 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.609343   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.42730 0.7733606 18 52.20851 55.45165  
## MornLow 51.16667 1.3826658 18 49.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8727529   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.42730 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.609343 24 52.29698 2.425759 3.734734  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.35654 0.5555625 3 52.79270 53.90344 53.08309 53.37348  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.82082 1.4365279 3 52.74292 55.45165 53.00540 53.26788  
## BLK:MornLow 52.00000 2.6457513 3 50.00000 55.00000 50.50000 51.00000  
## BRN:MornHigh 53.47623 0.3140321 3 53.27519 53.83810 53.29530 53.31540  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.11099 0.8196232 3 52.20851 53.80906 52.76195 53.31540  
## WHT:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## WT/BLK:MornHigh 53.51867 1.0822588 3 52.27000 54.18657 53.18473 54.09945  
## WT/BLK:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## WT/BR:MornHigh 53.28055 0.5757614 3 52.68816 53.83810 53.00178 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.63846  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.35977  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.57675  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.56223  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.82082 a  
## WT/BLK:MornHigh 53.51867 a  
## BRN:MornHigh 53.47623 a  
## BL/BR:MornHigh 53.35654 a  
## WT/BR:MornHigh 53.28055 a  
## WHT:MornHigh 53.11099 a  
## BLK:MornLow 52.00000 a  
## BRN:MornLow 51.33333 a  
## BL/BR:MornLow 51.00000 a  
## WT/BLK:MornLow 51.00000 a  
## WT/BR:MornLow 51.00000 a  
## WHT:MornLow 50.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT79 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 17.047 3.409 3.5871 0.01455 \*   
## THIregime 1 48.017 48.017 50.5194 2.395e-07 \*\*\*  
## Colour:THIregime 5 1.280 0.256 0.2694 0.92536   
## Residuals 24 22.811 0.950   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.950466   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.81522 2.2111332 6 47 53.10632  
## BLK 52.74043 1.2469867 6 51 53.99718  
## BRN 52.89942 0.9855992 6 52 53.83810  
## WHT 52.42177 1.4523793 6 50 53.87077  
## WT/BLK 51.97651 1.5053380 6 50 53.57675  
## WT/BR 52.40941 1.6219711 6 50 54.43547  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.740354   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.89942 a  
## BLK 52.74043 a  
## WHT 52.42177 ab  
## WT/BR 52.40941 ab  
## WT/BLK 51.97651 ab  
## BL/BR 50.81522 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.950466   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.36537 0.7743846 18 50.99229 54.43547  
## MornLow 51.05556 1.3491706 18 47.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6707109   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.36537 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.950466 24 52.21046 1.867286 2.870144  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.29710 1.14083049 3 50.99229 53.10632 51.89249 52.79270  
## BL/BR:MornLow 49.33333 2.08166600 3 47.00000 51.00000 48.50000 50.00000  
## BLK:MornHigh 53.81419 0.30855028 3 53.45795 53.99718 53.72270 53.98744  
## BLK:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.79885 0.04024187 3 53.75768 53.83810 53.77922 53.80076  
## BRN:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.51020 0.62137808 3 52.79270 53.87077 53.32992 53.86714  
## WHT:MornLow 51.33333 1.15470054 3 50.00000 52.00000 51.00000 52.00000  
## WT/BLK:MornHigh 53.28636 0.42973631 3 52.79270 53.57675 53.14117 53.48963  
## WT/BLK:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.48548 0.87739664 3 52.70558 54.43547 53.01049 53.31540  
## WT/BR:MornLow 51.33333 1.52752523 3 50.00000 53.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.94951  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.99231  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.86895  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 53.53319  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.87544  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.81419 a  
## BRN:MornHigh 53.79885 a  
## WHT:MornHigh 53.51020 ab  
## WT/BR:MornHigh 53.48548 ab  
## WT/BLK:MornHigh 53.28636 ab  
## BL/BR:MornHigh 52.29710 ab  
## BRN:MornLow 52.00000 abc  
## BLK:MornLow 51.66667 abc  
## WHT:MornLow 51.33333 abc  
## WT/BR:MornLow 51.33333 abc  
## WT/BLK:MornLow 50.66667 bc  
## BL/BR:MornLow 49.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT80 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 20.307 4.061 2.5473 0.0551 .   
## THIregime 1 44.607 44.607 27.9773 2.001e-05 \*\*\*  
## Colour:THIregime 5 1.517 0.303 0.1903 0.9634   
## Residuals 24 38.265 1.594   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.594388   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.02883 1.853927 6 48 53.05405  
## BLK 53.39833 1.979056 6 50 55.40620  
## BRN 52.07655 1.382082 6 50 53.69871  
## WHT 51.32019 1.911048 6 48 53.19241  
## WT/BLK 52.10688 1.420996 6 50 53.83810  
## WT/BR 52.08137 1.393760 6 50 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.254064   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.39833 a  
## WT/BLK 52.10688 ab  
## WT/BR 52.08137 ab  
## BRN 52.07655 ab  
## WHT 51.32019 ab  
## BL/BR 51.02883 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.594388   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.11516 0.9175226 18 51.45691 55.4062  
## MornLow 50.88889 1.6409785 18 48.00000 55.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8686885   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.11516 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.594388 24 52.00203 2.428157 3.717342  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.39100 0.8323497 3 51.45691 53.05405 52.05947 52.66203  
## BL/BR:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## BLK:MornHigh 54.13000 1.3610015 3 52.69766 55.40620 53.49190 54.28613  
## BLK:MornLow 52.66667 2.5166115 3 50.00000 55.00000 51.50000 53.00000  
## BRN:MornHigh 53.15310 0.5463474 3 52.60602 53.69871 52.88030 53.15457  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.64039 0.9494837 3 51.54403 53.19241 52.36438 53.18473  
## WHT:MornLow 50.00000 1.7320508 3 48.00000 51.00000 49.50000 51.00000  
## WT/BLK:MornHigh 53.21376 0.6103350 3 52.61847 53.83810 52.90160 53.18473  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.16274 0.5902000 3 52.58362 53.76343 52.86239 53.14117  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.85804  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.84616  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.42664  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.18857  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.51141  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.45230  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.13000 a  
## WT/BLK:MornHigh 53.21376 ab  
## WT/BR:MornHigh 53.16274 ab  
## BRN:MornHigh 53.15310 ab  
## BLK:MornLow 52.66667 ab  
## WHT:MornHigh 52.64039 ab  
## BL/BR:MornHigh 52.39100 ab  
## BRN:MornLow 51.00000 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## WHT:MornLow 50.00000 b  
## BL/BR:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT81 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 21.008 4.202 8.7561 7.783e-05 \*\*\*  
## THIregime 1 49.358 49.358 102.8628 3.729e-10 \*\*\*  
## Colour:THIregime 5 1.639 0.328 0.6831 0.6407   
## Residuals 24 11.516 0.480   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4798471   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.06658 1.745491 6 49 53.19924  
## BLK 53.16436 1.003658 6 52 54.38353  
## BRN 52.65857 1.160953 6 51 53.83810  
## WHT 51.10751 1.634429 6 49 52.76003  
## WT/BLK 52.18674 1.496590 6 50 54.01233  
## WT/BR 52.17512 1.479763 6 50 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.236575   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.16436 a  
## BRN 52.65857 a  
## WT/BLK 52.18674 ab  
## WT/BR 52.17512 ab  
## WHT 51.10751 b  
## BL/BR 51.06658 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4798471   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.23074 0.7023222 18 52.06092 54.38353  
## MornLow 50.88889 1.2313975 18 49.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.476561   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.23074 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4798471 24 52.05981 1.330604 2.039327  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46650 0.6357881 3 52.06092 53.19924 52.10012 52.13933  
## BL/BR:MornLow 49.66667 1.1547005 3 49.00000 51.00000 49.00000 49.00000  
## BLK:MornHigh 53.99540 0.3363828 3 53.78832 54.38353 53.80133 53.81434  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 53.65046 0.2908696 3 53.31540 53.83810 53.55665 53.79789  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.54836 0.3419648 3 52.15384 52.76003 52.44253 52.73121  
## WHT:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.37348 0.6118874 3 52.79270 54.01233 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.35025 0.5757614 3 52.79270 53.94264 53.05405 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.66928  
## BL/BR:MornLow 50.00000  
## BLK:MornHigh 54.09893  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.81800  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.74562  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 53.66387  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.62902  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.99540 a  
## BRN:MornHigh 53.65046 ab  
## WT/BLK:MornHigh 53.37348 ab  
## WT/BR:MornHigh 53.35025 ab  
## WHT:MornHigh 52.54836 abc  
## BL/BR:MornHigh 52.46650 abc  
## BLK:MornLow 52.33333 abc  
## BRN:MornLow 51.66667 bcd  
## WT/BLK:MornLow 51.00000 cd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 49.66667 d  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT82 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.279 1.256 2.8429 0.03736 \*   
## THIregime 1 50.321 50.321 113.9143 1.357e-10 \*\*\*  
## Colour:THIregime 5 0.430 0.086 0.1948 0.96154   
## Residuals 24 10.602 0.442   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4417444   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.38885 1.681404 6 49 53.26313  
## BLK 52.41527 1.256068 6 51 53.86083  
## BRN 51.88518 1.397170 6 50 53.28055  
## WHT 52.14774 1.447961 6 50 53.83810  
## WT/BLK 52.20126 1.518111 6 50 54.09945  
## WT/BR 52.72210 1.229818 6 51 53.98744  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.186464   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.72210 a  
## BLK 52.41527 ab  
## WT/BLK 52.20126 ab  
## WHT 52.14774 ab  
## BRN 51.88518 ab  
## BL/BR 51.38885 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4417444   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.30902 0.5068228 18 52.21192 54.09945  
## MornLow 50.94444 0.8726041 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4572488   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.30902 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4417444 24 52.12673 1.275044 1.956685  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.77770 0.5301891 3 52.21192 53.26313 52.53498 52.85804  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.49721 0.3149019 3 53.31540 53.86083 53.31540 53.31540  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.10370 0.3041602 3 52.75249 53.28055 53.01528 53.27806  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.29547 0.5381314 3 52.76195 53.83810 53.02416 53.28636  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.40252 0.6577164 3 52.79270 54.09945 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.77753 0.3255455 3 53.40252 53.98744 53.67258 53.94264  
## WT/BR:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.06058  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.58811  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.27931  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.56223  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.96504  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.77753 a  
## BLK:MornHigh 53.49721 ab  
## WT/BLK:MornHigh 53.40252 ab  
## WHT:MornHigh 53.29547 ab  
## BRN:MornHigh 53.10370 abc  
## BL/BR:MornHigh 52.77770 abcd  
## WT/BR:MornLow 51.66667 bcde  
## BLK:MornLow 51.33333 cde  
## WHT:MornLow 51.00000 de  
## WT/BLK:MornLow 51.00000 de  
## BRN:MornLow 50.66667 e  
## BL/BR:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT83 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.924 0.785 0.8996 0.4974   
## THIregime 1 47.945 47.945 54.9540 1.183e-07 \*\*\*  
## Colour:THIregime 5 0.277 0.055 0.0636 0.9969   
## Residuals 24 20.939 0.872   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8724496   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.82696 1.337816 6 50 53.18473  
## BLK 52.37562 1.583693 6 50 54.31535  
## BRN 52.13316 1.434030 6 50 53.79789  
## WHT 51.33019 1.623186 6 49 53.17021  
## WT/BLK 52.10688 1.420996 6 50 53.83810  
## WT/BR 51.81804 1.680447 6 49 53.68876  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.667398   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.37562 a  
## BRN 52.13316 a  
## WT/BLK 52.10688 a  
## BL/BR 51.82696 a  
## WT/BR 51.81804 a  
## WHT 51.33019 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8724496   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.08584 0.5955355 18 52.00865 54.31535  
## MornLow 50.77778 1.0602750 18 49.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6425948   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.08584 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8724496 24 51.93181 1.798609 2.749829  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.98726 0.3196521 3 52.61847 53.18473 52.88853 53.15859  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.41791 0.8232687 3 52.69766 54.31535 52.96920 53.24073  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.26632 0.5375390 3 52.72301 53.79789 53.00054 53.27806  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.66039 0.5278072 3 52.11626 53.17021 52.40548 52.69469  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.21376 0.6103350 3 52.61847 53.83810 52.90160 53.18473  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.96942 0.8656842 3 52.00865 53.68876 52.60976 53.21086  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.17166  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.77804  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.53798  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.93245  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.51141  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.44981  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.41791 a  
## BRN:MornHigh 53.26632 ab  
## WT/BLK:MornHigh 53.21376 ab  
## BL/BR:MornHigh 52.98726 ab  
## WT/BR:MornHigh 52.96942 ab  
## WHT:MornHigh 52.66039 abc  
## BLK:MornLow 51.33333 abc  
## BRN:MornLow 51.00000 abc  
## WT/BLK:MornLow 51.00000 abc  
## BL/BR:MornLow 50.66667 bc  
## WT/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT84 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 5.714 1.143 1.8327 0.1444   
## THIregime 1 46.879 46.879 75.1843 7.371e-09 \*\*\*  
## Colour:THIregime 5 0.480 0.096 0.1540 0.9768   
## Residuals 24 14.964 0.624   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6235178   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.85624 1.368397 6 50 53.25006  
## BLK 52.67680 1.182895 6 51 53.88355  
## BRN 52.66437 1.171692 6 51 53.87295  
## WHT 52.42629 1.457815 6 50 53.89618  
## WT/BLK 52.28112 1.590326 6 50 54.18657  
## WT/BR 51.60865 1.779230 6 49 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.409593   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.67680 a  
## BRN 52.66437 a  
## WHT 52.42629 a  
## WT/BLK 52.28112 a  
## BL/BR 51.85624 a  
## WT/BR 51.60865 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6235178   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.39338 0.5625664 18 52.09577 54.18657  
## MornLow 51.11111 0.9633818 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5432397   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.39338 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6235178 24 52.25225 1.511191 2.324662  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.04582 0.3204041 3 52.67654 53.25006 52.94370 53.21086  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.68694 0.3219433 3 53.31540 53.88355 53.58863 53.86186  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.66208 0.3355070 3 53.27519 53.87295 53.55665 53.83810  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.51924 0.6293519 3 52.79270 53.89618 53.33077 53.86885  
## WHT:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WT/BLK:MornHigh 53.56223 0.6317210 3 52.92338 54.18657 53.25006 53.57675  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.88397 0.8375685 3 52.09577 53.76343 52.44423 52.79270  
## WT/BR:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 53.23046  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.87271  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.88251  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 53.88166  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.27806  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.68694 a  
## BRN:MornHigh 53.66208 a  
## WT/BLK:MornHigh 53.56223 ab  
## WHT:MornHigh 53.51924 ab  
## BL/BR:MornHigh 53.04582 abc  
## WT/BR:MornHigh 52.88397 abcd  
## BLK:MornLow 51.66667 abcde  
## BRN:MornLow 51.66667 abcde  
## WHT:MornLow 51.33333 bcde  
## WT/BLK:MornLow 51.00000 cde  
## BL/BR:MornLow 50.66667 de  
## WT/BR:MornLow 50.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT85 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 24.323 4.865 6.3771 0.0006698 \*\*\*  
## THIregime 1 43.748 43.748 57.3495 8.218e-08 \*\*\*  
## Colour:THIregime 5 1.530 0.306 0.4013 0.8430654   
## Residuals 24 18.308 0.763   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7628347   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.51255 1.803822 6 48 52.47908  
## BLK 53.20384 1.458722 6 51 54.99713  
## BRN 52.33033 1.371962 6 50 53.69871  
## WHT 52.62900 1.130596 6 51 53.77661  
## WT/BLK 52.12866 1.441670 6 50 53.83810  
## WT/BR 52.14318 1.448015 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.559137   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.20384 a  
## WHT 52.62900 a  
## BRN 52.33033 a  
## WT/BR 52.14318 a  
## WT/BLK 52.12866 a  
## BL/BR 50.51255 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7628347   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.26030 0.8123124 18 51.45691 54.99713  
## MornLow 51.05556 1.3920878 18 48.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6008724   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.26030 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7628347 24 52.15793 1.674538 2.571288  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.02511 0.5205688 3 51.45691 52.47908 51.79812 52.13933  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 54.07435 0.8443894 3 53.34029 54.99713 53.61295 53.88562  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.32733 0.6247676 3 52.60602 53.69871 53.14165 53.67727  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.59134 0.2898439 3 53.25732 53.77661 53.49871 53.74009  
## WHT:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BLK:MornHigh 53.25732 0.6118874 3 52.61847 53.83810 52.96693 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.28636 0.5668165 3 52.70558 53.83810 53.01049 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.30920  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 54.44137  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.68799  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.75835  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.07435 a  
## WHT:MornHigh 53.59134 ab  
## BRN:MornHigh 53.32733 abc  
## WT/BR:MornHigh 53.28636 abc  
## WT/BLK:MornHigh 53.25732 abc  
## BLK:MornLow 52.33333 abc  
## BL/BR:MornHigh 52.02511 abc  
## WHT:MornLow 51.66667 abc  
## BRN:MornLow 51.33333 bcd  
## WT/BLK:MornLow 51.00000 cd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 49.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT86 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.280 3.656 3.5476 0.01527 \*   
## THIregime 1 41.537 41.537 40.3058 1.455e-06 \*\*\*  
## Colour:THIregime 5 1.175 0.235 0.2281 0.94660   
## Residuals 24 24.733 1.031   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.030535   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.27172 1.567493 6 49 53.05405  
## BLK 53.39400 1.364955 6 51 54.88350  
## BRN 52.32986 1.168236 6 51 53.68876  
## WHT 51.56825 1.414892 6 50 53.16166  
## WT/BLK 51.47590 1.684295 6 49 53.57675  
## WT/BR 52.07183 1.721990 6 49 53.73356  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.812177   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.39400 a  
## BRN 52.32986 ab  
## WT/BR 52.07183 ab  
## WHT 51.56825 b  
## WT/BLK 51.47590 b  
## BL/BR 51.27172 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.030535   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.09274 0.8132432 18 51.7473 54.8835  
## MornLow 50.94444 1.3920878 18 49.0000 54.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6983907   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.09274 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.030535 24 52.01859 1.951519 2.988593  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.54345 0.5391943 3 51.97961 53.05405 52.28815 52.59669  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 54.12132 0.8587209 3 53.19095 54.88350 53.74024 54.28952  
## BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## BRN:MornHigh 53.32638 0.3153404 3 53.11436 53.68876 53.14519 53.17601  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.80316 0.3105197 3 52.61847 53.16166 52.62391 52.62936  
## WHT:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 52.61847 0.9178310 3 51.74730 53.57675 52.13932 52.53135  
## WT/BLK:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.14366 0.9831990 3 52.00865 53.73356 52.84870 53.68876  
## WT/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## Q75  
## BL/BR:MornHigh 52.82537  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.58651  
## BLK:MornLow 53.50000  
## BRN:MornHigh 53.43239  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.89551  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.71116  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.12132 a  
## BRN:MornHigh 53.32638 ab  
## WT/BR:MornHigh 53.14366 abc  
## WHT:MornHigh 52.80316 abcd  
## BLK:MornLow 52.66667 abcd  
## WT/BLK:MornHigh 52.61847 abcd  
## BL/BR:MornHigh 52.54345 abcd  
## BRN:MornLow 51.33333 abcd  
## WT/BR:MornLow 51.00000 bcd  
## WHT:MornLow 50.33333 cd  
## WT/BLK:MornLow 50.33333 cd  
## BL/BR:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT87 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.560 2.512 2.2455 0.08249 .   
## THIregime 1 47.521 47.521 42.4799 9.679e-07 \*\*\*  
## Colour:THIregime 5 0.873 0.175 0.1561 0.97606   
## Residuals 24 26.848 1.119   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.118668   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.08075 1.385714 6 50 53.70743  
## BLK 52.86715 1.192721 6 51 54.29262  
## BRN 51.85394 1.543175 6 50 53.76343  
## WHT 51.59967 1.771289 6 49 53.77276  
## WT/BLK 52.46230 1.310615 6 51 54.01233  
## WT/BR 51.02973 2.114025 6 48 53.61409  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.888077   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.86715 a  
## WT/BLK 52.46230 a  
## BL/BR 52.08075 a  
## BRN 51.85394 a  
## WHT 51.59967 a  
## WT/BR 51.02973 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.118668   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.13118 0.7585305 18 51.39883 54.29262  
## MornLow 50.83333 1.3394468 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7276418   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.13118 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.118668 24 51.98226 2.034677 3.113766  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.16149 0.5444850 3 52.61847 53.70743 52.88853 53.15859  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.73429 0.5483001 3 53.19660 54.29262 53.45513 53.71365  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 53.04122 0.6255011 3 52.67208 53.76343 52.68012 52.68816  
## BRN:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## WHT:MornHigh 52.86601 0.8363586 3 52.12481 53.77276 52.41263 52.70046  
## WHT:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.59127 0.3704593 3 53.31540 54.01233 53.38074 53.44608  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 52.39279 1.1249871 3 51.39883 53.61409 51.78215 52.16546  
## WT/BR:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## Q75  
## BL/BR:MornHigh 53.43301  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.00313  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.22579  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.23661  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.72920  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 52.88977  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.73429 a  
## WT/BLK:MornHigh 53.59127 a  
## BL/BR:MornHigh 53.16149 ab  
## BRN:MornHigh 53.04122 ab  
## WHT:MornHigh 52.86601 ab  
## WT/BR:MornHigh 52.39279 abc  
## BLK:MornLow 52.00000 abc  
## WT/BLK:MornLow 51.33333 abc  
## BL/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.66667 abc  
## WHT:MornLow 50.33333 bc  
## WT/BR:MornLow 49.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT88 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.633 2.527 3.4582 0.01706 \*   
## THIregime 1 53.539 53.539 73.2827 9.324e-09 \*\*\*  
## Colour:THIregime 5 1.154 0.231 0.3158 0.89855   
## Residuals 24 17.534 0.731   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.730579   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.14899 1.450789 6 50 53.83810  
## BLK 52.37147 1.581303 6 50 54.31535  
## BRN 52.18313 1.482673 6 50 53.91852  
## WHT 50.60055 1.901549 6 48 52.79270  
## WT/BLK 51.88214 1.401105 6 50 53.31540  
## WT/BR 52.13074 1.436198 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.525818   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.37147 a  
## BRN 52.18313 a  
## BL/BR 52.14899 a  
## WT/BR 52.13074 a  
## WT/BLK 51.88214 ab  
## WHT 50.60055 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.730579   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10567 0.6561979 18 51.60211 54.31535  
## MornLow 50.66667 1.1881771 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5880316   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10567 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.730579 24 51.88617 1.647335 2.516338  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.29798 0.5490424 3 52.74043 53.83810 53.02792 53.31540  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.40962 0.8274984 3 52.69314 54.31535 52.95675 53.22036  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.36627 0.5444166 3 52.83004 53.91852 53.09014 53.35025  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.20110 0.5953317 3 51.60211 52.79270 51.90531 52.20851  
## WHT:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## WT/BLK:MornHigh 53.09761 0.3772262 3 52.66203 53.31540 52.98871 53.31540  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.26147 0.5665432 3 52.70558 53.83810 52.97316 53.24073  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.57675  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.76786  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.63438  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.50060  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 53.31540  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.53941  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.40962 a  
## BRN:MornHigh 53.36627 a  
## BL/BR:MornHigh 53.29798 a  
## WT/BR:MornHigh 53.26147 a  
## WT/BLK:MornHigh 53.09761 ab  
## WHT:MornHigh 52.20110 ab  
## BLK:MornLow 51.33333 abc  
## BL/BR:MornLow 51.00000 abc  
## BRN:MornLow 51.00000 abc  
## WT/BR:MornLow 51.00000 abc  
## WT/BLK:MornLow 50.66667 bc  
## WHT:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT89 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.544 1.509 4.3955 0.005547 \*\*   
## THIregime 1 43.381 43.381 126.3759 4.768e-11 \*\*\*  
## Colour:THIregime 5 0.543 0.109 0.3167 0.898039   
## Residuals 24 8.238 0.343   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.343267   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.11003 1.413785 6 50 53.77276  
## BLK 52.95438 1.045549 6 52 53.92900  
## BRN 52.67107 1.175991 6 51 53.87295  
## WHT 51.65074 1.503126 6 50 53.34807  
## WT/BLK 52.01977 1.359602 6 50 53.66387  
## WT/BR 51.84708 1.360035 6 50 53.22828  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.045888   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.95438 a  
## BRN 52.67107 ab  
## BL/BR 52.11003 ab  
## WT/BLK 52.01977 ab  
## WT/BR 51.84708 b  
## WHT 51.65074 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.343267   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.30658 0.5172436 18 52.27 53.929  
## MornLow 51.11111 0.8323524 18 50.00 52.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4030724   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.30658 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.343267 24 52.20884 1.122204 1.72485  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.22006 0.54816688 3 52.67654 53.77276 52.94370 53.21086  
## BL/BR:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.90875 0.02056878 3 53.88788 53.92900 53.89863 53.90938  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.67548 0.31232672 3 53.31540 53.87295 53.57675 53.83810  
## BRN:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.96814 0.32934531 3 52.76366 53.34807 52.77818 52.79270  
## WHT:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 53.03953 0.70818581 3 52.27000 53.66387 52.72736 53.18473  
## WT/BLK:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.02750 0.33279165 3 52.64336 53.22828 52.92711 53.21086  
## WT/BR:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.49181  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.91919  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.07038  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.42430  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.21957  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.90875 a  
## BRN:MornHigh 53.67548 ab  
## BL/BR:MornHigh 53.22006 abc  
## WT/BLK:MornHigh 53.03953 abc  
## WT/BR:MornHigh 53.02750 abc  
## WHT:MornHigh 52.96814 abc  
## BLK:MornLow 52.00000 bcd  
## BRN:MornLow 51.66667 cd  
## BL/BR:MornLow 51.00000 d  
## WT/BLK:MornLow 51.00000 d  
## WT/BR:MornLow 50.66667 d  
## WHT:MornLow 50.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT90 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.610 1.322 2.2751 0.07927 .   
## THIregime 1 47.364 47.364 81.5109 3.48e-09 \*\*\*  
## Colour:THIregime 5 0.537 0.107 0.1848 0.96558   
## Residuals 24 13.946 0.581   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.581079   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.58286 1.430859 6 50 53.19924  
## BLK 52.43510 1.630606 6 50 54.42898  
## BRN 52.12646 1.427916 6 50 53.80076  
## WHT 52.91332 1.234206 6 51 54.38984  
## WT/BLK 51.94748 1.471614 6 50 53.57675  
## WT/BR 51.87695 1.391164 6 50 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.360776   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.91332 a  
## BLK 52.43510 a  
## BRN 52.12646 a  
## WT/BLK 51.94748 a  
## WT/BR 51.87695 a  
## BL/BR 51.58286 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.581079   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.29406 0.5473381 18 52.63589 54.42898  
## MornLow 51.00000 0.9701425 18 50.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5244265   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.29406 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.581079 24 52.14703 1.4618 2.244156  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.83239 0.3179769 3 52.63589 53.19924 52.64896 52.66203  
## BL/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.53687 0.8198555 3 52.81646 54.42898 53.09082 53.36518  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.25292 0.5391026 3 52.72301 53.80076 52.97900 53.23498  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 53.82664 0.5528982 3 53.28465 54.38984 53.54504 53.80543  
## WHT:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BLK:MornHigh 53.22828 0.3992187 3 52.79270 53.57675 53.05405 53.31540  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.08724 0.3326241 3 52.70558 53.31540 52.97316 53.24073  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.93063  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.89708  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.51787  
## BRN:MornLow 51.50000  
## WHT:MornHigh 54.09764  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 53.44608  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.27806  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.82664 a  
## BLK:MornHigh 53.53687 ab  
## BRN:MornHigh 53.25292 ab  
## WT/BLK:MornHigh 53.22828 abc  
## WT/BR:MornHigh 53.08724 abc  
## BL/BR:MornHigh 52.83239 abcd  
## WHT:MornLow 52.00000 abcde  
## BLK:MornLow 51.33333 bcde  
## BRN:MornLow 51.00000 cde  
## WT/BLK:MornLow 50.66667 de  
## WT/BR:MornLow 50.66667 de  
## BL/BR:MornLow 50.33333 e  
##   
## attr(,"class")  
## [1] "group"

# Pulse Rate (Sheet Two for Afternoon Low THI)

# Fit the second model for Pulse Rate

## [1] "---- PULRAT1 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 303.213 60.643 8.0165 0.0001462 \*\*\*  
## THIregime 1 94.639 94.639 12.5106 0.0016809 \*\*   
## Colour:THIregime 5 12.240 2.448 0.3236 0.8937883   
## Residuals 24 181.553 7.565   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 7.564716   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.03813 4.600094 6 52 64.00000  
## BLK 55.75696 2.386644 6 52 58.61368  
## BRN 53.53756 3.144391 6 49 57.16098  
## WHT 53.56745 2.887367 6 49 56.81096  
## WT/BLK 58.01108 1.695969 6 56 60.11050  
## WT/BR 61.48376 3.119162 6 56 64.29210  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.909819   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 61.48376 a  
## BL/BR 59.03813 ab  
## WT/BLK 58.01108 abc  
## BLK 55.75696 bc  
## WHT 53.56745 c  
## BRN 53.53756 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 7.564716   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.52054 2.904302 18 54.41888 64.2921  
## MornLow 55.27778 4.560773 18 49.00000 64.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.892184   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.52054 a  
## MornLow 55.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 7.564716 24 56.89916 4.83382 8.097142  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.40960 3.3054586 3 57.36633 63.92621 58.65130 59.93627  
## BL/BR:MornLow 57.66667 6.0277138 3 52.00000 64.00000 54.50000 57.00000  
## BLK:MornHigh 57.18059 1.3515496 3 55.92890 58.61368 56.46405 56.99919  
## BLK:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## BRN:MornHigh 56.07512 1.1833807 3 54.81381 57.16098 55.53218 56.25056  
## BRN:MornLow 51.00000 2.0000000 3 49.00000 53.00000 50.00000 51.00000  
## WHT:MornHigh 55.80157 1.2389625 3 54.41888 56.81096 55.29688 56.17488  
## WHT:MornLow 51.33333 2.0816660 3 49.00000 53.00000 50.50000 52.00000  
## WT/BLK:MornHigh 59.35549 0.6596368 3 58.89087 60.11050 58.97798 59.06510  
## WT/BLK:MornLow 56.66667 1.1547005 3 56.00000 58.00000 56.00000 56.00000  
## WT/BR:MornHigh 62.30086 2.2330794 3 59.88649 64.29210 61.30524 62.72400  
## WT/BR:MornLow 60.66667 4.1633320 3 56.00000 64.00000 59.00000 62.00000  
## Q75  
## BL/BR:MornHigh 61.93124  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 57.80643  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.70577  
## BRN:MornLow 52.00000  
## WHT:MornHigh 56.49292  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 59.58780  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 63.50805  
## WT/BR:MornLow 63.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 62.30086 a  
## WT/BR:MornLow 60.66667 a  
## BL/BR:MornHigh 60.40960 a  
## WT/BLK:MornHigh 59.35549 ab  
## BL/BR:MornLow 57.66667 abc  
## BLK:MornHigh 57.18059 abc  
## WT/BLK:MornLow 56.66667 abc  
## BRN:MornHigh 56.07512 abc  
## WHT:MornHigh 55.80157 abc  
## BLK:MornLow 54.33333 abc  
## WHT:MornLow 51.33333 bc  
## BRN:MornLow 51.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT2 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 391.09 78.219 10.1300 2.609e-05 \*\*\*  
## THIregime 1 103.72 103.715 13.4320 0.001223 \*\*   
## Colour:THIregime 5 14.69 2.939 0.3806 0.857044   
## Residuals 24 185.32 7.722   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 7.721509   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.89728 4.487834 6 50 61.99222  
## BLK 55.49472 2.534998 6 51 58.06722  
## BRN 52.81198 2.918335 6 49 55.99859  
## WHT 52.08370 3.536108 6 46 55.77516  
## WT/BLK 58.51169 2.807377 6 54 61.93995  
## WT/BR 61.71805 2.297010 6 58 64.20498  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.960441   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 61.71805 a  
## WT/BLK 58.51169 ab  
## BL/BR 56.89728 abc  
## BLK 55.49472 bc  
## BRN 52.81198 c  
## WHT 52.08370 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 7.721509   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.95025 3.259917 18 52.38616 64.20498  
## MornLow 54.55556 4.913633 18 46.00000 64.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.911693   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.95025 a  
## MornLow 54.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 7.721509 24 56.2529 4.939764 8.180626  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.79455 2.9244916 3 56.25559 61.99222 57.19572 58.13586  
## BL/BR:MornLow 55.00000 5.5677644 3 50.00000 61.00000 52.00000 54.00000  
## BLK:MornHigh 56.65610 1.6388280 3 54.85861 58.06722 55.95054 57.04248  
## BLK:MornLow 54.33333 3.0550505 3 51.00000 57.00000 53.00000 55.00000  
## BRN:MornHigh 55.29062 0.7261962 3 54.54748 55.99859 54.93663 55.32578  
## BRN:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WHT:MornHigh 54.50073 1.8441030 3 52.38616 55.77516 53.86351 55.34086  
## WHT:MornLow 49.66667 3.2145503 3 46.00000 52.00000 48.50000 51.00000  
## WT/BLK:MornHigh 60.02338 1.9615764 3 58.01970 61.93995 59.06510 60.11050  
## WT/BLK:MornLow 57.00000 3.0000000 3 54.00000 60.00000 55.50000 57.00000  
## WT/BR:MornHigh 62.43610 1.6259909 3 61.00656 64.20498 61.55166 62.09676  
## WT/BR:MornLow 61.00000 3.0000000 3 58.00000 64.00000 59.50000 61.00000  
## Q75  
## BL/BR:MornHigh 60.06404  
## BL/BR:MornLow 57.50000  
## BLK:MornHigh 57.55485  
## BLK:MornLow 56.00000  
## BRN:MornHigh 55.66219  
## BRN:MornLow 51.00000  
## WHT:MornHigh 55.55801  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 61.02523  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 63.15087  
## WT/BR:MornLow 62.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 62.43610 a  
## WT/BR:MornLow 61.00000 a  
## WT/BLK:MornHigh 60.02338 a  
## BL/BR:MornHigh 58.79455 a  
## WT/BLK:MornLow 57.00000 ab  
## BLK:MornHigh 56.65610 ab  
## BRN:MornHigh 55.29062 ab  
## BL/BR:MornLow 55.00000 ab  
## WHT:MornHigh 54.50073 ab  
## BLK:MornLow 54.33333 ab  
## BRN:MornLow 50.33333 b  
## WHT:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT3 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 166.745 33.349 5.1873 0.002289 \*\*  
## THIregime 1 85.438 85.438 13.2896 0.001284 \*\*  
## Colour:THIregime 5 6.079 1.216 0.1891 0.963858   
## Residuals 24 154.295 6.429   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.428953   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.47991 4.967242 6 51 62.20130  
## BLK 55.69784 2.555698 6 51 57.97218  
## BRN 54.11118 2.435216 6 51 56.89388  
## WHT 54.72157 2.014906 6 52 56.97430  
## WT/BLK 58.09093 1.941666 6 55 60.37185  
## WT/BR 60.47517 2.048671 6 57 62.72400  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.526258   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 60.47517 a  
## WT/BLK 58.09093 ab  
## BL/BR 56.47991 ab  
## BLK 55.69784 b  
## WHT 54.72157 b  
## BRN 54.11118 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.428953   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.13664 2.353647 18 55.26984 62.724  
## MornLow 55.05556 3.701704 18 51.00000 62.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.744364   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.13664 a  
## MornLow 55.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 6.428953 24 56.5961 4.480058 7.464583  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.29315 3.3892278 3 56.16121 62.20130 56.33907 56.51694  
## BL/BR:MornLow 54.66667 6.3508530 3 51.00000 62.00000 51.00000 51.00000  
## BLK:MornHigh 57.06235 1.5524167 3 55.26984 57.97218 56.60744 57.94503  
## BLK:MornLow 54.33333 2.8867513 3 51.00000 56.00000 53.50000 56.00000  
## BRN:MornHigh 56.22235 0.6741642 3 55.54559 56.89388 55.88659 56.22759  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 56.44313 0.5081849 3 55.96157 56.97430 56.17755 56.39352  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 59.51520 1.0031034 3 58.41173 60.37185 59.08688 59.76203  
## WT/BLK:MornLow 56.66667 1.5275252 3 55.00000 58.00000 56.00000 57.00000  
## WT/BR:MornHigh 61.28367 1.4826564 3 59.76203 62.72400 60.56351 61.36498  
## WT/BR:MornLow 59.66667 2.5166115 3 57.00000 62.00000 58.50000 60.00000  
## Q75  
## BL/BR:MornHigh 59.35912  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 57.95861  
## BLK:MornLow 56.00000  
## BRN:MornHigh 56.56074  
## BRN:MornLow 52.50000  
## WHT:MornHigh 56.68391  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 60.06694  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 62.04449  
## WT/BR:MornLow 61.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 61.28367 a  
## WT/BR:MornLow 59.66667 ab  
## WT/BLK:MornHigh 59.51520 ab  
## BL/BR:MornHigh 58.29315 abc  
## BLK:MornHigh 57.06235 abc  
## WT/BLK:MornLow 56.66667 abc  
## WHT:MornHigh 56.44313 abc  
## BRN:MornHigh 56.22235 abc  
## BL/BR:MornLow 54.66667 abc  
## BLK:MornLow 54.33333 abc  
## WHT:MornLow 53.00000 bc  
## BRN:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT4 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 137.027 27.405 3.9303 0.009586 \*\*  
## THIregime 1 83.309 83.309 11.9477 0.002051 \*\*  
## Colour:THIregime 5 7.943 1.589 0.2278 0.946721   
## Residuals 24 167.347 6.973   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.972803   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 57.56975 3.811814 6 53 62.00000  
## BLK 54.55167 3.559108 6 50 58.77999  
## BRN 55.20076 3.022236 6 50 58.58261  
## WHT 52.95747 2.755631 6 49 56.09224  
## WT/BLK 56.70556 2.175926 6 53 59.32645  
## WT/BR 58.80883 1.749451 6 56 60.93189  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.713819   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 58.80883 a  
## BL/BR 57.56975 ab  
## WT/BLK 56.70556 ab  
## BRN 55.20076 ab  
## BLK 54.55167 ab  
## WHT 52.95747 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.972803   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.48690 2.194555 18 54.21561 61.93995  
## MornLow 54.44444 3.681787 18 49.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.816648   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.48690 a  
## MornLow 54.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 6.972803 24 55.96567 4.718261 7.773903  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.80617 2.7212663 3 57.03964 61.93995 57.23928 57.43892  
## BL/BR:MornLow 56.33333 4.9328829 3 53.00000 62.00000 53.50000 54.00000  
## BLK:MornHigh 56.10333 2.3334791 3 54.49716 58.77999 54.76500 55.03284  
## BLK:MornLow 53.00000 4.3588989 3 50.00000 58.00000 50.50000 51.00000  
## BRN:MornHigh 57.06818 1.7434494 3 55.16227 58.58261 56.31097 57.45966  
## BRN:MornLow 53.33333 3.0550505 3 50.00000 56.00000 52.00000 54.00000  
## WHT:MornHigh 55.24827 0.9524407 3 54.21561 56.09224 54.82628 55.43695  
## WHT:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## WT/BLK:MornHigh 58.07778 1.3617350 3 56.62583 59.32645 57.45344 58.28105  
## WT/BLK:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## WT/BR:MornHigh 59.61767 1.2995403 3 58.33332 60.93189 58.96056 59.58780  
## WT/BR:MornLow 58.00000 2.0000000 3 56.00000 60.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 59.68944  
## BL/BR:MornLow 58.00000  
## BLK:MornHigh 56.90642  
## BLK:MornLow 54.50000  
## BRN:MornHigh 58.02114  
## BRN:MornLow 55.00000  
## WHT:MornHigh 55.76460  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 58.80375  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 60.25984  
## WT/BR:MornLow 59.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 59.61767 a  
## BL/BR:MornHigh 58.80617 a  
## WT/BLK:MornHigh 58.07778 ab  
## WT/BR:MornLow 58.00000 ab  
## BRN:MornHigh 57.06818 ab  
## BL/BR:MornLow 56.33333 ab  
## BLK:MornHigh 56.10333 ab  
## WT/BLK:MornLow 55.33333 ab  
## WHT:MornHigh 55.24827 ab  
## BRN:MornLow 53.33333 ab  
## BLK:MornLow 53.00000 ab  
## WHT:MornLow 50.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT5 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 91.545 18.309 4.1770 0.0071528 \*\*   
## THIregime 1 72.000 72.000 16.4261 0.0004609 \*\*\*  
## Colour:THIregime 5 3.416 0.683 0.1559 0.9761566   
## Residuals 24 105.198 4.383   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.383242   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.07094 3.663428 6 52 60.37185  
## BLK 54.84097 1.971075 6 52 57.25941  
## BRN 54.36942 2.898990 6 50 57.93928  
## WHT 52.91759 2.212013 6 50 55.29004  
## WT/BLK 57.35801 1.219692 6 56 58.93443  
## WT/BR 57.26166 2.007991 6 54 59.69234  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.737377   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 57.35801 a  
## WT/BR 57.26166 a  
## BL/BR 56.07094 ab  
## BLK 54.84097 ab  
## BRN 54.36942 ab  
## WHT 52.91759 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.383242   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.88398 1.834543 18 54.39347 60.37185  
## MornLow 54.05556 2.899741 18 50.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.440339   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.88398 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.383242 24 55.46977 3.774343 6.163582  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.47522 2.5104682 3 55.92890 60.37185 56.02691 56.12491  
## BL/BR:MornLow 54.66667 4.6188022 3 52.00000 60.00000 52.00000 52.00000  
## BLK:MornHigh 56.01528 1.1146835 3 55.10751 57.25941 55.39321 55.67891  
## BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BRN:MornHigh 56.07218 1.7259450 3 54.53503 57.93928 55.13863 55.74222  
## BRN:MornLow 52.66667 3.0550505 3 50.00000 56.00000 51.00000 52.00000  
## WHT:MornHigh 54.83517 0.4484329 3 54.39347 55.29004 54.60774 54.82201  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 58.38269 0.4856966 3 58.01970 58.93443 58.10682 58.19393  
## WT/BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WT/BR:MornHigh 58.52332 1.1422433 3 57.40988 59.69234 57.93881 58.46773  
## WT/BR:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 58.24838  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 56.46916  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.84075  
## BRN:MornLow 54.00000  
## WHT:MornHigh 55.05603  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 58.56418  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 59.08003  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 58.52332 a  
## WT/BLK:MornHigh 58.38269 a  
## BL/BR:MornHigh 57.47522 a  
## WT/BLK:MornLow 56.33333 ab  
## BRN:MornHigh 56.07218 ab  
## BLK:MornHigh 56.01528 ab  
## WT/BR:MornLow 56.00000 ab  
## WHT:MornHigh 54.83517 ab  
## BL/BR:MornLow 54.66667 ab  
## BLK:MornLow 53.66667 ab  
## BRN:MornLow 52.66667 ab  
## WHT:MornLow 51.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT6 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 100.920 20.184 5.7934 0.001207 \*\*   
## THIregime 1 88.437 88.437 25.3838 3.773e-05 \*\*\*  
## Colour:THIregime 5 3.172 0.634 0.1821 0.966660   
## Residuals 24 83.616 3.484   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.483983   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.92557 3.382001 6 52 60.00596  
## BLK 55.76868 2.500569 6 52 58.66120  
## BRN 55.26681 2.315923 6 52 58.18053  
## WHT 53.07228 2.387302 6 50 55.79823  
## WT/BLK 58.69288 1.549500 6 57 60.45897  
## WT/BR 56.67786 1.972393 6 54 58.76641  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.332017   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.69288 a  
## WT/BR 56.67786 ab  
## BL/BR 55.92557 abc  
## BLK 55.76868 abc  
## BRN 55.26681 bc  
## WHT 53.07228 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.483983   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.46803 1.874086 18 54.60678 60.45897  
## MornLow 54.33333 2.743977 18 50.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.284118   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.46803 a  
## MornLow 54.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.483983 24 55.90068 3.339035 5.495073  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.51781 2.1577362 3 56.16121 60.00596 56.27374 56.38626  
## BL/BR:MornLow 54.33333 4.0414519 3 52.00000 59.00000 52.00000 52.00000  
## BLK:MornHigh 56.87069 1.6295689 3 55.47438 58.66120 55.97543 56.47649  
## BLK:MornLow 54.66667 3.0550505 3 52.00000 58.00000 53.00000 54.00000  
## BRN:MornHigh 56.86695 1.1806956 3 55.89405 58.18053 56.21016 56.52627  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 55.14457 0.6041167 3 54.60678 55.79823 54.81774 55.02869  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 60.05242 0.3520778 3 59.84915 60.45897 59.84915 59.84915  
## WT/BLK:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## WT/BR:MornHigh 58.35572 0.5293251 3 57.75835 58.76641 58.15038 58.54240  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 58.19611  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.56884  
## BLK:MornLow 56.00000  
## BRN:MornHigh 57.35340  
## BRN:MornLow 54.50000  
## WHT:MornHigh 55.41346  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 60.15406  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 58.65441  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.05242 a  
## WT/BR:MornHigh 58.35572 ab  
## BL/BR:MornHigh 57.51781 ab  
## WT/BLK:MornLow 57.33333 ab  
## BLK:MornHigh 56.87069 ab  
## BRN:MornHigh 56.86695 ab  
## WHT:MornHigh 55.14457 abc  
## WT/BR:MornLow 55.00000 abc  
## BLK:MornLow 54.66667 abc  
## BL/BR:MornLow 54.33333 bc  
## BRN:MornLow 53.66667 bc  
## WHT:MornLow 51.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT7 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 104.848 20.970 3.0080 0.030171 \*   
## THIregime 1 90.655 90.655 13.0038 0.001416 \*\*  
## Colour:THIregime 5 3.045 0.609 0.0873 0.993541   
## Residuals 24 167.314 6.971   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.971412   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.81058 3.899212 6 52 61.36498  
## BLK 54.13586 2.260707 6 51 56.83175  
## BRN 54.65579 2.447441 6 51 57.49700  
## WHT 54.77868 2.080932 6 52 57.17031  
## WT/BLK 58.51864 1.554871 6 56 60.11050  
## WT/BR 57.95507 4.376095 6 52 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.713348   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.51864 a  
## WT/BR 57.95507 a  
## BL/BR 56.81058 a  
## WHT 54.77868 a  
## BRN 54.65579 a  
## BLK 54.13586 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.971412   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.72932 2.124958 18 55.17894 62.81112  
## MornLow 54.55556 3.416607 18 51.00000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.816467   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.72932 a  
## MornLow 54.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 6.971412 24 56.14244 4.702936 7.773128  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.28783 2.6701196 3 56.58228 61.36498 56.74925 56.91622  
## BL/BR:MornLow 55.33333 4.9328829 3 52.00000 61.00000 52.50000 53.00000  
## BLK:MornHigh 55.93838 0.8345029 3 55.17894 56.83175 55.49169 55.80445  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 56.64492 0.8784834 3 55.74222 57.49700 56.21887 56.69553  
## BRN:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WHT:MornHigh 56.55736 0.5784149 3 56.02114 57.17031 56.25089 56.48064  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 59.70396 0.7041556 3 58.89087 60.11050 59.50068 60.11050  
## WT/BLK:MornLow 57.33333 1.1547005 3 56.00000 58.00000 57.00000 58.00000  
## WT/BR:MornHigh 59.24348 3.2499550 3 56.45160 62.81112 57.45966 58.46773  
## WT/BR:MornLow 56.66667 5.6862407 3 52.00000 63.00000 53.50000 55.00000  
## Q75  
## BL/BR:MornHigh 59.14060  
## BL/BR:MornLow 57.00000  
## BLK:MornHigh 56.31810  
## BLK:MornLow 53.00000  
## BRN:MornHigh 57.09626  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.82548  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 60.11050  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 60.63942  
## WT/BR:MornLow 59.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.70396 a  
## WT/BR:MornHigh 59.24348 a  
## BL/BR:MornHigh 58.28783 a  
## WT/BLK:MornLow 57.33333 a  
## WT/BR:MornLow 56.66667 a  
## BRN:MornHigh 56.64492 a  
## WHT:MornHigh 56.55736 a  
## BLK:MornHigh 55.93838 a  
## BL/BR:MornLow 55.33333 a  
## WHT:MornLow 53.00000 a  
## BRN:MornLow 52.66667 a  
## BLK:MornLow 52.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT8 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 140.279 28.056 4.6604 0.0040987 \*\*   
## THIregime 1 99.287 99.287 16.4930 0.0004514 \*\*\*  
## Colour:THIregime 5 2.017 0.403 0.0670 0.9965247   
## Residuals 24 144.480 6.020   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.019995   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 53.92041 4.331334 6 48 58.96056  
## BLK 54.36909 2.620959 6 50 57.33069  
## BRN 53.73654 2.042729 6 51 56.08973  
## WHT 53.08920 2.208317 6 50 55.66755  
## WT/BLK 58.97570 1.823892 6 56 61.15590  
## WT/BR 55.87337 3.339317 6 51 60.02338  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.379931   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.97570 a  
## WT/BR 55.87337 ab  
## BLK 54.36909 b  
## BL/BR 53.92041 b  
## BRN 53.73654 b  
## WHT 53.08920 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 6.019995   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.65477 2.361153 18 53.54771 61.1559  
## MornLow 53.33333 3.360672 18 48.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.687972   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.65477 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 6.019995 24 54.99405 4.461515 7.223264  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 55.84082 2.7995060 3 53.54771 58.96056 54.28094 55.01418  
## BL/BR:MornLow 52.00000 5.2915026 3 48.00000 58.00000 49.00000 50.00000  
## BLK:MornHigh 55.73819 1.5969689 3 54.13679 57.33069 54.94194 55.74709  
## BLK:MornLow 53.00000 3.0000000 3 50.00000 56.00000 51.50000 53.00000  
## BRN:MornHigh 55.47309 0.6205754 3 54.84865 56.08973 55.16476 55.48087  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 54.84507 0.7804622 3 54.11482 55.66755 54.43382 54.75283  
## WHT:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WT/BLK:MornHigh 60.28473 0.9178310 3 59.32645 61.15590 59.84915 60.37185  
## WT/BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## WT/BR:MornHigh 57.74673 2.0854451 3 55.92890 60.02338 56.60841 57.28792  
## WT/BR:MornLow 54.00000 3.6055513 3 51.00000 58.00000 52.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.98737  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.53889  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.78530  
## BRN:MornLow 52.50000  
## WHT:MornHigh 55.21019  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 60.76388  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 58.65565  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.28473 a  
## WT/BR:MornHigh 57.74673 ab  
## WT/BLK:MornLow 57.66667 ab  
## BL/BR:MornHigh 55.84082 ab  
## BLK:MornHigh 55.73819 ab  
## BRN:MornHigh 55.47309 ab  
## WHT:MornHigh 54.84507 ab  
## WT/BR:MornLow 54.00000 ab  
## BLK:MornLow 53.00000 b  
## BL/BR:MornLow 52.00000 b  
## BRN:MornLow 52.00000 b  
## WHT:MornLow 51.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT9 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 147.745 29.549 15.7636 6.595e-07 \*\*\*  
## THIregime 1 100.901 100.901 53.8282 1.410e-07 \*\*\*  
## Colour:THIregime 5 2.353 0.471 0.2511 0.9351   
## Residuals 24 44.988 1.875   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.874508   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 53.81496 2.772251 6 50 57.02657  
## BLK 53.35523 2.031938 6 51 55.80445  
## BRN 54.85114 2.358928 6 52 57.85887  
## WHT 54.51673 1.812694 6 52 56.61494  
## WT/BLK 59.36016 1.671249 6 57 61.41725  
## WT/BR 56.48008 2.488170 6 53 59.58780  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.444065   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.36016 a  
## WT/BR 56.48008 b  
## BRN 54.85114 bc  
## WHT 54.51673 bc  
## BL/BR 53.81496 c  
## BLK 53.35523 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.874508   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.07055 2.107069 18 54.63351 61.41725  
## MornLow 53.72222 2.652536 18 50.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9419127   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.07055 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.874508 24 55.39638 2.471509 4.030687  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 55.96326 1.0171286 3 54.99966 57.02657 55.43161 55.86356  
## BL/BR:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## BLK:MornHigh 55.04380 0.6594245 3 54.63351 55.80445 54.66347 54.69343  
## BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## BRN:MornHigh 56.36895 1.2910422 3 55.58043 57.85887 55.62399 55.66755  
## BRN:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WHT:MornHigh 56.03345 0.5597004 3 55.49844 56.61494 55.74271 55.98698  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 60.72032 0.6577164 3 60.11050 61.41725 60.37185 60.63320  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 58.29350 1.1308059 3 57.49700 59.58780 57.64634 57.79569  
## WT/BR:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.44507  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.24894  
## BLK:MornLow 52.00000  
## BRN:MornHigh 56.76321  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.30096  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 61.02523  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 58.69174  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.72032 a  
## WT/BR:MornHigh 58.29350 ab  
## WT/BLK:MornLow 58.00000 ab  
## BRN:MornHigh 56.36895 bc  
## WHT:MornHigh 56.03345 bc  
## BL/BR:MornHigh 55.96326 bc  
## BLK:MornHigh 55.04380 bcd  
## WT/BR:MornLow 54.66667 bcd  
## BRN:MornLow 53.33333 cd  
## WHT:MornLow 53.00000 cd  
## BL/BR:MornLow 51.66667 d  
## BLK:MornLow 51.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT10 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 166.617 33.323 11.8309 7.616e-06 \*\*\*  
## THIregime 1 90.957 90.957 32.2927 7.471e-06 \*\*\*  
## Colour:THIregime 5 5.359 1.072 0.3805 0.8571   
## Residuals 24 67.599 2.817   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.816645   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.52080 2.504789 6 53 59.53553  
## BLK 56.21262 1.818758 6 54 58.49488  
## BRN 53.88815 2.572221 6 51 56.82496  
## WHT 54.75270 2.047215 6 52 56.97430  
## WT/BLK 60.14329 1.929194 6 57 62.46265  
## WT/BR 58.68624 2.944847 6 54 62.12663  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.995955   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.14329 a  
## WT/BR 58.68624 ab  
## BL/BR 56.52080 bc  
## BLK 56.21262 bc  
## WHT 54.75270 c  
## BRN 53.88815 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.816645   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.29016 2.139236 18 55.61528 62.46265  
## MornLow 55.11111 3.084857 18 51.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.154604   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.29016 a  
## MornLow 55.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.816645 24 56.70064 2.959908 4.940848  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.37494 1.0188733 3 57.62768 59.53553 57.79465 57.96162  
## BL/BR:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## BLK:MornHigh 57.42525 0.9264636 3 56.87474 58.49488 56.89043 56.90612  
## BLK:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## BRN:MornHigh 56.10964 0.6343849 3 55.61528 56.82496 55.75199 55.88869  
## BRN:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WHT:MornHigh 56.50541 0.5116753 3 55.95965 56.97430 56.27096 56.58228  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 61.28658 1.1760750 3 60.11050 62.46265 60.69854 61.28658  
## WT/BLK:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## WT/BR:MornHigh 60.03915 1.9636446 3 58.22878 62.12663 58.99541 59.76203  
## WT/BR:MornLow 57.33333 3.5118846 3 54.00000 61.00000 55.50000 57.00000  
## Q75  
## BL/BR:MornHigh 58.74858  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.70050  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.35682  
## BRN:MornLow 52.00000  
## WHT:MornHigh 56.77829  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 61.87461  
## WT/BLK:MornLow 60.00000  
## WT/BR:MornHigh 60.94433  
## WT/BR:MornLow 59.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.28658 a  
## WT/BR:MornHigh 60.03915 ab  
## WT/BLK:MornLow 59.00000 abc  
## BL/BR:MornHigh 58.37494 abc  
## BLK:MornHigh 57.42525 abcd  
## WT/BR:MornLow 57.33333 abcd  
## WHT:MornHigh 56.50541 abcde  
## BRN:MornHigh 56.10964 bcde  
## BLK:MornLow 55.00000 cde  
## BL/BR:MornLow 54.66667 cde  
## WHT:MornLow 53.00000 de  
## BRN:MornLow 51.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT11 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 129.237 25.847 10.5068 1.965e-05 \*\*\*  
## THIregime 1 96.166 96.166 39.0908 1.838e-06 \*\*\*  
## Colour:THIregime 5 2.527 0.505 0.2055 0.957   
## Residuals 24 59.042 2.460   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.46007   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.59684 2.577605 6 52 58.64694  
## BLK 55.10268 2.167755 6 52 57.78211  
## BRN 53.73919 2.539663 6 50 56.65264  
## WHT 55.14696 1.674007 6 53 56.84363  
## WT/BLK 59.38920 1.699075 6 57 61.41725  
## WT/BR 57.83155 2.839847 6 54 61.30524  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.799902   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.38920 a  
## WT/BR 57.83155 ab  
## BL/BR 55.59684 bc  
## WHT 55.14696 bc  
## BLK 55.10268 bc  
## BRN 53.73919 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.46007   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.76881 2.004492 18 54.77896 61.41725  
## MornLow 54.50000 2.684377 18 50.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.079048   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.76881 a  
## MornLow 54.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.46007 24 56.1344 2.794117 4.617524  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.52701 1.0488641 3 56.56776 58.64694 56.96704 57.36633  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 56.53870 1.1082130 3 55.65510 57.78211 55.91700 56.17889  
## BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BRN:MornHigh 55.81172 0.9514578 3 54.77896 56.65264 55.39127 56.00357  
## BRN:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WHT:MornHigh 56.62726 0.3139948 3 56.26712 56.84363 56.51907 56.77103  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 60.77839 0.6538588 3 60.11050 61.41725 60.45897 60.80743  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 59.32977 1.7591252 3 57.93258 61.30524 58.34203 58.75148  
## WT/BR:MornLow 56.33333 3.2145503 3 54.00000 60.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 58.00663  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.98050  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.32810  
## BRN:MornLow 52.50000  
## WHT:MornHigh 56.80733  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 61.11234  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.02836  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.77839 a  
## WT/BR:MornHigh 59.32977 ab  
## WT/BLK:MornLow 58.00000 abc  
## BL/BR:MornHigh 57.52701 abc  
## WHT:MornHigh 56.62726 abc  
## BLK:MornHigh 56.53870 abc  
## WT/BR:MornLow 56.33333 abc  
## BRN:MornHigh 55.81172 bcd  
## BL/BR:MornLow 53.66667 cd  
## BLK:MornLow 53.66667 cd  
## WHT:MornLow 53.66667 cd  
## BRN:MornLow 51.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT12 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 162.109 32.422 15.4586 7.841e-07 \*\*\*  
## THIregime 1 104.518 104.518 49.8339 2.682e-07 \*\*\*  
## Colour:THIregime 5 2.939 0.588 0.2802 0.9194   
## Residuals 24 50.336 2.097   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.097325   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.00543 2.142881 6 53 58.60048  
## BLK 53.40660 1.950870 6 51 55.38131  
## BRN 52.61879 2.935728 6 48 55.81689  
## WHT 53.97834 1.846364 6 52 55.92890  
## WT/BLK 58.71466 1.901279 6 56 61.15590  
## WT/BR 56.83291 2.741938 6 52 59.81181  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.585247   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.71466 a  
## WT/BR 56.83291 ab  
## BL/BR 56.00543 bc  
## WHT 53.97834 cd  
## BLK 53.40660 d  
## BRN 52.61879 d  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.097325   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.96335 2.127394 18 53.48963 61.1559  
## MornLow 53.55556 2.853733 18 48.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9963225   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.96335 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.097325 24 55.25946 2.620754 4.26352  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.67753 0.8710896 3 56.86976 58.60048 57.21605 57.56234  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 55.14654 0.3150708 3 54.78846 55.38131 55.02915 55.26984  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 54.90424 1.2421777 3 53.48963 55.81689 54.44792 55.40620  
## BRN:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## WHT:MornHigh 55.62335 0.2667415 3 55.43695 55.92890 55.47058 55.50421  
## WHT:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BLK:MornHigh 60.09598 0.9897747 3 59.19578 61.15590 59.56602 59.93627  
## WT/BLK:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## WT/BR:MornHigh 58.33249 1.6480359 3 56.55614 59.81181 57.59283 58.62952  
## WT/BR:MornLow 55.33333 3.0550505 3 52.00000 58.00000 54.00000 56.00000  
## Q75  
## BL/BR:MornHigh 58.08141  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 55.32558  
## BLK:MornLow 52.00000  
## BRN:MornHigh 55.61155  
## BRN:MornLow 51.50000  
## WHT:MornHigh 55.71655  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 60.54608  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 59.22067  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.09598 a  
## WT/BR:MornHigh 58.33249 ab  
## BL/BR:MornHigh 57.67753 ab  
## WT/BLK:MornLow 57.33333 ab  
## WHT:MornHigh 55.62335 bc  
## WT/BR:MornLow 55.33333 bc  
## BLK:MornHigh 55.14654 bc  
## BRN:MornHigh 54.90424 bc  
## BL/BR:MornLow 54.33333 bcd  
## WHT:MornLow 52.33333 cd  
## BLK:MornLow 51.66667 cd  
## BRN:MornLow 50.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT13 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 199.271 39.854 33.1109 5.108e-10 \*\*\*  
## THIregime 1 107.593 107.593 89.3878 1.453e-09 \*\*\*  
## Colour:THIregime 5 3.879 0.776 0.6445 0.6682   
## Residuals 24 28.888 1.204   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.203662   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.56422 2.113859 6 52 56.62583  
## BLK 54.36587 2.415947 6 50 56.76977  
## BRN 53.50060 2.281122 6 50 56.04091  
## WHT 53.39433 1.938129 6 51 55.37353  
## WT/BLK 60.28848 1.594122 6 58 62.20130  
## WT/BR 54.92585 2.503106 6 52 57.32277  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.95849   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.28848 a  
## WT/BR 54.92585 b  
## BL/BR 54.56422 b  
## BLK 54.36587 b  
## BRN 53.50060 b  
## WHT 53.39433 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.203662   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.90201 2.346379 18 54.12321 62.2013  
## MornLow 53.44444 2.853733 18 50.00000 60.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7547781   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.90201 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.203662 24 55.17323 1.988492 3.22989  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.46176 0.1886802 3 56.25559 56.62583 56.37973 56.50387  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 55.73174 1.4125080 3 54.12321 56.76977 55.21273 56.30226  
## BLK:MornLow 53.00000 2.6457513 3 50.00000 55.00000 52.00000 54.00000  
## BRN:MornHigh 55.33453 0.7652188 3 54.52163 56.04091 54.98134 55.44105  
## BRN:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WHT:MornHigh 55.12200 0.3209629 3 54.76051 55.37353 54.99624 55.23197  
## WHT:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BLK:MornHigh 61.57696 0.6103350 3 60.98167 62.20130 61.26480 61.54793  
## WT/BLK:MornLow 59.00000 1.0000000 3 58.00000 60.00000 58.50000 59.00000  
## WT/BR:MornHigh 57.18504 0.1369052 3 57.04897 57.32277 57.11618 57.18338  
## WT/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.56485  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.53601  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.74098  
## BRN:MornLow 52.50000  
## WHT:MornHigh 55.30275  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 61.87461  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 57.25307  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.57696 a  
## WT/BLK:MornLow 59.00000 ab  
## WT/BR:MornHigh 57.18504 bc  
## BL/BR:MornHigh 56.46176 bc  
## BLK:MornHigh 55.73174 cd  
## BRN:MornHigh 55.33453 cd  
## WHT:MornHigh 55.12200 cd  
## BLK:MornLow 53.00000 de  
## BL/BR:MornLow 52.66667 de  
## WT/BR:MornLow 52.66667 de  
## BRN:MornLow 51.66667 e  
## WHT:MornLow 51.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT14 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 67.114 13.423 5.5779 0.00151 \*\*   
## THIregime 1 81.565 81.565 33.8949 5.288e-06 \*\*\*  
## Colour:THIregime 5 2.132 0.426 0.1772 0.96853   
## Residuals 24 57.754 2.406   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.406399   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.56846 1.873363 6 53 57.75835  
## BLK 54.16759 1.695696 6 52 55.87912  
## BRN 53.24771 2.138508 6 51 55.51821  
## WHT 53.92756 2.307740 6 50 56.45160  
## WT/BLK 56.66200 1.694501 6 54 58.54240  
## WT/BR 56.79133 3.022408 6 53 60.40919  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.769191   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 56.79133 a  
## WT/BLK 56.66200 ab  
## BL/BR 55.56846 abc  
## BLK 54.16759 abc  
## WHT 53.92756 bc  
## BRN 53.24771 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.406399   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.56599 1.505969 18 54.21561 60.40919  
## MornLow 53.55556 2.280924 18 50.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.067212   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.56599 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.406399 24 55.06077 2.817355 4.566876  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.13692 0.6273207 3 56.50387 57.75835 56.82620 57.14853  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 55.66852 0.3111197 3 55.31116 55.87912 55.56322 55.81527  
## BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BRN:MornHigh 55.16208 0.3243810 3 54.88350 55.51821 54.98402 55.08454  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 55.52179 1.1645414 3 54.21561 56.45160 55.05688 55.89815  
## WHT:MornLow 52.33333 2.0816660 3 50.00000 54.00000 51.50000 53.00000  
## WT/BLK:MornHigh 57.99066 0.7409186 3 57.14853 58.54240 57.71479 58.28105  
## WT/BLK:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BR:MornHigh 57.91599 2.1701274 3 56.45160 60.40919 56.66939 56.88718  
## WT/BR:MornLow 55.66667 3.7859389 3 53.00000 60.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.45344  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.84719  
## BLK:MornLow 53.00000  
## BRN:MornHigh 55.30137  
## BRN:MornLow 51.50000  
## WHT:MornHigh 56.17488  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 58.41173  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 58.64818  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 57.99066 a  
## WT/BR:MornHigh 57.91599 a  
## BL/BR:MornHigh 57.13692 ab  
## BLK:MornHigh 55.66852 abc  
## WT/BR:MornLow 55.66667 abc  
## WHT:MornHigh 55.52179 abc  
## WT/BLK:MornLow 55.33333 abc  
## BRN:MornHigh 55.16208 abc  
## BL/BR:MornLow 54.00000 abc  
## BLK:MornLow 52.66667 bc  
## WHT:MornLow 52.33333 c  
## BRN:MornLow 51.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT15 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 98.267 19.653 10.9977 1.371e-05 \*\*\*  
## THIregime 1 85.015 85.015 47.5728 3.922e-07 \*\*\*  
## Colour:THIregime 5 3.920 0.784 0.4387 0.8171   
## Residuals 24 42.889 1.787   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.787052   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.54903 1.729589 6 53 57.69301  
## BLK 53.96951 1.799913 6 51 56.00357  
## BRN 53.15363 2.264055 6 50 55.78951  
## WHT 52.00336 2.315247 6 49 54.65482  
## WT/BLK 57.14053 1.932539 6 54 59.58780  
## WT/BR 54.07096 2.431576 6 50 56.52627  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.38637   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 57.14053 a  
## BL/BR 55.54903 ab  
## WT/BR 54.07096 bc  
## BLK 53.96951 bc  
## BRN 53.15363 c  
## WHT 52.00336 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.787052   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 55.85123 1.608152 18 53.46914 59.5878  
## MornLow 52.77778 2.438793 18 49.00000 58.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9196777   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 55.85123 a  
## MornLow 52.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.787052 24 54.3145 2.461233 3.935537  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.76474 0.8435489 3 56.04506 57.69301 56.30060 56.55614  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 55.27235 0.8207842 3 54.38456 56.00357 54.90674 55.42893  
## BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## BRN:MornHigh 54.97394 0.7355560 3 54.36080 55.78951 54.56615 54.77149  
## BRN:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WHT:MornHigh 54.00671 0.6005201 3 53.46914 54.65482 53.68266 53.89618  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 58.28105 1.1976562 3 57.23565 59.58780 57.62768 58.01970  
## WT/BLK:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WT/BR:MornHigh 55.80860 1.1789742 3 54.44792 56.52627 55.44976 56.45160  
## WT/BR:MornLow 52.33333 2.0816660 3 50.00000 54.00000 51.50000 53.00000  
## Q75  
## BL/BR:MornHigh 57.12458  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 55.71625  
## BLK:MornLow 53.50000  
## BRN:MornHigh 55.28050  
## BRN:MornLow 52.00000  
## WHT:MornHigh 54.27550  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 58.80375  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 56.48894  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 58.28105 a  
## BL/BR:MornHigh 56.76474 ab  
## WT/BLK:MornLow 56.00000 abc  
## WT/BR:MornHigh 55.80860 abc  
## BLK:MornHigh 55.27235 abc  
## BRN:MornHigh 54.97394 abcd  
## BL/BR:MornLow 54.33333 bcd  
## WHT:MornHigh 54.00671 bcd  
## BLK:MornLow 52.66667 cde  
## WT/BR:MornLow 52.33333 cde  
## BRN:MornLow 51.33333 de  
## WHT:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT16 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 69.632 13.926 8.9091 6.858e-05 \*\*\*  
## THIregime 1 83.924 83.924 53.6886 1.441e-07 \*\*\*  
## Colour:THIregime 5 2.405 0.481 0.3077 0.9035   
## Residuals 24 37.516 1.563   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.56317   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.30717 2.359299 6 52 58.34639  
## BLK 56.03059 1.334341 6 54 57.57167  
## BRN 54.09512 2.216814 6 51 56.75029  
## WHT 54.52157 1.813047 6 52 56.53872  
## WT/BLK 58.41006 2.030823 6 56 61.15590  
## WT/BR 55.46319 2.257571 6 52 57.79569  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.231887   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.41006 a  
## BLK 56.03059 b  
## WT/BR 55.46319 b  
## BL/BR 55.30717 b  
## WHT 54.52157 b  
## BRN 54.09512 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.56317   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.16479 1.529608 18 55.20516 61.1559  
## MornLow 54.11111 2.025975 18 51.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.860142   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.16479 a  
## MornLow 54.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.56317 24 55.63795 2.24715 3.680769  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.94768 1.2282526 3 56.04506 58.34639 56.24833 56.45160  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 57.06117 0.5146321 3 56.54250 57.57167 56.80592 57.06934  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 55.85691 0.8004003 3 55.20516 56.75029 55.41022 55.61528  
## BRN:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WHT:MornHigh 56.04313 0.5218737 3 55.49844 56.53872 55.79534 56.09224  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 59.82011 1.1601027 3 59.06510 61.15590 59.15222 59.23933  
## WT/BLK:MornLow 57.00000 1.7320508 3 56.00000 59.00000 56.00000 56.00000  
## WT/BR:MornHigh 57.25971 0.8519139 3 56.27737 57.79569 56.99172 57.70608  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.39899  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.32050  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.18278  
## BRN:MornLow 53.00000  
## WHT:MornHigh 56.31548  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 60.19762  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 57.75088  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.82011 a  
## WT/BR:MornHigh 57.25971 ab  
## BLK:MornHigh 57.06117 ab  
## WT/BLK:MornLow 57.00000 ab  
## BL/BR:MornHigh 56.94768 ab  
## WHT:MornHigh 56.04313 bc  
## BRN:MornHigh 55.85691 bcd  
## BLK:MornLow 55.00000 bcd  
## BL/BR:MornLow 53.66667 bcd  
## WT/BR:MornLow 53.66667 bcd  
## WHT:MornLow 53.00000 cd  
## BRN:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT17 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 81.544 16.309 18.2311 1.768e-07 \*\*\*  
## THIregime 1 91.732 91.732 102.5440 3.844e-10 \*\*\*  
## Colour:THIregime 5 1.577 0.315 0.3525 0.8756   
## Residuals 24 21.470 0.895   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8945636   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.54479 1.836727 6 52 56.55614  
## BLK 53.27935 2.074628 6 50 55.59627  
## BRN 54.21156 1.739635 6 52 55.92890  
## WHT 52.84659 2.489368 6 49 55.86356  
## WT/BLK 57.54676 1.398980 6 56 59.19578  
## WT/BR 54.48197 2.024248 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.688398   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 57.54676 a  
## BL/BR 54.54479 b  
## WT/BR 54.48197 bc  
## BRN 54.21156 bc  
## BLK 53.27935 bc  
## WHT 52.84659 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8945636   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.08145 1.471548 18 53.62287 59.19578  
## MornLow 52.88889 1.996729 18 49.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6506878   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.08145 a  
## MornLow 52.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8945636 24 54.48517 1.73591 2.78446  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.08958 0.5241928 3 55.52236 56.55614 55.85630 56.19025  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 54.89203 0.7903536 3 54.03722 55.59627 54.53990 55.04258  
## BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## BRN:MornHigh 55.75645 0.2690724 3 55.44641 55.92890 55.67023 55.89405  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 54.69318 1.1236928 3 53.62287 55.86356 54.10799 54.59311  
## WHT:MornLow 51.00000 2.0000000 3 49.00000 53.00000 50.00000 51.00000  
## WT/BLK:MornHigh 58.76019 0.3772262 3 58.54240 59.19578 58.54240 58.54240  
## WT/BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WT/BR:MornHigh 56.29728 0.1568693 3 56.13798 56.45160 56.22012 56.30226  
## WT/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.37320  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.31943  
## BLK:MornLow 52.50000  
## BRN:MornHigh 55.91148  
## BRN:MornLow 53.00000  
## WHT:MornHigh 55.22834  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 58.86909  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 56.37693  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 58.76019 a  
## WT/BLK:MornLow 56.33333 ab  
## WT/BR:MornHigh 56.29728 ab  
## BL/BR:MornHigh 56.08958 ab  
## BRN:MornHigh 55.75645 bc  
## BLK:MornHigh 54.89203 bcd  
## WHT:MornHigh 54.69318 bcd  
## BL/BR:MornLow 53.00000 cde  
## BRN:MornLow 52.66667 de  
## WT/BR:MornLow 52.66667 de  
## BLK:MornLow 51.66667 e  
## WHT:MornLow 51.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT18 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 110.881 22.176 16.288 4.925e-07 \*\*\*  
## THIregime 1 102.260 102.260 75.107 7.441e-09 \*\*\*  
## Colour:THIregime 5 2.028 0.406 0.298 0.9092   
## Residuals 24 32.677 1.362   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.361528   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.96458 2.333726 6 51 57.39246  
## BLK 54.21139 1.887741 6 52 56.50138  
## BRN 54.85025 1.715902 6 53 56.77326  
## WHT 52.14175 2.743466 6 48 55.23197  
## WT/BLK 58.11271 1.648170 6 56 59.84915  
## WT/BR 55.16502 2.279421 6 52 57.72101  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.082967   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.11271 a  
## WT/BR 55.16502 b  
## BL/BR 54.96458 b  
## BRN 54.85025 b  
## BLK 54.21139 bc  
## WHT 52.14175 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.361528   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.59301 1.756918 18 53.19241 59.84915  
## MornLow 53.22222 2.340326 18 48.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.80275   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.59301 a  
## MornLow 53.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.361528 24 54.90762 2.125106 3.435174  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.59583 1.1399395 3 55.29004 57.39246 56.19751 57.10498  
## BL/BR:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## BLK:MornHigh 55.75611 0.6458239 3 55.36075 56.50138 55.38347 55.40620  
## BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BRN:MornHigh 56.36716 0.3526607 3 56.13798 56.77326 56.16412 56.19025  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 54.28351 1.0272312 3 53.19241 55.23197 53.80927 54.42614  
## WHT:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BLK:MornHigh 59.55876 0.4297363 3 59.06510 59.84915 59.41357 59.76203  
## WT/BLK:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WT/BR:MornHigh 56.99670 0.7686806 3 56.19025 57.72101 56.63455 57.07884  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 57.24872  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.95379  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.48176  
## BRN:MornLow 53.50000  
## WHT:MornHigh 54.82905  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 59.80559  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 57.39993  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.55876 a  
## WT/BR:MornHigh 56.99670 ab  
## WT/BLK:MornLow 56.66667 abc  
## BL/BR:MornHigh 56.59583 abc  
## BRN:MornHigh 56.36716 abc  
## BLK:MornHigh 55.75611 bcd  
## WHT:MornHigh 54.28351 bcd  
## BL/BR:MornLow 53.33333 cde  
## BRN:MornLow 53.33333 cde  
## WT/BR:MornLow 53.33333 cde  
## BLK:MornLow 52.66667 de  
## WHT:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT19 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 179.475 35.895 17.5684 2.483e-07 \*\*\*  
## THIregime 1 123.420 123.420 60.4065 5.243e-08 \*\*\*  
## Colour:THIregime 5 0.926 0.185 0.0906 0.993   
## Residuals 24 49.036 2.043   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.043153   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.78007 2.357094 6 52 57.30099  
## BLK 53.76709 2.059055 6 51 56.01980  
## BRN 54.27041 2.162899 6 52 56.56361  
## WHT 53.86869 2.166302 6 51 56.19025  
## WT/BLK 59.91885 3.011907 6 56 64.03075  
## WT/BR 57.17101 2.537329 6 53 60.21504  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.551642   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.91885 a  
## WT/BR 57.17101 b  
## BL/BR 54.78007 bc  
## BRN 54.27041 c  
## WHT 53.86869 c  
## BLK 53.76709 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.043153   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.48093 2.380374 18 55.05773 64.03075  
## MornLow 53.77778 2.798225 18 51.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9833713   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.48093 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.043153 24 55.62935 2.569487 4.208099  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.89348 0.3961875 3 56.50968 57.30099 56.68972 56.86976  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 55.53418 0.4811012 3 55.05773 56.01980 55.29136 55.52500  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 56.20748 0.3243810 3 55.92890 56.56361 56.02942 56.12994  
## BRN:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WHT:MornHigh 55.73737 0.5061617 3 55.19097 56.19025 55.51093 55.83089  
## WHT:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BLK:MornHigh 61.50437 2.1918110 3 60.11050 64.03075 60.24118 60.37185  
## WT/BLK:MornLow 58.33333 3.2145503 3 56.00000 62.00000 56.50000 57.00000  
## WT/BR:MornHigh 59.00868 1.2769599 3 57.67123 60.21504 58.40550 59.13977  
## WT/BR:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 57.08537  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 55.77240  
## BLK:MornLow 52.50000  
## BRN:MornHigh 56.34677  
## BRN:MornLow 52.50000  
## WHT:MornHigh 56.01057  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 62.20130  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 59.67741  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.50437 a  
## WT/BR:MornHigh 59.00868 ab  
## WT/BLK:MornLow 58.33333 ab  
## BL/BR:MornHigh 56.89348 b  
## BRN:MornHigh 56.20748 bc  
## WHT:MornHigh 55.73737 bc  
## BLK:MornHigh 55.53418 bc  
## WT/BR:MornLow 55.33333 bc  
## BL/BR:MornLow 52.66667 c  
## BRN:MornLow 52.33333 c  
## BLK:MornLow 52.00000 c  
## WHT:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT20 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 112.002 22.400 29.619 1.596e-09 \*\*\*  
## THIregime 1 99.384 99.384 131.412 3.202e-11 \*\*\*  
## Colour:THIregime 5 1.887 0.377 0.499 0.7739   
## Residuals 24 18.151 0.756   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7562814   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.00664 1.886998 6 54 58.15038  
## BLK 53.05783 2.362679 6 50 55.56528  
## BRN 54.73962 2.033017 6 52 57.01164  
## WHT 54.37565 2.041672 6 52 56.74199  
## WT/BLK 58.33746 1.649118 6 56 60.37185  
## WT/BR 57.11864 1.928781 6 54 59.28911  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.552426   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.33746 a  
## WT/BR 57.11864 ab  
## BL/BR 56.00664 bc  
## BRN 54.73962 cd  
## WHT 54.37565 de  
## BLK 53.05783 e  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7562814   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.26750 1.664423 18 54.57463 60.37185  
## MornLow 53.94444 2.235337 18 50.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5982859   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.26750 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7562814 24 55.60597 1.563941 2.560219  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.67995 0.4107438 3 57.39246 58.15038 57.44473 57.49700  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 55.11566 0.5016119 3 54.57463 55.56528 54.89085 55.20708  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 56.47923 0.5040729 3 56.00932 57.01164 56.21303 56.41675  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.08463 0.5708587 3 55.71367 56.74199 55.75595 55.79823  
## WHT:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BLK:MornHigh 59.67492 0.6577164 3 59.06510 60.37185 59.32645 59.58780  
## WT/BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BR:MornHigh 58.57061 0.8015558 3 57.70608 59.28911 58.21136 58.71663  
## WT/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.82369  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.38618  
## BLK:MornLow 51.50000  
## BRN:MornHigh 56.71419  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.27011  
## WHT:MornLow 53.00000  
## WT/BLK:MornHigh 59.97983  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 59.00287  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.67492 a  
## WT/BR:MornHigh 58.57061 ab  
## BL/BR:MornHigh 57.67995 abc  
## WT/BLK:MornLow 57.00000 bcd  
## BRN:MornHigh 56.47923 bcde  
## WHT:MornHigh 56.08463 bcde  
## WT/BR:MornLow 55.66667 cde  
## BLK:MornHigh 55.11566 def  
## BL/BR:MornLow 54.33333 ef  
## BRN:MornLow 53.00000 fg  
## WHT:MornLow 52.66667 fg  
## BLK:MornLow 51.00000 g  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT21 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 115.145 23.029 22.2476 2.706e-08 \*\*\*  
## THIregime 1 93.997 93.997 90.8079 1.250e-09 \*\*\*  
## Colour:THIregime 5 3.869 0.774 0.7475 0.5959   
## Residuals 24 24.843 1.035   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.035124   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 53.73898 2.538935 6 50 56.77829  
## BLK 54.69084 1.702237 6 52 56.42671  
## BRN 55.38235 1.678194 6 53 57.33617  
## WHT 52.96926 2.270295 6 50 55.37716  
## WT/BLK 58.52590 1.578837 6 56 60.24118  
## WT/BR 56.05455 2.175939 6 53 58.54240  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.816207   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.52590 a  
## WT/BR 56.05455 b  
## BRN 55.38235 bc  
## BLK 54.69084 bcd  
## BL/BR 53.73898 cd  
## WHT 52.96926 d  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.035124   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.84285 1.707747 18 54.39155 60.24118  
## MornLow 53.61111 2.354942 18 50.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6999438   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.84285 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.035124 24 55.22698 1.842234 2.995239  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 55.81129 0.9480019 3 54.88350 56.77829 55.32780 55.77209  
## BL/BR:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## BLK:MornHigh 56.04835 0.6182263 3 55.33492 56.42671 55.85917 56.38342  
## BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## BRN:MornHigh 56.76471 0.5550888 3 56.22759 57.33617 56.47898 56.73037  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 54.93852 0.5016570 3 54.39155 55.37716 54.71920 55.04684  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 59.71848 0.7948650 3 58.80375 60.24118 59.45713 60.11050  
## WT/BLK:MornLow 57.33333 1.1547005 3 56.00000 58.00000 57.00000 58.00000  
## WT/BR:MornHigh 57.77577 0.7846306 3 56.97430 58.54240 57.39246 57.81062  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.27519  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.40507  
## BLK:MornLow 54.00000  
## BRN:MornHigh 57.03327  
## BRN:MornLow 54.50000  
## WHT:MornHigh 55.21200  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 60.17584  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 58.17651  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.71848 a  
## WT/BR:MornHigh 57.77577 ab  
## WT/BLK:MornLow 57.33333 ab  
## BRN:MornHigh 56.76471 abc  
## BLK:MornHigh 56.04835 bcd  
## BL/BR:MornHigh 55.81129 bcd  
## WHT:MornHigh 54.93852 bcd  
## WT/BR:MornLow 54.33333 cde  
## BRN:MornLow 54.00000 cde  
## BLK:MornLow 53.33333 def  
## BL/BR:MornLow 51.66667 ef  
## WHT:MornLow 51.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT22 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 124.068 24.814 52.7610 3.636e-12 \*\*\*  
## THIregime 1 104.465 104.465 222.1231 1.249e-13 \*\*\*  
## Colour:THIregime 5 2.614 0.523 1.1115 0.3805   
## Residuals 24 11.287 0.470   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.4703024   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.21612 2.548974 6 51 57.23565  
## BLK 54.24672 1.777689 6 52 56.00018  
## BRN 53.90471 2.203396 6 51 56.24252  
## WHT 54.84211 1.706444 6 53 56.74562  
## WT/BLK 58.52621 1.851192 6 56 60.89455  
## WT/BR 57.81828 1.679863 6 56 59.67492  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.224215   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.52621 a  
## WT/BR 57.81828 a  
## WHT 54.84211 b  
## BLK 54.24672 b  
## BL/BR 54.21612 b  
## BRN 53.90471 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.4703024   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.29583 1.818067 18 55.25686 60.89455  
## MornLow 53.88889 2.193276 18 51.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4717975   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.29583 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4703024 24 55.59236 1.233598 2.018943  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.43224 0.7138686 3 55.87082 57.23565 56.03054 56.19025  
## BL/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BLK:MornHigh 55.82676 0.2782955 3 55.50576 56.00018 55.74006 55.97435  
## BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BRN:MornHigh 55.80943 0.5035756 3 55.25686 56.24252 55.59288 55.92890  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 56.35089 0.3425121 3 56.13217 56.74562 56.15352 56.17488  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 60.05242 0.7611292 3 59.41357 60.89455 59.63136 59.84915  
## WT/BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BR:MornHigh 59.30322 0.3261159 3 59.06510 59.67492 59.11737 59.16964  
## WT/BR:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.71295  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.98726  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.08571  
## BRN:MornLow 52.50000  
## WHT:MornHigh 56.46025  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 60.37185  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 59.42228  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.05242 a  
## WT/BR:MornHigh 59.30322 a  
## WT/BLK:MornLow 57.00000 b  
## BL/BR:MornHigh 56.43224 b  
## WHT:MornHigh 56.35089 b  
## WT/BR:MornLow 56.33333 b  
## BLK:MornHigh 55.82676 b  
## BRN:MornHigh 55.80943 b  
## WHT:MornLow 53.33333 c  
## BLK:MornLow 52.66667 c  
## BL/BR:MornLow 52.00000 c  
## BRN:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT23 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 128.987 25.797 17.9376 2.053e-07 \*\*\*  
## THIregime 1 96.028 96.028 66.7709 2.164e-08 \*\*\*  
## Colour:THIregime 5 3.270 0.654 0.4547 0.8057   
## Residuals 24 34.516 1.438   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.438171   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 53.54273 2.329443 6 50 55.98117  
## BLK 54.03638 1.855059 6 51 56.11071  
## BRN 53.67365 1.973326 6 51 55.89156  
## WHT 54.12423 2.415412 6 50 56.85131  
## WT/BLK 58.94666 1.463868 6 57 60.45897  
## WT/BR 54.14242 2.454396 6 51 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.140792   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.94666 a  
## WT/BR 54.14242 b  
## WHT 54.12423 b  
## BLK 54.03638 b  
## BRN 53.67365 b  
## BL/BR 53.54273 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.438171   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.37757 1.924991 18 54.12849 60.45897  
## MornLow 53.11111 2.470744 18 50.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8250349   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.37757 a  
## MornLow 53.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.438171 24 54.74434 2.190615 3.530536  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 55.41878 0.8207601 3 54.47696 55.98117 55.13759 55.79823  
## BL/BR:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## BLK:MornHigh 55.40609 0.8009132 3 54.53503 56.11071 55.05377 55.57251  
## BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## BRN:MornHigh 55.34729 0.5759891 3 54.74411 55.89156 55.07516 55.40620  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 55.58179 1.3706823 3 54.12849 56.85131 54.94702 55.76556  
## WHT:MornLow 52.66667 2.5166115 3 50.00000 55.00000 51.50000 53.00000  
## WT/BLK:MornHigh 60.22666 0.3298184 3 59.84915 60.45897 60.11050 60.37185  
## WT/BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WT/BR:MornHigh 56.28483 0.5387911 3 55.66755 56.66068 56.09691 56.52627  
## WT/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 55.88970  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.84161  
## BLK:MornLow 53.50000  
## BRN:MornHigh 55.64888  
## BRN:MornLow 52.50000  
## WHT:MornHigh 56.30843  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 60.41541  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 56.59348  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.22666 a  
## WT/BLK:MornLow 57.66667 ab  
## WT/BR:MornHigh 56.28483 b  
## WHT:MornHigh 55.58179 bc  
## BL/BR:MornHigh 55.41878 bcd  
## BLK:MornHigh 55.40609 bcd  
## BRN:MornHigh 55.34729 bcd  
## BLK:MornLow 52.66667 cde  
## WHT:MornLow 52.66667 cde  
## BRN:MornLow 52.00000 de  
## WT/BR:MornLow 52.00000 de  
## BL/BR:MornLow 51.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT24 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 148.323 29.665 55.4590 2.110e-12 \*\*\*  
## THIregime 1 102.491 102.491 191.6108 6.157e-13 \*\*\*  
## Colour:THIregime 5 2.923 0.585 1.0928 0.3899   
## Residuals 24 12.837 0.535   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.5348903   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.44933 2.469235 6 51 57.17031  
## BLK 54.59963 1.895394 6 52 56.73671  
## BRN 54.75883 2.053408 6 52 56.97430  
## WHT 55.18774 1.714939 6 53 56.88206  
## WT/BLK 60.22314 1.518419 6 58 61.93995  
## WT/BR 56.57176 2.120706 6 54 58.62952  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.305574   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.22314 a  
## WT/BR 56.57176 b  
## WHT 55.18774 c  
## BRN 54.75883 c  
## BLK 54.59963 c  
## BL/BR 54.44933 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.5348903   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.65237 1.947416 18 55.63346 61.93995  
## MornLow 54.27778 2.420636 18 51.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5031523   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.65237 a  
## MornLow 54.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5348903 24 55.96507 1.306819 2.153118  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.56534 0.6907172 3 55.81274 57.17031 56.26285 56.71295  
## BL/BR:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## BLK:MornHigh 56.19925 0.5521696 3 55.63346 56.73671 55.93052 56.22759  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 56.51766 0.5106713 3 55.96624 56.97430 56.28933 56.61243  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.70882 0.2796004 3 56.38626 56.88206 56.62220 56.85814  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 61.44629 0.5251143 3 60.89455 61.93995 61.19946 61.50437  
## WT/BLK:MornLow 59.00000 1.0000000 3 58.00000 60.00000 58.50000 59.00000  
## WT/BR:MornHigh 58.47686 0.1483091 3 58.33332 58.62952 58.40052 58.46773  
## WT/BR:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.94163  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.48215  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.79337  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.87010  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 61.72216  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 58.54862  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.44629 a  
## WT/BLK:MornLow 59.00000 b  
## WT/BR:MornHigh 58.47686 bc  
## WHT:MornHigh 56.70882 cd  
## BL/BR:MornHigh 56.56534 cd  
## BRN:MornHigh 56.51766 cd  
## BLK:MornHigh 56.19925 d  
## WT/BR:MornLow 54.66667 de  
## WHT:MornLow 53.66667 ef  
## BLK:MornLow 53.00000 ef  
## BRN:MornLow 53.00000 ef  
## BL/BR:MornLow 52.33333 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT25 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 179.459 35.892 88.7486 1.123e-14 \*\*\*  
## THIregime 1 121.738 121.738 301.0174 4.388e-15 \*\*\*  
## Colour:THIregime 5 2.680 0.536 1.3254 0.2871   
## Residuals 24 9.706 0.404   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.4044216   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.33100 2.229697 6 52 56.68391  
## BLK 52.87524 2.169772 6 50 55.22439  
## BRN 54.35561 1.900535 6 52 56.29077  
## WHT 54.52157 1.813047 6 52 56.53872  
## WT/BLK 59.94789 1.840369 6 58 62.20130  
## WT/BR 55.00218 2.619013 6 52 57.91516  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.135236   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.94789 a  
## WT/BR 55.00218 b  
## WHT 54.52157 b  
## BRN 54.35561 b  
## BL/BR 54.33100 b  
## BLK 52.87524 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.4044216   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.01116 2.273187 18 54.28613 62.2013  
## MornLow 53.33333 2.473388 18 50.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4375062   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.01116 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4044216 24 55.17225 1.152647 1.872202  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.32867 0.3514345 3 55.98117 56.68391 56.15105 56.32093  
## BL/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 54.75049 0.4692042 3 54.28613 55.22439 54.51354 54.74095  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 56.04454 0.3730943 3 55.61528 56.29077 55.92143 56.22759  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 56.04313 0.5218737 3 55.49844 56.53872 55.79534 56.09224  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 61.56244 0.5600818 3 61.15590 62.20130 61.24302 61.33013  
## WT/BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BR:MornHigh 57.33770 0.6714341 3 56.60094 57.91516 57.04897 57.49700  
## WT/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.50242  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 54.98267  
## BLK:MornLow 51.50000  
## BRN:MornHigh 56.25918  
## BRN:MornLow 53.00000  
## WHT:MornHigh 56.31548  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 61.76572  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 57.70608  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.56244 a  
## WT/BLK:MornLow 58.33333 b  
## WT/BR:MornHigh 57.33770 bc  
## BL/BR:MornHigh 56.32867 cd  
## BRN:MornHigh 56.04454 cd  
## WHT:MornHigh 56.04313 cd  
## BLK:MornHigh 54.75049 de  
## WHT:MornLow 53.00000 ef  
## BRN:MornLow 52.66667 fg  
## WT/BR:MornLow 52.66667 fg  
## BL/BR:MornLow 52.33333 fg  
## BLK:MornLow 51.00000 g  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT26 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 111.603 22.321 19.3945 9.956e-08 \*\*\*  
## THIregime 1 112.651 112.651 97.8837 6.055e-10 \*\*\*  
## Colour:THIregime 5 2.660 0.532 0.4623 0.8003   
## Residuals 24 27.621 1.151   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.15087   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.73990 2.302601 6 52 56.97430  
## BLK 55.68975 1.701174 6 53 57.42233  
## BRN 55.11871 2.133377 6 52 57.33617  
## WHT 55.28561 2.537779 6 51 58.17344  
## WT/BLK 59.96967 1.836023 6 58 61.80928  
## WT/BR 56.14343 2.455185 6 53 58.64694  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.91506   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.96967 a  
## WT/BR 56.14343 b  
## BLK 55.68975 b  
## WHT 55.28561 b  
## BRN 55.11871 b  
## BL/BR 54.73990 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.15087   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.92680 1.872496 18 55.43524 61.80928  
## MornLow 54.38889 2.199970 18 51.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7380406   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.92680 a  
## MornLow 54.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.15087 24 56.15785 1.910305 3.158265  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.81313 0.1633873 3 56.64761 56.97430 56.73255 56.81749  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 57.04617 0.6180975 3 56.33280 57.42233 56.85809 57.38337  
## BLK:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## BRN:MornHigh 56.90410 0.6943731 3 56.10313 57.33617 56.68806 57.27299  
## BRN:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WHT:MornHigh 56.90455 1.3800571 3 55.43524 58.17344 56.27011 57.10498  
## WHT:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## WT/BLK:MornHigh 61.60600 0.2476832 3 61.33013 61.80928 61.50437 61.67860  
## WT/BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BR:MornHigh 58.28686 0.5357026 3 57.67123 58.64694 58.10682 58.54240  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.89590  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 57.40285  
## BLK:MornLow 55.00000  
## BRN:MornHigh 57.30458  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.63921  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 61.74394  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 58.59467  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.60600 a  
## WT/BLK:MornLow 58.33333 b  
## WT/BR:MornHigh 58.28686 b  
## BLK:MornHigh 57.04617 bc  
## WHT:MornHigh 56.90455 bc  
## BRN:MornHigh 56.90410 bc  
## BL/BR:MornHigh 56.81313 bcd  
## BLK:MornLow 54.33333 cde  
## WT/BR:MornLow 54.00000 cde  
## WHT:MornLow 53.66667 de  
## BRN:MornLow 53.33333 e  
## BL/BR:MornLow 52.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT27 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 185.421 37.084 33.6365 4.342e-10 \*\*\*  
## THIregime 1 103.560 103.560 93.9316 9.026e-10 \*\*\*  
## Colour:THIregime 5 8.117 1.623 1.4724 0.2356   
## Residuals 24 26.460 1.103   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.102502   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 53.96130 2.262289 6 51 56.29479  
## BLK 56.14559 1.735426 6 53 57.82058  
## BRN 53.75527 2.062175 6 51 56.12994  
## WHT 53.12543 2.138775 6 50 55.34086  
## WT/BLK 59.82447 1.853929 6 57 61.93995  
## WT/BR 54.36436 2.689550 6 51 57.18338  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.874385   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.82447 a  
## BLK 56.14559 b  
## WT/BR 54.36436 bc  
## BL/BR 53.96130 c  
## BRN 53.75527 c  
## WHT 53.12543 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.102502   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.89214 2.242611 18 54.12849 61.93995  
## MornLow 53.50000 2.812786 18 50.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.722365   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.89214 a  
## MornLow 53.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.102502 24 55.19607 1.902311 3.091185  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 55.92261 0.5047180 3 55.34812 56.29479 55.73652 56.12491  
## BL/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BLK:MornHigh 56.95785 1.1030082 3 55.71507 57.82058 56.52649 57.33792  
## BLK:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BRN:MornHigh 55.51055 0.6232545 3 54.88350 56.12994 55.20085 55.51821  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 54.91752 0.6839296 3 54.12849 55.34086 54.70585 55.28321  
## WHT:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WT/BLK:MornHigh 61.31561 0.7673358 3 60.45897 61.93995 61.00345 61.54793  
## WT/BLK:MornLow 58.33333 1.1547005 3 57.00000 59.00000 58.00000 59.00000  
## WT/BR:MornHigh 56.72871 0.5600376 3 56.10313 57.18338 56.50138 56.89963  
## WT/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 56.20985  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 57.57925  
## BLK:MornLow 56.50000  
## BRN:MornHigh 55.82407  
## BRN:MornLow 52.50000  
## WHT:MornHigh 55.31204  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 61.74394  
## WT/BLK:MornLow 59.00000  
## WT/BR:MornHigh 57.04150  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.31561 a  
## WT/BLK:MornLow 58.33333 ab  
## BLK:MornHigh 56.95785 bc  
## WT/BR:MornHigh 56.72871 bc  
## BL/BR:MornHigh 55.92261 bc  
## BRN:MornHigh 55.51055 bc  
## BLK:MornLow 55.33333 bc  
## WHT:MornHigh 54.91752 cd  
## BL/BR:MornLow 52.00000 de  
## BRN:MornLow 52.00000 de  
## WT/BR:MornLow 52.00000 de  
## WHT:MornLow 51.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT28 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 129.176 25.835 17.8118 2.190e-07 \*\*\*  
## THIregime 1 108.574 108.574 74.8551 7.674e-09 \*\*\*  
## Colour:THIregime 5 3.629 0.726 0.5004 0.7728   
## Residuals 24 34.811 1.450   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.450456   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.13578 2.441336 6 51 56.80007  
## BLK 55.24184 1.537997 6 53 57.02408  
## BRN 54.38062 2.172822 6 51 56.73037  
## WHT 54.28832 1.821425 6 52 56.08264  
## WT/BLK 59.57069 1.871335 6 57 61.54793  
## WT/BR 56.13596 3.088144 6 52 60.31958  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.149916   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.57069 a  
## WT/BR 56.13596 b  
## BLK 55.24184 b  
## BRN 54.38062 b  
## WHT 54.28832 b  
## BL/BR 54.13578 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.450456   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.36218 2.055672 18 55.18219 61.54793  
## MornLow 53.88889 2.373602 18 51.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8285511   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.36218 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.450456 24 55.62554 2.1651 3.545583  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.27156 0.4643681 3 55.92890 56.80007 56.00731 56.08571  
## BL/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BLK:MornHigh 56.48369 0.5357723 3 55.95266 57.02408 56.21349 56.47433  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.09458 0.8103106 3 55.18219 56.73037 55.77669 56.37118  
## BRN:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WHT:MornHigh 55.90997 0.2671854 3 55.60221 56.08264 55.82363 56.04506  
## WHT:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BLK:MornHigh 61.14138 0.5945885 3 60.45897 61.54793 60.93811 61.41725  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 58.27192 1.7761153 3 57.14853 60.31958 57.24810 57.34766  
## WT/BR:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.44289  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.74920  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.55078  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.06385  
## WHT:MornLow 53.00000  
## WT/BLK:MornHigh 61.48259  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 58.83362  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.14138 a  
## WT/BR:MornHigh 58.27192 ab  
## WT/BLK:MornLow 58.00000 ab  
## BLK:MornHigh 56.48369 bc  
## BL/BR:MornHigh 56.27156 bc  
## BRN:MornHigh 56.09458 bcd  
## WHT:MornHigh 55.90997 bcd  
## BLK:MornLow 54.00000 cde  
## WT/BR:MornLow 54.00000 cde  
## BRN:MornLow 52.66667 de  
## WHT:MornLow 52.66667 de  
## BL/BR:MornLow 52.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT29 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 156.472 31.294 19.5262 9.344e-08 \*\*\*  
## THIregime 1 111.134 111.134 69.3422 1.541e-08 \*\*\*  
## Colour:THIregime 5 3.252 0.650 0.4058 0.84   
## Residuals 24 38.464 1.603   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.602687   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.89495 2.191283 6 52 57.32277  
## BLK 54.71445 1.568560 6 53 56.45160  
## BRN 54.39977 2.081152 6 52 56.93409  
## WHT 54.28864 2.086225 6 51 56.56776  
## WT/BLK 60.24523 2.363626 6 57 63.50805  
## WT/BR 55.33230 3.006262 6 51 59.16964  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.259922   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.24523 a  
## WT/BR 55.33230 b  
## BL/BR 54.89495 b  
## BLK 54.71445 b  
## BRN 54.39977 b  
## WHT 54.28864 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.602687   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.40289 2.280488 18 55.00649 63.50805  
## MornLow 53.88889 2.541164 18 51.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8709463   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.40289 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.602687 24 55.64589 2.275052 3.727003  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 56.78990 0.4814395 3 56.38626 57.32277 56.52347 56.66068  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.09556 0.3085507 3 55.90617 56.45160 55.91754 55.92890  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.13287 0.6954849 3 55.68497 56.93409 55.73227 55.77956  
## BRN:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WHT:MornHigh 55.91061 0.8094045 3 55.00649 56.56776 55.58203 56.15758  
## WHT:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BLK:MornHigh 61.82379 1.4689775 3 60.80743 63.50805 60.98167 61.15590  
## WT/BLK:MornLow 58.66667 2.0816660 3 57.00000 61.00000 57.50000 58.00000  
## WT/BR:MornHigh 57.66460 1.5083738 3 56.15291 59.16964 56.91207 57.67123  
## WT/BR:MornLow 53.00000 2.0000000 3 51.00000 55.00000 52.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.99172  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.19025  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.35682  
## BRN:MornLow 53.00000  
## WHT:MornHigh 56.36267  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 62.33198  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 58.42044  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.82379 a  
## WT/BLK:MornLow 58.66667 ab  
## WT/BR:MornHigh 57.66460 b  
## BL/BR:MornHigh 56.78990 bc  
## BRN:MornHigh 56.13287 bcd  
## BLK:MornHigh 56.09556 bcd  
## WHT:MornHigh 55.91061 bcd  
## BLK:MornLow 53.33333 cd  
## BL/BR:MornLow 53.00000 d  
## WT/BR:MornLow 53.00000 d  
## BRN:MornLow 52.66667 d  
## WHT:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT30 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 175.048 35.010 45.2791 1.897e-11 \*\*\*  
## THIregime 1 124.533 124.533 161.0630 3.888e-12 \*\*\*  
## Colour:THIregime 5 3.767 0.753 0.9743 0.4533   
## Residuals 24 18.557 0.773   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7731963   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 53.39718 2.738321 6 50 56.33544  
## BLK 54.20309 1.875734 6 52 56.45160  
## BRN 54.94391 1.816415 6 53 56.97430  
## WHT 54.07592 1.953664 6 52 56.17488  
## WT/BLK 59.99871 1.875205 6 58 62.02707  
## WT/BR 56.20731 2.778847 6 53 59.90142  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.569691   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.99871 a  
## WT/BR 56.20731 b  
## BRN 54.94391 bc  
## BLK 54.20309 c  
## WHT 54.07592 c  
## BL/BR 53.39718 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7731963   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.33093 2.289281 18 54.98804 62.02707  
## MornLow 53.61111 2.523743 18 50.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6049395   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.33093 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7731963 24 55.47102 1.585181 2.588692  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 55.79435 0.7117806 3 54.98804 56.33544 55.52381 56.05958  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 55.73952 0.6171015 3 55.36075 56.45160 55.38347 55.40620  
## BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BRN:MornHigh 56.55448 0.3650113 3 56.31221 56.97430 56.34457 56.37693  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 55.81851 0.3143806 3 55.58043 56.17488 55.64033 55.70022  
## WHT:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BLK:MornHigh 61.66408 0.3704593 3 61.28658 62.02707 61.48259 61.67860  
## WT/BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BR:MornHigh 58.41463 1.2993337 3 57.49700 59.90142 57.67123 57.84547  
## WT/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.19751  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 55.92890  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.67561  
## BRN:MornLow 53.50000  
## WHT:MornHigh 55.93755  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 61.85283  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 58.87344  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.66408 a  
## WT/BR:MornHigh 58.41463 b  
## WT/BLK:MornLow 58.33333 bc  
## BRN:MornHigh 56.55448 bcd  
## WHT:MornHigh 55.81851 cde  
## BL/BR:MornHigh 55.79435 cde  
## BLK:MornHigh 55.73952 de  
## WT/BR:MornLow 54.00000 def  
## BRN:MornLow 53.33333 efg  
## BLK:MornLow 52.66667 fg  
## WHT:MornLow 52.33333 fg  
## BL/BR:MornLow 51.00000 g  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT31 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 147.876 29.575 46.8415 1.318e-11 \*\*\*  
## THIregime 1 103.249 103.249 163.5261 3.315e-12 \*\*\*  
## Colour:THIregime 5 3.370 0.674 1.0674 0.4028   
## Residuals 24 15.153 0.631   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6313908   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.86791 2.452463 6 52 57.49700  
## BLK 54.20346 2.210314 6 51 56.50138  
## BRN 55.65041 1.943060 6 53 57.77577  
## WHT 56.37690 1.671464 6 54 58.29642  
## WT/BLK 60.28848 1.594122 6 58 62.20130  
## WT/BR 57.77399 2.084186 6 55 60.11050  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.418464   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.28848 a  
## WT/BR 57.77399 b  
## WHT 56.37690 bc  
## BRN 55.65041 cd  
## BL/BR 54.86791 de  
## BLK 54.20346 e  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6313908   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.22038 1.938762 18 55.35868 62.2013  
## MornLow 54.83333 2.455486 18 51.00000 60.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5466586   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.22038 a  
## MornLow 54.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6313908 24 56.52686 1.405705 2.339293  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.06916 0.4082142 3 56.68391 57.49700 56.85524 57.02657  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.07359 0.6231085 3 55.35868 56.50138 55.85969 56.36070  
## BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## BRN:MornHigh 57.30081 0.5169030 3 56.75029 57.77577 57.06333 57.37638  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 57.75379 0.5449205 3 57.20661 58.29642 57.48248 57.75835  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 61.57696 0.6103350 3 60.98167 62.20130 61.26480 61.54793  
## WT/BLK:MornLow 59.00000 1.0000000 3 58.00000 60.00000 58.50000 59.00000  
## WT/BR:MornHigh 59.54798 0.6469034 3 58.84109 60.11050 59.26671 59.69234  
## WT/BR:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## Q75  
## BL/BR:MornHigh 57.26179  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.43104  
## BLK:MornLow 53.00000  
## BRN:MornHigh 57.57608  
## BRN:MornLow 54.50000  
## WHT:MornHigh 58.02739  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 61.87461  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 59.90142  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.57696 a  
## WT/BR:MornHigh 59.54798 ab  
## WT/BLK:MornLow 59.00000 bc  
## WHT:MornHigh 57.75379 bcd  
## BRN:MornHigh 57.30081 bcde  
## BL/BR:MornHigh 57.06916 cde  
## BLK:MornHigh 56.07359 def  
## WT/BR:MornLow 56.00000 def  
## WHT:MornLow 55.00000 efg  
## BRN:MornLow 54.00000 fgh  
## BL/BR:MornLow 52.66667 gh  
## BLK:MornLow 52.33333 h  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT32 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 113.527 22.705 6.7783 0.0004537 \*\*\*  
## THIregime 1 107.268 107.268 32.0227 7.928e-06 \*\*\*  
## Colour:THIregime 5 2.807 0.561 0.1676 0.9720976   
## Residuals 24 80.394 3.350   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.349751   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.77349 2.349754 6 53 58.28105  
## BLK 56.88691 1.895653 6 54 58.81620  
## BRN 57.24268 2.044592 6 54 59.48326  
## WHT 56.93278 3.953382 6 52 61.58636  
## WT/BLK 61.40556 1.715736 6 59 63.50805  
## WT/BR 57.44895 2.495107 6 54 60.21504  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.267198   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 61.40556 a  
## WT/BR 57.44895 b  
## BRN 57.24268 b  
## WHT 56.93278 b  
## BLK 56.88691 b  
## BL/BR 55.77349 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.349751   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.34123 1.984501 18 56.74199 63.50805  
## MornLow 55.88889 2.762967 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.259138   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.34123 a  
## MornLow 55.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.349751 24 57.61506 3.176656 5.388175  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.88031 0.3923153 3 57.49700 58.28105 57.67995 57.86289  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 58.44049 0.6399871 3 57.70153 58.81620 58.25264 58.80375  
## BLK:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BRN:MornHigh 58.81868 0.8161761 3 57.90769 59.48326 58.48640 59.06510  
## BRN:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WHT:MornHigh 58.53222 2.6580197 3 56.74199 61.58636 57.00515 57.26832  
## WHT:MornLow 55.33333 4.9328829 3 52.00000 61.00000 52.50000 53.00000  
## WT/BLK:MornHigh 62.81112 0.6577164 3 62.20130 63.50805 62.46265 62.72400  
## WT/BLK:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## WT/BR:MornHigh 59.56457 0.8961309 3 58.54240 60.21504 59.23933 59.93627  
## WT/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 58.07197  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 58.80997  
## BLK:MornLow 56.00000  
## BRN:MornHigh 59.27418  
## BRN:MornLow 56.50000  
## WHT:MornHigh 59.42734  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 63.11603  
## WT/BLK:MornLow 60.50000  
## WT/BR:MornHigh 60.07565  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.81112 a  
## WT/BLK:MornLow 60.00000 ab  
## WT/BR:MornHigh 59.56457 ab  
## BRN:MornHigh 58.81868 abc  
## WHT:MornHigh 58.53222 abc  
## BLK:MornHigh 58.44049 abc  
## BL/BR:MornHigh 57.88031 abc  
## BRN:MornLow 55.66667 bc  
## BLK:MornLow 55.33333 bc  
## WHT:MornLow 55.33333 bc  
## WT/BR:MornLow 55.33333 bc  
## BL/BR:MornLow 53.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT33 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 113.877 22.775 31.7353 7.900e-10 \*\*\*  
## THIregime 1 107.070 107.070 149.1919 8.655e-12 \*\*\*  
## Colour:THIregime 5 1.908 0.382 0.5318 0.75   
## Residuals 24 17.224 0.718   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7176677   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 57.24302 2.127962 6 55 59.37872  
## BLK 56.60934 1.905042 6 54 58.75623  
## BRN 56.05580 2.354351 6 53 58.54240  
## WHT 56.96908 2.098751 6 54 59.49556  
## WT/BLK 61.34022 1.641437 6 59 63.24670  
## WT/BR 58.79669 2.107391 6 56 61.15590  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.512275   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 61.34022 a  
## WT/BR 58.79669 b  
## BL/BR 57.24302 c  
## WHT 56.96908 c  
## BLK 56.60934 c  
## BRN 56.05580 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7176677   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.56027 1.735978 18 57.65608 63.2467  
## MornLow 56.11111 2.193276 18 53.00000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5828124   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.56027 a  
## MornLow 56.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7176677 24 57.83569 1.464758 2.494004  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.15270 0.2157510 3 58.94894 59.37872 59.03969 59.13044  
## BL/BR:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BLK:MornHigh 58.21868 0.5505018 3 57.65608 58.75623 57.94990 58.24371  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 58.11160 0.4224444 3 57.69804 58.54240 57.89620 58.09437  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 58.60482 0.8072115 3 57.92169 59.49556 58.15945 58.39721  
## WHT:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WT/BLK:MornHigh 62.68044 0.5892462 3 62.07063 63.24670 62.39731 62.72400  
## WT/BLK:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## WT/BR:MornHigh 60.59338 0.6469034 3 59.88649 61.15590 60.31211 60.73774  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 59.25458  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 58.49997  
## BLK:MornLow 55.50000  
## BRN:MornHigh 58.31839  
## BRN:MornLow 54.50000  
## WHT:MornHigh 58.94638  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 62.98535  
## WT/BLK:MornLow 60.50000  
## WT/BR:MornHigh 60.94682  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.68044 a  
## WT/BR:MornHigh 60.59338 ab  
## WT/BLK:MornLow 60.00000 b  
## BL/BR:MornHigh 59.15270 bc  
## WHT:MornHigh 58.60482 bc  
## BLK:MornHigh 58.21868 bc  
## BRN:MornHigh 58.11160 bc  
## WT/BR:MornLow 57.00000 cd  
## BL/BR:MornLow 55.33333 de  
## WHT:MornLow 55.33333 de  
## BLK:MornLow 55.00000 de  
## BRN:MornLow 54.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT34 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 89.296 17.859 14.4347 1.429e-06 \*\*\*  
## THIregime 1 87.777 87.777 70.9458 1.253e-08 \*\*\*  
## Colour:THIregime 5 5.354 1.071 0.8655 0.5185   
## Residuals 24 29.694 1.237   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.237242   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.01208 2.312495 6 52 57.55508  
## BLK 57.35087 2.061821 6 54 59.78692  
## BRN 58.09366 1.401828 6 56 59.76203  
## WHT 57.34280 1.636429 6 55 59.21884  
## WT/BLK 60.07826 2.166889 6 57 62.85468  
## WT/BR 56.15795 2.372298 6 54 58.64694  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.985622   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.07826 a  
## BRN 58.09366 ab  
## BLK 57.35087 b  
## WHT 57.34280 b  
## WT/BR 56.15795 bc  
## BL/BR 55.01208 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.237242   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.90076 1.519143 18 56.64761 62.85468  
## MornLow 55.77778 2.237529 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7652343   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.90076 a  
## MornLow 55.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.237242 24 57.33927 1.939882 3.274634  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.02415 0.4730228 3 56.64761 57.55508 56.75869 56.86976  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 58.70174 1.0738692 3 57.63955 59.78692 58.15916 58.67876  
## BLK:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## BRN:MornHigh 59.18732 0.5696776 3 58.62282 59.76203 58.89996 59.17711  
## BRN:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WHT:MornHigh 58.68560 0.5342329 3 58.15038 59.21884 58.41898 58.68759  
## WHT:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WT/BLK:MornHigh 61.48985 1.1947483 3 60.63320 62.85468 60.80743 60.98167  
## WT/BLK:MornLow 58.66667 2.0816660 3 57.00000 61.00000 57.50000 58.00000  
## WT/BR:MornHigh 58.31590 0.3150686 3 58.01970 58.64694 58.15038 58.28105  
## WT/BR:MornLow 54.00000 0.0000000 3 54.00000 54.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.21242  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 59.23284  
## BLK:MornLow 57.00000  
## BRN:MornHigh 59.46957  
## BRN:MornLow 57.50000  
## WHT:MornHigh 58.95321  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 61.91817  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 58.46400  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.48985 a  
## BRN:MornHigh 59.18732 ab  
## BLK:MornHigh 58.70174 ab  
## WHT:MornHigh 58.68560 ab  
## WT/BLK:MornLow 58.66667 ab  
## WT/BR:MornHigh 58.31590 ab  
## BL/BR:MornHigh 57.02415 bc  
## BRN:MornLow 57.00000 bc  
## BLK:MornLow 56.00000 bcd  
## WHT:MornLow 56.00000 bcd  
## WT/BR:MornLow 54.00000 cd  
## BL/BR:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT35 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 101.060 20.212 16.0295 5.682e-07 \*\*\*  
## THIregime 1 94.557 94.557 74.9898 7.548e-09 \*\*\*  
## Colour:THIregime 5 7.308 1.462 1.1591 0.3577   
## Residuals 24 30.262 1.261   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.260934   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.67487 2.819922 6 51 58.21571  
## BLK 56.42729 2.224984 6 53 58.94065  
## BRN 58.93664 1.760277 6 56 60.91465  
## WHT 58.19632 1.495141 6 56 59.93627  
## WT/BLK 59.73766 2.080374 6 57 62.46265  
## WT/BR 58.08460 1.964938 6 56 60.19762  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.004543   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.73766 a  
## BRN 58.93664 a  
## WHT 58.19632 ab  
## WT/BR 58.08460 ab  
## BLK 56.42729 bc  
## BL/BR 54.67487 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.260934   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.29691 1.603051 18 56.27737 62.46265  
## MornLow 56.05556 2.363254 18 51.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7725262   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.29691 a  
## MornLow 56.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.260934 24 57.67623 1.946925 3.305838  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.01641 1.0479408 3 56.27737 58.21571 56.41675 56.55614  
## BL/BR:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BLK:MornHigh 58.18792 0.8623547 3 57.24701 58.94065 57.81155 58.37609  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 59.87327 1.0557333 3 58.80375 60.91465 59.35259 59.90142  
## BRN:MornLow 58.00000 2.0000000 3 56.00000 60.00000 57.00000 58.00000  
## WHT:MornHigh 59.39264 0.5431985 3 58.84987 59.93627 59.12083 59.39179  
## WHT:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BLK:MornHigh 61.47533 0.8726174 3 60.80743 62.46265 60.98167 61.15590  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 59.83588 0.3439062 3 59.51313 60.19762 59.65500 59.79688  
## WT/BR:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.38593  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 58.65837  
## BLK:MornLow 55.50000  
## BRN:MornHigh 60.40804  
## BRN:MornLow 59.00000  
## WHT:MornHigh 59.66403  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 61.80928  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 59.99725  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.47533 a  
## BRN:MornHigh 59.87327 ab  
## WT/BR:MornHigh 59.83588 ab  
## WHT:MornHigh 59.39264 abc  
## BLK:MornHigh 58.18792 abc  
## BRN:MornLow 58.00000 bc  
## WT/BLK:MornLow 58.00000 bc  
## BL/BR:MornHigh 57.01641 bcd  
## WHT:MornLow 57.00000 bcd  
## WT/BR:MornLow 56.33333 cd  
## BLK:MornLow 54.66667 de  
## BL/BR:MornLow 52.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT36 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 57.560 11.512 7.1155 0.00033 \*\*\*  
## THIregime 1 67.757 67.757 41.8799 1.082e-06 \*\*\*  
## Colour:THIregime 5 5.032 1.006 0.6220 0.68440   
## Residuals 24 38.829 1.618   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.617877   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.97639 2.103194 6 53 58.43786  
## BLK 55.81628 2.443540 6 52 58.65603  
## BRN 57.03034 1.551417 6 55 58.58261  
## WHT 59.61931 2.041345 6 56 61.41725  
## WT/BLK 57.73552 1.589439 6 56 59.45713  
## WT/BR 57.38694 1.681913 6 55 59.32645  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.270607   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 59.61931 a  
## WT/BLK 57.73552 ab  
## WT/BR 57.38694 ab  
## BRN 57.03034 b  
## BL/BR 55.97639 b  
## BLK 55.81628 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.617877   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.63270 1.179297 18 56.62583 61.41725  
## MornLow 55.88889 2.138963 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.875064   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.63270 a  
## MornLow 55.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.617877 24 57.26079 2.221342 3.744624  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.61945 0.7914047 3 56.85814 58.43786 57.21024 57.56234  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 57.63255 1.0152023 3 56.62583 58.65603 57.12081 57.61580  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 58.39401 0.3241690 3 58.01970 58.58261 58.29972 58.57974  
## BRN:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WHT:MornHigh 60.23861 1.5056905 3 58.54240 61.41725 59.64929 60.75619  
## WHT:MornLow 59.00000 2.6457513 3 56.00000 61.00000 58.00000 60.00000  
## WT/BLK:MornHigh 59.13770 0.2900257 3 58.89087 59.45713 58.97798 59.06510  
## WT/BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WT/BR:MornHigh 58.77388 0.5488731 3 58.22878 59.32645 58.49760 58.76641  
## WT/BR:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## Q75  
## BL/BR:MornHigh 58.00010  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 58.13591  
## BLK:MornLow 55.00000  
## BRN:MornHigh 58.58117  
## BRN:MornLow 56.00000  
## WHT:MornHigh 61.08672  
## WHT:MornLow 60.50000  
## WT/BLK:MornHigh 59.26111  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 59.04643  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 60.23861 a  
## WT/BLK:MornHigh 59.13770 ab  
## WHT:MornLow 59.00000 ab  
## WT/BR:MornHigh 58.77388 ab  
## BRN:MornHigh 58.39401 ab  
## BLK:MornHigh 57.63255 abc  
## BL/BR:MornHigh 57.61945 abc  
## WT/BLK:MornLow 56.33333 bc  
## WT/BR:MornLow 56.00000 bc  
## BRN:MornLow 55.66667 bc  
## BL/BR:MornLow 54.33333 c  
## BLK:MornLow 54.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT37 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 90.608 18.122 17.6742 2.351e-07 \*\*\*  
## THIregime 1 105.027 105.027 102.4338 3.885e-10 \*\*\*  
## Colour:THIregime 5 0.716 0.143 0.1396 0.9813   
## Residuals 24 24.608 1.025   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.025313   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.37310 1.916847 6 56 60.37185  
## BLK 55.61855 2.178464 6 53 57.82058  
## BRN 57.63961 1.932369 6 55 59.76203  
## WHT 57.84890 2.236107 6 54 60.30651  
## WT/BLK 60.95607 2.112967 6 58 63.59517  
## WT/BR 58.81204 2.109768 6 56 61.00656  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.807579   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.95607 a  
## WT/BR 58.81204 b  
## BL/BR 58.37310 b  
## WHT 57.84890 b  
## BRN 57.63961 b  
## BLK 55.61855 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.025313   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.91608 1.670347 18 57.21189 63.59517  
## MornLow 56.50000 2.007339 18 53.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6966189   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.91608 a  
## MornLow 56.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.025313 24 58.20804 1.739583 2.981011  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.07953 0.3416402 3 59.70396 60.37185 59.93336 60.16277  
## BL/BR:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## BLK:MornHigh 57.57043 0.3184881 3 57.21189 57.82058 57.44535 57.67881  
## BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BRN:MornHigh 59.27922 0.5197587 3 58.72908 59.76203 59.03782 59.34655  
## BRN:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WHT:MornHigh 59.36446 1.1297455 3 58.11194 60.30651 58.89343 59.67492  
## WHT:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## WT/BLK:MornHigh 62.57881 0.9635487 3 61.67860 63.59517 62.07063 62.46265  
## WT/BLK:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## WT/BR:MornHigh 60.62407 0.5266576 3 60.02338 61.00656 60.43283 60.84228  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 60.26731  
## BL/BR:MornLow 57.00000  
## BLK:MornHigh 57.74969  
## BLK:MornLow 54.00000  
## BRN:MornHigh 59.55429  
## BRN:MornLow 56.50000  
## WHT:MornHigh 59.99071  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 63.02891  
## WT/BLK:MornLow 60.00000  
## WT/BR:MornHigh 60.92442  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.57881 a  
## WT/BR:MornHigh 60.62407 ab  
## BL/BR:MornHigh 60.07953 abc  
## WHT:MornHigh 59.36446 bcd  
## WT/BLK:MornLow 59.33333 bcd  
## BRN:MornHigh 59.27922 bcde  
## BLK:MornHigh 57.57043 cdef  
## WT/BR:MornLow 57.00000 def  
## BL/BR:MornLow 56.66667 def  
## WHT:MornLow 56.33333 efg  
## BRN:MornLow 56.00000 fg  
## BLK:MornLow 53.66667 g  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT38 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 145.766 29.153 9.3916 4.639e-05 \*\*\*  
## THIregime 1 115.956 115.956 37.3547 2.590e-06 \*\*\*  
## Colour:THIregime 5 4.126 0.825 0.2658 0.9273   
## Residuals 24 74.501 3.104   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.104194   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.89061 2.476917 6 53 58.54240  
## BLK 55.01185 2.521046 6 52 58.01970  
## BRN 57.04059 2.988516 6 53 60.79403  
## WHT 57.70897 2.352457 6 54 60.51021  
## WT/BLK 61.36200 2.468115 6 57 64.03075  
## WT/BR 58.08761 2.422589 6 55 61.05136  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.145166   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 61.36200 a  
## WT/BR 58.08761 b  
## WHT 57.70897 b  
## BRN 57.04059 b  
## BL/BR 55.89061 b  
## BLK 55.01185 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.104194   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.31165 2.125223 18 56.47536 64.03075  
## MornLow 55.72222 2.946694 18 52.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.212109   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.31165 a  
## MornLow 55.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.104194 24 57.51694 3.063224 5.186924  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.11456 0.4082142 3 57.72931 58.54240 57.90064 58.07197  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 57.02370 0.8640261 3 56.47536 58.01970 56.52571 56.57605  
## BLK:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## BRN:MornHigh 58.74784 1.8029368 3 57.39246 60.79403 57.72475 58.05704  
## BRN:MornLow 55.33333 3.2145503 3 53.00000 59.00000 53.50000 54.00000  
## WHT:MornHigh 59.08460 1.3508134 3 57.82369 60.51021 58.37180 58.91991  
## WHT:MornLow 56.33333 2.5166115 3 54.00000 59.00000 55.00000 56.00000  
## WT/BLK:MornHigh 62.72400 1.6321302 3 60.89455 64.03075 62.07063 63.24670  
## WT/BLK:MornLow 60.00000 2.6457513 3 57.00000 62.00000 59.00000 61.00000  
## WT/BR:MornHigh 60.17522 0.7733211 3 59.58780 61.05136 59.73714 59.88649  
## WT/BR:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## Q75  
## BL/BR:MornHigh 58.30719  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 57.29788  
## BLK:MornLow 53.50000  
## BRN:MornHigh 59.42553  
## BRN:MornLow 56.50000  
## WHT:MornHigh 59.71506  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 63.63873  
## WT/BLK:MornLow 61.50000  
## WT/BR:MornHigh 60.46892  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.72400 a  
## WT/BR:MornHigh 60.17522 ab  
## WT/BLK:MornLow 60.00000 ab  
## WHT:MornHigh 59.08460 ab  
## BRN:MornHigh 58.74784 abc  
## BL/BR:MornHigh 58.11456 abcd  
## BLK:MornHigh 57.02370 bcd  
## WHT:MornLow 56.33333 bcd  
## WT/BR:MornLow 56.00000 bcd  
## BRN:MornLow 55.33333 bcd  
## BL/BR:MornLow 53.66667 cd  
## BLK:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT39 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 132.082 26.416 31.5441 8.405e-10 \*\*\*  
## THIregime 1 90.998 90.998 108.6623 2.171e-10 \*\*\*  
## Colour:THIregime 5 4.611 0.922 1.1012 0.3856   
## Residuals 24 20.099 0.837   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8374425   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.14319 2.467296 6 53 58.83279  
## BLK 56.34006 2.015934 6 54 58.76641  
## BRN 58.81978 1.675312 6 56 60.70289  
## WHT 57.26396 1.795977 6 55 59.03435  
## WT/BLK 61.80423 1.649455 6 59 63.50805  
## WT/BR 58.50142 2.058435 6 56 60.73774  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.633604   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 61.80423 a  
## BRN 58.81978 b  
## WT/BR 58.50142 b  
## WHT 57.26396 bc  
## BLK 56.34006 c  
## BL/BR 56.14319 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8374425   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.73533 1.787980 18 57.54927 63.50805  
## MornLow 56.55556 2.454821 18 53.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6295708   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.73533 a  
## MornLow 56.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8374425 24 58.14544 1.573845 2.694095  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.28637 0.6626664 3 57.54927 58.83279 58.01317 58.47706  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 58.01345 0.6526156 3 57.61063 58.76641 57.63697 57.66331  
## BLK:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## BRN:MornHigh 59.97290 0.8332487 3 59.06510 60.70289 59.60790 60.15071  
## BRN:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## WHT:MornHigh 58.86126 0.2764774 3 58.54240 59.03435 58.77471 59.00702  
## WHT:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WT/BLK:MornHigh 62.94179 0.7656856 3 62.07063 63.50805 62.65866 63.24670  
## WT/BLK:MornLow 60.66667 1.5275252 3 59.00000 62.00000 60.00000 61.00000  
## WT/BR:MornHigh 60.33617 0.4007392 3 59.93627 60.73774 60.13539 60.33451  
## WT/BR:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 58.65493  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 58.21486  
## BLK:MornLow 55.00000  
## BRN:MornHigh 60.42680  
## BRN:MornLow 58.50000  
## WHT:MornHigh 59.02069  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 63.37738  
## WT/BLK:MornLow 61.50000  
## WT/BR:MornHigh 60.53613  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.94179 a  
## WT/BLK:MornLow 60.66667 ab  
## WT/BR:MornHigh 60.33617 abc  
## BRN:MornHigh 59.97290 bc  
## WHT:MornHigh 58.86126 bcd  
## BL/BR:MornHigh 58.28637 bcde  
## BLK:MornHigh 58.01345 bcde  
## BRN:MornLow 57.66667 cde  
## WT/BR:MornLow 56.66667 def  
## WHT:MornLow 55.66667 ef  
## BLK:MornLow 54.66667 f  
## BL/BR:MornLow 54.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT40 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 39.509 7.902 2.2729 0.07951 .   
## THIregime 1 77.627 77.627 22.3284 8.35e-05 \*\*\*  
## Colour:THIregime 5 1.365 0.273 0.0785 0.99496   
## Residuals 24 83.438 3.477   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.476589   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.62939 2.799223 6 52 59.79688  
## BLK 56.31968 2.750350 6 53 59.75411  
## BRN 56.56646 2.120312 6 54 59.21444  
## WHT 58.11984 2.256685 6 54 60.27384  
## WT/BLK 59.29482 1.597109 6 57 61.15590  
## WT/BR 57.54707 2.224116 6 54 60.19762  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.328479   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.29482 a  
## WHT 58.11984 a  
## WT/BR 57.54707 a  
## BL/BR 56.62939 a  
## BRN 56.56646 a  
## BLK 56.31968 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.476589   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.88131 1.400998 18 56.56776 61.1559  
## MornLow 55.94444 2.312936 18 52.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.282755   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.88131 a  
## MornLow 55.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.476589 24 57.41288 3.247636 5.489239  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.25879 1.6199857 3 56.56776 59.79688 57.48974 58.41173  
## BL/BR:MornLow 55.00000 3.0000000 3 52.00000 58.00000 53.50000 55.00000  
## BLK:MornHigh 57.97269 1.5428492 3 57.06520 59.75411 57.08198 57.09875  
## BLK:MornLow 54.66667 2.8867513 3 53.00000 58.00000 53.00000 53.00000  
## BRN:MornHigh 58.13292 0.9369726 3 57.56669 59.21444 57.59216 57.61762  
## BRN:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## WHT:MornHigh 59.23969 1.4033562 3 57.64219 60.27384 58.72261 59.80303  
## WHT:MornLow 57.00000 2.6457513 3 54.00000 59.00000 56.00000 58.00000  
## WT/BLK:MornHigh 60.58964 0.5892462 3 59.97983 61.15590 60.30651 60.63320  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 59.09414 1.0892487 3 58.01970 60.19762 58.54240 59.06510  
## WT/BR:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 59.10430  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 58.42643  
## BLK:MornLow 55.50000  
## BRN:MornHigh 58.41603  
## BRN:MornLow 55.50000  
## WHT:MornHigh 60.03844  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 60.89455  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 59.63136  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.58964 a  
## WHT:MornHigh 59.23969 ab  
## WT/BR:MornHigh 59.09414 ab  
## BL/BR:MornHigh 58.25879 ab  
## BRN:MornHigh 58.13292 ab  
## WT/BLK:MornLow 58.00000 ab  
## BLK:MornHigh 57.97269 ab  
## WHT:MornLow 57.00000 ab  
## WT/BR:MornLow 56.00000 ab  
## BL/BR:MornLow 55.00000 b  
## BRN:MornLow 55.00000 b  
## BLK:MornLow 54.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT41 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 90.193 18.039 11.1929 1.191e-05 \*\*\*  
## THIregime 1 89.833 89.833 55.7411 1.048e-07 \*\*\*  
## Colour:THIregime 5 2.867 0.573 0.3557 0.8734   
## Residuals 24 38.679 1.612   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.611611   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.43399 2.530053 6 53 59.27418  
## BLK 58.29011 1.584732 6 56 60.11050  
## BRN 57.24268 2.044592 6 54 59.48326  
## WHT 57.98905 1.507047 6 56 59.49556  
## WT/BLK 61.42734 2.532340 6 58 64.81480  
## WT/BR 59.09486 2.121042 6 56 61.36498  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.266206   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 61.42734 a  
## WT/BR 59.09486 b  
## BLK 58.29011 bc  
## WHT 57.98905 bc  
## BRN 57.24268 bc  
## BL/BR 56.43399 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.611611   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.99268 1.701867 18 57.90769 64.8148  
## MornLow 56.83333 2.202939 18 53.00000 63.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8733678   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.99268 a  
## MornLow 56.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.611611 24 58.413 2.173305 3.737365  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.53466 0.6566985 3 58.01970 59.27418 58.16489 58.31009  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 59.58022 0.5341033 3 59.04237 60.11050 59.31509 59.58780  
## BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BRN:MornHigh 58.81868 0.8161761 3 57.90769 59.48326 58.48640 59.06510  
## BRN:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WHT:MornHigh 59.31143 0.3139370 3 58.94894 59.49556 59.21937 59.48979  
## WHT:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WT/BLK:MornHigh 62.85468 1.7087974 3 61.67860 64.81480 61.87461 62.07063  
## WT/BLK:MornLow 60.00000 2.6457513 3 58.00000 63.00000 58.50000 59.00000  
## WT/BR:MornHigh 60.85638 0.7776843 3 59.96116 61.36498 60.60209 61.24302  
## WT/BR:MornLow 57.33333 1.1547005 3 56.00000 58.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 58.79213  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.84915  
## BLK:MornLow 57.50000  
## BRN:MornHigh 59.27418  
## BRN:MornLow 56.50000  
## WHT:MornHigh 59.49268  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 63.44271  
## WT/BLK:MornLow 61.00000  
## WT/BR:MornHigh 61.30400  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.85468 a  
## WT/BR:MornHigh 60.85638 ab  
## WT/BLK:MornLow 60.00000 abc  
## BLK:MornHigh 59.58022 abc  
## WHT:MornHigh 59.31143 abcd  
## BRN:MornHigh 58.81868 bcd  
## BL/BR:MornHigh 58.53466 bcd  
## WT/BR:MornLow 57.33333 bcde  
## BLK:MornLow 57.00000 cde  
## WHT:MornLow 56.66667 cde  
## BRN:MornLow 55.66667 de  
## BL/BR:MornLow 54.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT42 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 40.482 8.096 7.2791 0.0002835 \*\*\*  
## THIregime 1 78.260 78.260 70.3599 1.351e-08 \*\*\*  
## Colour:THIregime 5 2.259 0.452 0.4062 0.8396685   
## Residuals 24 26.695 1.112   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.112277   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.42643 2.230278 6 53 59.06510  
## BLK 55.53130 2.323234 6 52 58.11474  
## BRN 57.59991 1.448159 6 56 59.22593  
## WHT 57.87090 1.714503 6 55 59.80303  
## WT/BLK 58.64932 1.839263 6 56 60.98167  
## WT/BR 58.10193 1.628365 6 56 59.79688  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.882676   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.64932 a  
## WT/BR 58.10193 ab  
## WHT 57.87090 ab  
## BRN 57.59991 ab  
## BL/BR 56.42643 bc  
## BLK 55.53130 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.112277   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.83771 1.075341 18 56.4516 60.98167  
## MornLow 55.88889 1.711171 18 52.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7255604   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.83771 a  
## MornLow 55.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.112277 24 57.3633 1.838537 3.10486  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.18619 0.9009609 3 57.26469 59.06510 57.74673 58.22878  
## BL/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BLK:MornHigh 57.39593 0.8541961 3 56.45160 58.11474 57.03653 57.62145  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 58.86649 0.3113274 3 58.68179 59.22593 58.68676 58.69174  
## BRN:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WHT:MornHigh 59.07514 0.8154294 3 58.19393 59.80303 58.71119 59.22844  
## WHT:MornLow 56.66667 1.5275252 3 55.00000 58.00000 56.00000 57.00000  
## WT/BLK:MornHigh 59.96531 0.9635487 3 59.06510 60.98167 59.45713 59.84915  
## WT/BLK:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## WT/BR:MornHigh 59.53719 0.3401020 3 59.15222 59.79688 59.40734 59.66247  
## WT/BR:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 58.64694  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.86809  
## BLK:MornLow 54.50000  
## BRN:MornHigh 58.95884  
## BRN:MornLow 56.50000  
## WHT:MornHigh 59.51574  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 60.41541  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 59.72968  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.96531 a  
## WT/BR:MornHigh 59.53719 ab  
## WHT:MornHigh 59.07514 abc  
## BRN:MornHigh 58.86649 abc  
## BL/BR:MornHigh 58.18619 abc  
## BLK:MornHigh 57.39593 abcd  
## WT/BLK:MornLow 57.33333 abcd  
## WHT:MornLow 56.66667 bcde  
## WT/BR:MornLow 56.66667 bcde  
## BRN:MornLow 56.33333 cde  
## BL/BR:MornLow 54.66667 de  
## BLK:MornLow 53.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT43 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 107.977 21.595 6.3030 0.0007208 \*\*\*  
## THIregime 1 90.139 90.139 26.3084 2.998e-05 \*\*\*  
## Colour:THIregime 5 3.725 0.745 0.2174 0.9515964   
## Residuals 24 82.230 3.426   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.426234   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.10447 3.148976 6 51 59.64007  
## BLK 55.70147 2.233867 6 53 58.42877  
## BRN 56.07456 3.565435 6 51 60.43216  
## WHT 58.06821 1.370930 6 56 59.65314  
## WT/BLK 60.06374 1.591358 6 58 61.67860  
## WT/BR 59.48171 1.785579 6 57 61.57406  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.304287   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.06374 a  
## WT/BR 59.48171 a  
## WHT 58.06821 ab  
## BL/BR 56.10447 b  
## BRN 56.07456 b  
## BLK 55.70147 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.426234   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.16472 1.908676 18 56.04091 61.6786  
## MornLow 56.00000 2.786522 18 51.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.273432   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.16472 a  
## MornLow 56.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.426234 24 57.58236 3.214542 5.449341  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.20894 1.5823266 3 56.50968 59.64007 57.49337 58.47706  
## BL/BR:MornLow 54.00000 3.0000000 3 51.00000 57.00000 52.50000 54.00000  
## BLK:MornHigh 57.40293 0.8890721 3 56.85550 58.42877 56.89001 56.92452  
## BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BRN:MornHigh 57.81579 2.3134082 3 56.04091 60.43216 56.50760 56.97430  
## BRN:MornLow 54.33333 4.1633320 3 51.00000 59.00000 52.00000 53.00000  
## WHT:MornHigh 59.13642 0.5248001 3 58.60389 59.65314 58.87806 59.15222  
## WHT:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BLK:MornHigh 61.46081 0.3772262 3 61.02523 61.67860 61.35191 61.67860  
## WT/BLK:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## WT/BR:MornHigh 60.96341 0.6199744 3 60.33451 61.57406 60.65809 60.98167  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 59.05857  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.67664  
## BLK:MornLow 54.50000  
## BRN:MornHigh 58.70323  
## BRN:MornLow 56.00000  
## WHT:MornHigh 59.40268  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 61.67860  
## WT/BLK:MornLow 59.00000  
## WT/BR:MornHigh 61.27786  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.46081 a  
## WT/BR:MornHigh 60.96341 a  
## WHT:MornHigh 59.13642 ab  
## WT/BLK:MornLow 58.66667 ab  
## BL/BR:MornHigh 58.20894 ab  
## WT/BR:MornLow 58.00000 ab  
## BRN:MornHigh 57.81579 ab  
## BLK:MornHigh 57.40293 ab  
## WHT:MornLow 57.00000 ab  
## BRN:MornLow 54.33333 b  
## BL/BR:MornLow 54.00000 b  
## BLK:MornLow 54.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT44 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 47.863 9.573 2.8293 0.03802 \*   
## THIregime 1 73.820 73.820 21.8190 9.584e-05 \*\*\*  
## Colour:THIregime 5 2.506 0.501 0.1481 0.97867   
## Residuals 24 81.200 3.383   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.383318   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 57.25287 2.056116 6 54 59.48326  
## BLK 56.50264 2.187804 6 53 59.08999  
## BRN 55.51750 3.560164 6 50 59.82905  
## WHT 57.23522 1.972857 6 54 59.55705  
## WT/BLK 57.40188 2.128863 6 54 59.84915  
## WT/BR 59.34844 1.179861 6 58 60.63320  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.283527   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 59.34844 a  
## WT/BLK 57.40188 ab  
## BL/BR 57.25287 ab  
## WHT 57.23522 ab  
## BLK 56.50264 ab  
## BRN 55.51750 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.383318   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.64174 1.423689 18 55.4062 60.6332  
## MornLow 55.77778 2.390067 18 50.0000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.265431   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.64174 a  
## MornLow 55.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.383318 24 57.20976 3.21515 5.415105  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.83908 0.8291815 3 57.90354 59.48326 58.51699 59.13044  
## BL/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BLK:MornHigh 58.00527 1.0920059 3 56.90612 59.08999 57.46291 58.01970  
## BLK:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## BRN:MornHigh 57.36834 2.2531811 3 55.40620 59.82905 56.13798 56.86976  
## BRN:MornLow 53.66667 4.0414519 3 50.00000 58.00000 51.50000 53.00000  
## WHT:MornHigh 58.47044 1.0738218 3 57.40988 59.55705 57.92714 58.44439  
## WHT:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WT/BLK:MornHigh 58.80375 1.1976562 3 57.49700 59.84915 58.28105 59.06510  
## WT/BLK:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WT/BR:MornHigh 60.36355 0.2355846 3 60.19762 60.63320 60.22873 60.25984  
## WT/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## Q75  
## BL/BR:MornHigh 59.30685  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 58.55485  
## BLK:MornLow 56.00000  
## BRN:MornHigh 58.34940  
## BRN:MornLow 55.50000  
## WHT:MornHigh 59.00072  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 59.45713  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 60.44652  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 60.36355 a  
## BL/BR:MornHigh 58.83908 ab  
## WT/BLK:MornHigh 58.80375 ab  
## WHT:MornHigh 58.47044 ab  
## WT/BR:MornLow 58.33333 ab  
## BLK:MornHigh 58.00527 ab  
## BRN:MornHigh 57.36834 ab  
## WHT:MornLow 56.00000 ab  
## WT/BLK:MornLow 56.00000 ab  
## BL/BR:MornLow 55.66667 ab  
## BLK:MornLow 55.00000 ab  
## BRN:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT45 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 61.750 12.350 7.9577 0.000154 \*\*\*  
## THIregime 1 83.916 83.916 54.0712 1.357e-07 \*\*\*  
## Colour:THIregime 5 3.396 0.679 0.4376 0.817822   
## Residuals 24 37.247 1.552   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.551951   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.05534 2.374518 6 53 58.65856  
## BLK 56.11764 2.233710 6 53 58.74693  
## BRN 57.94783 2.290822 6 54 60.51258  
## WHT 58.19632 1.495141 6 56 59.93627  
## WT/BLK 59.20801 2.058533 6 56 61.67860  
## WT/BR 59.30208 1.600940 6 57 61.15590  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.223864   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 59.30208 a  
## WT/BLK 59.20801 a  
## WHT 58.19632 ab  
## BRN 57.94783 ab  
## BLK 56.11764 b  
## BL/BR 56.05534 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.551951   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.33130 1.345613 18 57.2481 61.6786  
## MornLow 56.27778 2.052418 18 53.0000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8570498   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.33130 a  
## MornLow 56.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.551951 24 57.80454 2.155148 3.667537  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.11069 0.6500129 3 57.39246 58.65856 57.83676 58.28105  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 57.90195 0.7674801 3 57.24810 58.74693 57.47946 57.71083  
## BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BRN:MornHigh 59.22899 1.3646200 3 57.79569 60.51258 58.58720 59.37872  
## BRN:MornLow 56.66667 2.5166115 3 54.00000 59.00000 55.50000 57.00000  
## WHT:MornHigh 59.39264 0.5431985 3 58.84987 59.93627 59.12083 59.39179  
## WHT:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BLK:MornHigh 60.74936 1.0645833 3 59.58780 61.67860 60.28473 60.98167  
## WT/BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## WT/BR:MornHigh 60.60416 0.5668165 3 60.02338 61.15590 60.32829 60.63320  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 58.46980  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 58.22888  
## BLK:MornLow 55.00000  
## BRN:MornHigh 59.94565  
## BRN:MornLow 58.00000  
## WHT:MornHigh 59.66403  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 61.33013  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.89455  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.74936 a  
## WT/BR:MornHigh 60.60416 ab  
## WHT:MornHigh 59.39264 abc  
## BRN:MornHigh 59.22899 abc  
## BL/BR:MornHigh 58.11069 abc  
## WT/BR:MornLow 58.00000 abcd  
## BLK:MornHigh 57.90195 abcd  
## WT/BLK:MornLow 57.66667 abcde  
## WHT:MornLow 57.00000 bcde  
## BRN:MornLow 56.66667 cde  
## BLK:MornLow 54.33333 de  
## BL/BR:MornLow 54.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT46 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 42.981 8.596 5.8438 0.001146 \*\*   
## THIregime 1 70.697 70.697 48.0607 3.609e-07 \*\*\*  
## Colour:THIregime 5 2.571 0.514 0.3496 0.877418   
## Residuals 24 35.304 1.471   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.470987   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.58595 2.560175 6 52 58.64694  
## BLK 57.73461 1.606751 6 55 59.54235  
## BRN 56.46036 1.750291 6 54 58.43786  
## WHT 56.95034 1.783396 6 54 58.94211  
## WT/BLK 58.89584 1.771509 6 56 61.02523  
## WT/BR 58.11437 1.787710 6 56 60.25984  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.165078   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.89584 a  
## WT/BR 58.11437 ab  
## BLK 57.73461 abc  
## WHT 56.95034 abc  
## BRN 56.46036 bc  
## BL/BR 55.58595 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.470987   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.69160 1.165130 18 56.77829 61.02523  
## MornLow 55.88889 1.843554 18 52.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8343946   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.69160 a  
## MornLow 55.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.470987 24 57.29024 2.117014 3.570589  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 57.50523 1.0009957 3 56.77829 58.64694 56.93437 57.09046  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 58.80255 0.8362294 3 57.89525 59.54235 58.43266 58.97006  
## BLK:MornLow 56.66667 1.5275252 3 55.00000 58.00000 56.00000 57.00000  
## BRN:MornHigh 57.92071 0.5107622 3 57.41658 58.43786 57.66214 57.90769  
## BRN:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WHT:MornHigh 58.23400 0.8212792 3 57.33366 58.94211 57.87995 58.42624  
## WHT:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BLK:MornHigh 60.12502 0.9897747 3 59.06510 61.02523 59.67492 60.28473  
## WT/BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## WT/BR:MornHigh 59.56208 0.6073497 3 59.15222 60.25984 59.21320 59.27418  
## WT/BR:MornLow 56.66667 1.1547005 3 56.00000 58.00000 56.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.86870  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.25621  
## BLK:MornLow 57.50000  
## BRN:MornHigh 58.17278  
## BRN:MornLow 55.50000  
## WHT:MornHigh 58.68418  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 60.65498  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 59.76701  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.12502 a  
## WT/BR:MornHigh 59.56208 a  
## BLK:MornHigh 58.80255 ab  
## WHT:MornHigh 58.23400 abc  
## BRN:MornHigh 57.92071 abc  
## WT/BLK:MornLow 57.66667 abc  
## BL/BR:MornHigh 57.50523 abc  
## BLK:MornLow 56.66667 abcd  
## WT/BR:MornLow 56.66667 abcd  
## WHT:MornLow 55.66667 bcd  
## BRN:MornLow 55.00000 cd  
## BL/BR:MornLow 53.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT47 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.911 6.182 3.2631 0.02179 \*   
## THIregime 1 60.078 60.078 31.7100 8.494e-06 \*\*\*  
## Colour:THIregime 5 3.178 0.636 0.3355 0.88640   
## Residuals 24 45.470 1.895   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.894597   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.98046 1.9973778 6 54 59.06510  
## BLK 57.15206 1.9582786 6 54 59.33781  
## BRN 57.59902 1.6165261 6 55 59.23933  
## WHT 59.45374 0.9650023 6 58 60.48801  
## WT/BLK 59.04799 2.3075732 6 56 62.07063  
## WT/BR 57.85105 2.2475605 6 54 60.18517  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.457127   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 59.45374 a  
## WT/BLK 59.04799 ab  
## WT/BR 57.85105 ab  
## BRN 57.59902 ab  
## BLK 57.15206 ab  
## BL/BR 56.98046 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.894597   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.30588 1.083256 18 57.7708 62.07063  
## MornLow 56.72222 1.872575 18 54.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9469467   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.30588 a  
## MornLow 56.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.894597 24 58.01405 2.372604 4.052228  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 58.62758 0.7081044 3 57.81062 59.06510 58.40882 59.00702  
## BL/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BLK:MornHigh 58.63745 0.7966350 3 57.77080 59.33781 58.28727 58.80375  
## BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BRN:MornHigh 58.86470 0.6274520 3 58.14032 59.23933 58.67738 59.21444  
## BRN:MornLow 56.33333 1.1547005 3 55.00000 57.00000 56.00000 57.00000  
## WHT:MornHigh 60.24082 0.3691520 3 59.81648 60.48801 60.11723 60.41797  
## WHT:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## WT/BLK:MornHigh 60.09598 1.7370621 3 58.80375 62.07063 59.10866 59.41357  
## WT/BLK:MornLow 58.00000 2.6457513 3 56.00000 61.00000 56.50000 57.00000  
## WT/BR:MornHigh 59.36876 1.1769064 3 58.01970 60.18517 58.96056 59.90142  
## WT/BR:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## Q75  
## BL/BR:MornHigh 59.03606  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 59.07078  
## BLK:MornLow 56.50000  
## BRN:MornHigh 59.22689  
## BRN:MornLow 57.00000  
## WHT:MornHigh 60.45299  
## WHT:MornLow 59.00000  
## WT/BLK:MornHigh 60.74210  
## WT/BLK:MornLow 59.00000  
## WT/BR:MornHigh 60.04330  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 60.24082 a  
## WT/BLK:MornHigh 60.09598 a  
## WT/BR:MornHigh 59.36876 ab  
## BRN:MornHigh 58.86470 ab  
## WHT:MornLow 58.66667 ab  
## BLK:MornHigh 58.63745 ab  
## BL/BR:MornHigh 58.62758 ab  
## WT/BLK:MornLow 58.00000 ab  
## BRN:MornLow 56.33333 ab  
## WT/BR:MornLow 56.33333 ab  
## BLK:MornLow 55.66667 b  
## BL/BR:MornLow 55.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT48 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 26.136 5.227 3.4100 0.01812 \*   
## THIregime 1 74.574 74.574 48.6488 3.268e-07 \*\*\*  
## Colour:THIregime 5 1.184 0.237 0.1545 0.97662   
## Residuals 24 36.790 1.533   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.532908   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.06257 2.686058 6 55 62.31746  
## BLK 57.08122 2.086554 6 54 59.23933  
## BRN 59.26711 1.562904 6 57 61.07548  
## WHT 57.95099 1.819976 6 56 59.92602  
## WT/BLK 59.27304 1.586757 6 57 61.15590  
## WT/BR 59.33402 1.633445 6 57 61.26044  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.210178   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 59.33402 a  
## WT/BLK 59.27304 ab  
## BRN 59.26711 ab  
## BL/BR 59.06257 ab  
## WHT 57.95099 ab  
## BLK 57.08122 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.532908   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.10077 0.9999515 18 58.11474 62.31746  
## MornLow 57.22222 1.6647047 18 54.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8517753   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.10077 a  
## MornLow 57.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.532908 24 58.66149 2.110595 3.644966  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.45848 1.6906397 3 59.01283 62.31746 59.52900 60.04516  
## BL/BR:MornLow 57.66667 3.0550505 3 55.00000 61.00000 56.00000 57.00000  
## BLK:MornHigh 58.82912 0.6209393 3 58.11474 59.23933 58.62401 59.13328  
## BLK:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BRN:MornHigh 60.53421 0.5385173 3 59.99849 61.07548 60.26358 60.52866  
## BRN:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WHT:MornHigh 59.56865 0.3114010 3 59.35549 59.92602 59.38997 59.42446  
## WHT:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WT/BLK:MornHigh 60.54608 0.6577164 3 59.84915 61.15590 60.24118 60.63320  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.66805 0.5757614 3 60.11050 61.26044 60.37185 60.63320  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 61.18131  
## BL/BR:MornLow 59.00000  
## BLK:MornHigh 59.18631  
## BLK:MornLow 56.00000  
## BRN:MornHigh 60.80207  
## BRN:MornLow 58.50000  
## WHT:MornHigh 59.67524  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 60.89455  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.94682  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 60.66805 a  
## WT/BLK:MornHigh 60.54608 a  
## BRN:MornHigh 60.53421 a  
## BL/BR:MornHigh 60.45848 a  
## WHT:MornHigh 59.56865 ab  
## BLK:MornHigh 58.82912 abc  
## BRN:MornLow 58.00000 abc  
## WT/BLK:MornLow 58.00000 abc  
## WT/BR:MornLow 58.00000 abc  
## BL/BR:MornLow 57.66667 abc  
## WHT:MornLow 56.33333 bc  
## BLK:MornLow 55.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT49 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 52.261 10.452 11.8436 7.549e-06 \*\*\*  
## THIregime 1 74.911 74.911 84.8817 2.376e-09 \*\*\*  
## Colour:THIregime 5 2.550 0.510 0.5779 0.7164   
## Residuals 24 21.181 0.883   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8825291   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.36421 1.576153 6 57 61.33013  
## BLK 55.53527 2.088896 6 53 57.64634  
## BRN 57.46474 1.759916 6 55 59.47579  
## WHT 56.63917 1.937007 6 54 58.86909  
## WT/BLK 57.72100 1.894164 6 55 60.11050  
## WT/BR 58.26403 1.563134 6 56 60.11050  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.677002   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 59.36421 a  
## WT/BR 58.26403 ab  
## WT/BLK 57.72100 ab  
## BRN 57.46474 b  
## WHT 56.63917 bc  
## BLK 55.53527 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8825291   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.94058 1.112706 18 57.04558 61.33013  
## MornLow 56.05556 1.797784 18 53.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6462962   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.94058 a  
## MornLow 56.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8825291 24 57.49807 1.633847 2.765667  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.39508 0.8301872 3 59.74461 61.33013 59.92756 60.11050  
## BL/BR:MornLow 58.33333 1.5275252 3 57.00000 60.00000 57.50000 58.00000  
## BLK:MornHigh 57.40388 0.3166934 3 57.04558 57.64634 57.28265 57.51973  
## BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BRN:MornHigh 58.92948 0.5539654 3 58.36817 59.47579 58.65632 58.94448  
## BRN:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WHT:MornHigh 58.27835 0.5650939 3 57.74298 58.86909 57.98297 58.22297  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 59.10866 0.9270867 3 58.28105 60.11050 58.60774 58.93443  
## WT/BLK:MornLow 56.33333 1.5275252 3 55.00000 58.00000 55.50000 56.00000  
## WT/BR:MornHigh 59.52806 0.5613782 3 58.99043 60.11050 59.23684 59.48326  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 60.72032  
## BL/BR:MornLow 59.00000  
## BLK:MornHigh 57.58303  
## BLK:MornLow 54.00000  
## BRN:MornHigh 59.21013  
## BRN:MornLow 56.50000  
## WHT:MornHigh 58.54603  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 59.52246  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 59.79688  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 60.39508 a  
## WT/BR:MornHigh 59.52806 ab  
## WT/BLK:MornHigh 59.10866 ab  
## BRN:MornHigh 58.92948 abc  
## BL/BR:MornLow 58.33333 abcd  
## WHT:MornHigh 58.27835 abcd  
## BLK:MornHigh 57.40388 bcde  
## WT/BR:MornLow 57.00000 bcde  
## WT/BLK:MornLow 56.33333 cdef  
## BRN:MornLow 56.00000 def  
## WHT:MornLow 55.00000 ef  
## BLK:MornLow 53.66667 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT50 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 75.643 15.129 13.5082 2.525e-06 \*\*\*  
## THIregime 1 79.557 79.557 71.0360 1.239e-08 \*\*\*  
## Colour:THIregime 5 4.100 0.820 0.7321 0.6065   
## Residuals 24 26.879 1.120   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.11995   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.85334 1.196287 6 59 62.25938  
## BLK 56.00714 2.319700 6 53 58.61707  
## BRN 58.19667 1.727029 6 56 59.94967  
## WHT 57.91050 2.291188 6 54 60.40452  
## WT/BLK 59.16445 2.002219 6 56 61.50437  
## WT/BR 58.45403 1.747533 6 56 60.45897  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.889159   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 60.85334 a  
## WT/BLK 59.16445 ab  
## WT/BR 58.45403 b  
## BRN 58.19667 b  
## WHT 57.91050 b  
## BLK 56.00714 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.11995   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.91760 1.321242 18 57.4061 62.25938  
## MornLow 56.94444 2.127474 18 53.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7280587   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.91760 a  
## MornLow 56.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.11995 24 58.43102 1.811156 3.11555  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.70667 0.6270674 3 61.02523 62.25938 61.43032 61.83541  
## BL/BR:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## BLK:MornHigh 58.01429 0.6055060 3 57.40610 58.61707 57.71290 58.01970  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 59.72668 0.3170068 3 59.36379 59.94967 59.61518 59.86657  
## BRN:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WHT:MornHigh 59.48766 1.1524723 3 58.19393 60.40452 59.02923 59.86452  
## WHT:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## WT/BLK:MornHigh 60.66224 0.9791748 3 59.58780 61.50437 60.24118 60.89455  
## WT/BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## WT/BR:MornHigh 59.90806 0.5404463 3 59.37872 60.45897 59.63260 59.88649  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 62.04739  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 58.31839  
## BLK:MornLow 54.50000  
## BRN:MornHigh 59.90812  
## BRN:MornLow 57.00000  
## WHT:MornHigh 60.13452  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 61.19946  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.17273  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 61.70667 a  
## WT/BLK:MornHigh 60.66224 ab  
## BL/BR:MornLow 60.00000 abc  
## WT/BR:MornHigh 59.90806 abc  
## BRN:MornHigh 59.72668 abcd  
## WHT:MornHigh 59.48766 abcd  
## BLK:MornHigh 58.01429 bcde  
## WT/BLK:MornLow 57.66667 bcde  
## WT/BR:MornLow 57.00000 cdef  
## BRN:MornLow 56.66667 def  
## WHT:MornLow 56.33333 ef  
## BLK:MornLow 54.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT51 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 107.804 21.561 11.3478 1.067e-05 \*\*\*  
## THIregime 1 107.169 107.169 56.4052 9.475e-08 \*\*\*  
## Colour:THIregime 5 4.137 0.827 0.4355 0.8193   
## Residuals 24 45.600 1.900   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.899992   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 61.37936 1.430095 6 59 62.88081  
## BLK 56.14971 2.763837 6 52 59.37397  
## BRN 58.18729 2.318045 6 55 61.03528  
## WHT 58.32777 1.995223 6 56 60.66224  
## WT/BLK 60.75310 2.731344 6 57 64.29210  
## WT/BR 58.88837 2.209720 6 56 61.57406  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.460623   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 61.37936 a  
## WT/BLK 60.75310 ab  
## WT/BR 58.88837 bc  
## WHT 58.32777 bcd  
## BRN 58.18729 cd  
## BLK 56.14971 d  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.899992   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.67298 1.72234 18 57.15611 64.2921  
## MornLow 57.22222 2.51011 18 52.00000 62.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9482938   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.67298 a  
## MornLow 57.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.899992 24 58.9476 2.338351 4.057993  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 62.42538 0.7050477 3 61.61326 62.88081 62.19767 62.78208  
## BL/BR:MornLow 60.33333 1.1547005 3 59.00000 61.00000 60.00000 61.00000  
## BLK:MornHigh 58.29941 1.1105270 3 57.15611 59.37397 57.76214 58.36817  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 60.04125 0.8879726 3 59.32645 61.03528 59.54424 59.76203  
## BRN:MornLow 56.33333 1.5275252 3 55.00000 58.00000 55.50000 56.00000  
## WHT:MornHigh 59.98886 0.5841286 3 59.61855 60.66224 59.65218 59.68581  
## WHT:MornLow 56.66667 1.1547005 3 56.00000 58.00000 56.00000 56.00000  
## WT/BLK:MornHigh 62.50621 1.5589989 3 61.41725 64.29210 61.61326 61.80928  
## WT/BLK:MornLow 59.00000 2.6457513 3 57.00000 62.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.77674 0.7136943 3 60.19762 61.57406 60.37807 60.55853  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 62.83144  
## BL/BR:MornLow 61.00000  
## BLK:MornHigh 58.87107  
## BLK:MornLow 55.00000  
## BRN:MornHigh 60.39866  
## BRN:MornLow 57.00000  
## WHT:MornHigh 60.17402  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 63.05069  
## WT/BLK:MornLow 60.00000  
## WT/BR:MornHigh 61.06629  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.50621 a  
## BL/BR:MornHigh 62.42538 a  
## WT/BR:MornHigh 60.77674 ab  
## BL/BR:MornLow 60.33333 abc  
## BRN:MornHigh 60.04125 abc  
## WHT:MornHigh 59.98886 abc  
## WT/BLK:MornLow 59.00000 abc  
## BLK:MornHigh 58.29941 bc  
## WT/BR:MornLow 57.00000 bcd  
## WHT:MornLow 56.66667 cd  
## BRN:MornLow 56.33333 cd  
## BLK:MornLow 54.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT52 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 41.138 8.228 5.4048 0.001813 \*\*   
## THIregime 1 70.744 70.744 46.4726 4.74e-07 \*\*\*  
## Colour:THIregime 5 3.077 0.615 0.4043 0.840997   
## Residuals 24 36.535 1.522   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.522271   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.44226 2.033840 6 57 62.49169  
## BLK 57.77065 1.628025 6 56 59.56404  
## BRN 57.36170 2.166832 6 54 59.82905  
## WHT 57.79178 1.649273 6 56 59.58780  
## WT/BLK 58.83081 1.709435 6 57 60.89455  
## WT/BR 57.54707 2.224116 6 54 60.19762  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.202496   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 60.44226 a  
## WT/BLK 58.83081 ab  
## WHT 57.79178 b  
## BLK 57.77065 b  
## WT/BR 57.54707 b  
## BRN 57.36170 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.522271   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.69253 1.110691 18 58.0197 62.49169  
## MornLow 56.88889 1.875191 18 54.0000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.848815   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.69253 a  
## MornLow 56.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.522271 24 58.29071 2.116638 3.632298  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.21785 1.4843541 3 59.58780 62.49169 60.58093 61.57406  
## BL/BR:MornLow 59.66667 2.5166115 3 57.00000 62.00000 58.50000 60.00000  
## BLK:MornHigh 59.20797 0.3085412 3 59.01965 59.56404 59.02993 59.04021  
## BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## BRN:MornHigh 59.05674 0.8860746 3 58.08939 59.82905 58.67059 59.25178  
## BRN:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WHT:MornHigh 59.25022 0.2928063 3 59.06510 59.58780 59.08143 59.09777  
## WHT:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WT/BLK:MornHigh 60.32829 0.4947276 3 59.97983 60.89455 60.04516 60.11050  
## WT/BLK:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## WT/BR:MornHigh 59.09414 1.0892487 3 58.01970 60.19762 58.54240 59.06510  
## WT/BR:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 62.03287  
## BL/BR:MornLow 61.00000  
## BLK:MornHigh 59.30213  
## BLK:MornLow 56.50000  
## BRN:MornHigh 59.54041  
## BRN:MornLow 56.50000  
## WHT:MornHigh 59.34278  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 60.50253  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 59.63136  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 61.21785 a  
## WT/BLK:MornHigh 60.32829 ab  
## BL/BR:MornLow 59.66667 abc  
## WHT:MornHigh 59.25022 abcd  
## BLK:MornHigh 59.20797 abcd  
## WT/BR:MornHigh 59.09414 abcd  
## BRN:MornHigh 59.05674 abcd  
## WT/BLK:MornLow 57.33333 bcd  
## BLK:MornLow 56.33333 cd  
## WHT:MornLow 56.33333 cd  
## WT/BR:MornLow 56.00000 d  
## BRN:MornLow 55.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT53 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 50.208 10.042 3.3313 0.020 \*   
## THIregime 1 76.864 76.864 25.4999 3.665e-05 \*\*\*  
## Colour:THIregime 5 2.017 0.403 0.1338 0.983   
## Residuals 24 72.343 3.014   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.014276   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.41866 3.167107 6 54 62.61946  
## BLK 56.60519 2.152827 6 54 59.27893  
## BRN 56.50628 2.283546 6 53 58.99541  
## WHT 57.46063 2.148094 6 54 59.98751  
## WT/BLK 59.28756 1.593468 6 57 61.15590  
## WT/BR 58.48888 1.792024 6 56 60.63320  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.099279   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 59.41866 a  
## WT/BLK 59.28756 a  
## WT/BR 58.48888 a  
## WHT 57.46063 a  
## BLK 56.60519 a  
## BRN 56.50628 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.014276   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.4224 1.415612 18 57.53721 62.61946  
## MornLow 56.5000 2.307277 18 53.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.194424   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.4224 a  
## MornLow 56.5000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.014276 24 57.9612 2.995395 5.111248  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.50398 2.2823915 3 58.08504 62.61946 59.44624 60.80743  
## BL/BR:MornLow 58.33333 4.0414519 3 54.00000 62.00000 56.50000 59.00000  
## BLK:MornHigh 58.21038 0.9256101 3 57.65608 59.27893 57.67610 57.69612  
## BLK:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## BRN:MornHigh 58.34589 0.7420160 3 57.53721 58.99541 58.02114 58.50506  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 58.92126 1.0655784 3 57.85636 59.98751 58.38813 58.91991  
## WHT:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WT/BLK:MornHigh 60.57512 0.6118874 3 59.93627 61.15590 60.28473 60.63320  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 59.97775 0.6149174 3 59.41357 60.63320 59.65003 59.88649  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 61.71345  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 58.48753  
## BLK:MornLow 55.50000  
## BRN:MornHigh 58.75024  
## BRN:MornLow 55.50000  
## WHT:MornHigh 59.45371  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 60.89455  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.25984  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.57512 a  
## BL/BR:MornHigh 60.50398 a  
## WT/BR:MornHigh 59.97775 ab  
## WHT:MornHigh 58.92126 abc  
## BRN:MornHigh 58.34589 abc  
## BL/BR:MornLow 58.33333 abc  
## BLK:MornHigh 58.21038 abc  
## WT/BLK:MornLow 58.00000 abc  
## WT/BR:MornLow 57.00000 abc  
## WHT:MornLow 56.00000 abc  
## BLK:MornLow 55.00000 bc  
## BRN:MornLow 54.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT54 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 50.771 10.154 3.4496 0.0172478 \*   
## THIregime 1 63.541 63.541 21.5860 0.0001021 \*\*\*  
## Colour:THIregime 5 2.739 0.548 0.1861 0.9650623   
## Residuals 24 70.647 2.944   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.943626   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.31471 2.393400 6 54 60.68547  
## BLK 56.19280 1.995999 6 53 58.42360  
## BRN 57.90414 2.680278 6 53 60.43216  
## WHT 55.81708 2.467147 6 52 58.77108  
## WT/BLK 58.34441 1.589140 6 56 60.45897  
## WT/BR 59.06479 1.370046 6 57 60.72032  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.062743   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 59.06479 a  
## WT/BLK 58.34441 ab  
## BL/BR 58.31471 ab  
## BRN 57.90414 ab  
## BLK 56.19280 ab  
## WHT 55.81708 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.943626   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.93487 1.383652 18 56.48064 60.72032  
## MornLow 56.27778 2.321398 18 52.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.180343   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.93487 a  
## MornLow 56.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.943626 24 57.60632 2.978319 5.050993  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.62942 1.4613410 3 57.96162 60.68547 59.10140 60.24118  
## BL/BR:MornLow 57.00000 2.6457513 3 54.00000 59.00000 56.00000 58.00000  
## BLK:MornHigh 57.71893 0.7996569 3 56.84985 58.42360 57.36660 57.88334  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 59.14162 1.7413623 3 57.16098 60.43216 58.49635 59.83173  
## BRN:MornLow 56.66667 3.2145503 3 53.00000 59.00000 55.50000 58.00000  
## WHT:MornHigh 57.63415 1.1453112 3 56.48064 58.77108 57.06569 57.65074  
## WHT:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 59.35549 0.9556398 3 58.80375 60.45897 58.80375 58.80375  
## WT/BLK:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## WT/BR:MornHigh 60.12958 0.5396490 3 59.66247 60.72032 59.83422 60.00596  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 60.46332  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 58.15347  
## BLK:MornLow 55.50000  
## BRN:MornHigh 60.13194  
## BRN:MornLow 58.50000  
## WHT:MornHigh 58.21091  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 59.63136  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 60.36314  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 60.12958 a  
## BL/BR:MornHigh 59.62942 ab  
## WT/BLK:MornHigh 59.35549 ab  
## BRN:MornHigh 59.14162 ab  
## WT/BR:MornLow 58.00000 abc  
## BLK:MornHigh 57.71893 abc  
## WHT:MornHigh 57.63415 abc  
## WT/BLK:MornLow 57.33333 abc  
## BL/BR:MornLow 57.00000 abc  
## BRN:MornLow 56.66667 abc  
## BLK:MornLow 54.66667 bc  
## WHT:MornLow 54.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT55 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 67.950 13.590 7.6264 0.0002067 \*\*\*  
## THIregime 1 68.881 68.881 38.6547 2.002e-06 \*\*\*  
## Colour:THIregime 5 3.867 0.773 0.4340 0.8203145   
## Residuals 24 42.767 1.782   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.78196   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.69078 1.568399 6 58 62.39731  
## BLK 58.28579 1.580659 6 56 60.11050  
## BRN 56.93666 2.869636 6 53 60.59299  
## WHT 57.03555 2.383040 6 53 59.61855  
## WT/BLK 59.43245 1.288078 6 58 60.98167  
## WT/BR 59.58490 1.603719 6 57 61.24302  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.382968   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 60.69078 a  
## WT/BR 59.58490 ab  
## WT/BLK 59.43245 ab  
## BLK 58.28579 bc  
## WHT 57.03555 c  
## BRN 56.93666 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.78196   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.04427 1.349793 18 57.52967 62.39731  
## MornLow 57.27778 2.217724 18 53.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9183665   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.04427 a  
## MornLow 57.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.78196 24 58.66102 2.275618 3.929926  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.71490 0.8184834 3 60.80743 62.39731 61.37369 61.93995  
## BL/BR:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BLK:MornHigh 59.57158 0.5351851 3 59.04021 60.11050 59.30213 59.56404  
## BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BRN:MornHigh 58.87332 1.5281023 3 57.67123 60.59299 58.01348 58.35572  
## BRN:MornLow 55.00000 2.6457513 3 53.00000 58.00000 53.50000 54.00000  
## WHT:MornHigh 58.73777 1.0822250 3 57.52967 59.61855 58.29738 59.06510  
## WHT:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## WT/BLK:MornHigh 60.53156 0.4363087 3 60.11050 60.98167 60.30651 60.50253  
## WT/BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BR:MornHigh 60.83647 0.6302175 3 60.11050 61.24302 60.63320 61.15590  
## WT/BR:MornLow 58.33333 1.1547005 3 57.00000 59.00000 58.00000 59.00000  
## Q75  
## BL/BR:MornHigh 62.16863  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 59.83727  
## BLK:MornLow 57.50000  
## BRN:MornHigh 59.47436  
## BRN:MornLow 56.00000  
## WHT:MornHigh 59.34182  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 60.74210  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 61.19946  
## WT/BR:MornLow 59.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 61.71490 a  
## WT/BR:MornHigh 60.83647 ab  
## WT/BLK:MornHigh 60.53156 ab  
## BL/BR:MornLow 59.66667 ab  
## BLK:MornHigh 59.57158 ab  
## BRN:MornHigh 58.87332 abc  
## WHT:MornHigh 58.73777 abc  
## WT/BLK:MornLow 58.33333 abc  
## WT/BR:MornLow 58.33333 abc  
## BLK:MornLow 57.00000 bc  
## WHT:MornLow 55.33333 c  
## BRN:MornLow 55.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT56 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 85.081 17.016 5.4504 0.001727 \*\*   
## THIregime 1 80.466 80.466 25.7738 3.422e-05 \*\*\*  
## Colour:THIregime 5 4.418 0.884 0.2831 0.917790   
## Residuals 24 74.928 3.122   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.122003   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.63319 1.818638 6 58 62.78934  
## BLK 56.22543 2.756143 6 52 59.61269  
## BRN 58.15168 3.164471 6 54 61.95737  
## WHT 56.31712 2.443378 6 53 59.29378  
## WT/BLK 58.66384 1.516951 6 57 60.37185  
## WT/BR 58.97902 1.665406 6 57 61.05136  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.154175   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 60.63319 a  
## WT/BR 58.97902 ab  
## WT/BLK 58.66384 ab  
## BRN 58.15168 ab  
## WHT 56.31712 b  
## BLK 56.22543 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.122003   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.65676 1.579786 18 56.87926 62.78934  
## MornLow 56.66667 2.678894 18 52.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.21558   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.65676 a  
## MornLow 56.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.122003 24 58.16171 3.037942 5.201781  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.59971 1.0643222 3 60.73774 62.78934 61.00490 61.27206  
## BL/BR:MornLow 59.66667 2.0816660 3 58.00000 62.00000 58.50000 59.00000  
## BLK:MornHigh 58.11752 1.3847044 3 56.87926 59.61269 57.36994 57.86062  
## BLK:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## BRN:MornHigh 59.63669 2.0212827 3 58.26095 61.95737 58.47634 58.69174  
## BRN:MornLow 56.66667 3.7859389 3 54.00000 61.00000 54.50000 55.00000  
## WHT:MornHigh 58.30091 0.8863817 3 57.58924 59.29378 57.80447 58.01970  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 59.99434 0.3298184 3 59.76203 60.37185 59.80559 59.84915  
## WT/BLK:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## WT/BR:MornHigh 60.29137 0.6586404 3 59.88649 61.05136 59.91138 59.93627  
## WT/BR:MornLow 57.66667 1.1547005 3 57.00000 59.00000 57.00000 57.00000  
## Q75  
## BL/BR:MornHigh 62.03070  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 58.73665  
## BLK:MornLow 55.50000  
## BRN:MornHigh 60.32456  
## BRN:MornLow 58.00000  
## WHT:MornHigh 58.65674  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 60.11050  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 60.49381  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 61.59971 a  
## WT/BR:MornHigh 60.29137 a  
## WT/BLK:MornHigh 59.99434 a  
## BL/BR:MornLow 59.66667 a  
## BRN:MornHigh 59.63669 a  
## WHT:MornHigh 58.30091 ab  
## BLK:MornHigh 58.11752 ab  
## WT/BR:MornLow 57.66667 ab  
## WT/BLK:MornLow 57.33333 ab  
## BRN:MornLow 56.66667 ab  
## BLK:MornLow 54.33333 b  
## WHT:MornLow 54.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT57 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 67.948 13.590 13.7912 2.116e-06 \*\*\*  
## THIregime 1 61.769 61.769 62.6855 3.790e-08 \*\*\*  
## Colour:THIregime 5 5.372 1.074 1.0903 0.3911   
## Residuals 24 23.649 0.985   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.9853861   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 61.02799 1.163911 6 59 62.25357  
## BLK 58.26615 1.561576 6 56 60.06505  
## BRN 58.46829 1.758867 6 56 60.45897  
## WHT 56.32680 2.436980 6 53 59.12318  
## WT/BLK 58.27212 1.575066 6 56 60.11050  
## WT/BR 58.83134 1.688664 6 56 60.73774  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.772035   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 61.02799 a  
## WT/BR 58.83134 b  
## BRN 58.46829 b  
## WT/BLK 58.27212 b  
## BLK 58.26615 b  
## WHT 56.32680 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.9853861   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.84201 1.184668 18 57.58924 62.25357  
## MornLow 57.22222 2.073802 18 53.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6829207   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.84201 a  
## MornLow 57.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9853861 24 58.53211 1.695934 2.922393  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.72264 0.7783023 3 60.82921 62.25357 61.45718 62.08514  
## BL/BR:MornLow 60.33333 1.1547005 3 59.00000 61.00000 60.00000 61.00000  
## BLK:MornHigh 59.53230 0.5356355 3 58.99382 60.06505 59.26592 59.53802  
## BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BRN:MornHigh 59.93659 0.5161171 3 59.42697 60.45897 59.67540 59.92382  
## BRN:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WHT:MornHigh 58.32027 0.7694908 3 57.58924 59.12318 57.91881 58.24838  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 59.54424 0.5892462 3 58.93443 60.11050 59.26111 59.58780  
## WT/BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BR:MornHigh 59.99600 0.8522144 3 59.06510 60.73774 59.62514 60.18517  
## WT/BR:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 62.16936  
## BL/BR:MornLow 61.00000  
## BLK:MornHigh 59.80153  
## BLK:MornLow 57.50000  
## BRN:MornHigh 60.19139  
## BRN:MornLow 57.50000  
## WHT:MornHigh 58.68578  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 59.84915  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 60.46146  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 61.72264 a  
## BL/BR:MornLow 60.33333 ab  
## WT/BR:MornHigh 59.99600 ab  
## BRN:MornHigh 59.93659 ab  
## WT/BLK:MornHigh 59.54424 abc  
## BLK:MornHigh 59.53230 abc  
## WHT:MornHigh 58.32027 bc  
## WT/BR:MornLow 57.66667 bc  
## BLK:MornLow 57.00000 cd  
## BRN:MornLow 57.00000 cd  
## WT/BLK:MornLow 57.00000 cd  
## WHT:MornLow 54.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT58 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.970 3.194 1.2288 0.3264   
## THIregime 1 66.136 66.136 25.4444 3.716e-05 \*\*\*  
## Colour:THIregime 5 1.340 0.268 0.1031 0.9905   
## Residuals 24 62.382 2.599   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.599251   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.14774 2.508462 6 54 60.94682  
## BLK 57.39035 1.965523 6 54 59.33890  
## BRN 58.45396 2.512321 6 54 61.04389  
## WHT 56.34400 2.010773 6 54 58.68759  
## WT/BLK 57.48899 1.798208 6 55 59.58780  
## WT/BR 57.64072 1.492455 6 56 59.32645  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.878016   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BRN 58.45396 a  
## BL/BR 58.14774 a  
## WT/BR 57.64072 a  
## WT/BLK 57.48899 a  
## BLK 57.39035 a  
## WHT 56.34400 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.599251   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.93303 1.045462 18 57.61316 61.04389  
## MornLow 56.22222 1.895988 18 54.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.109152   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.93303 a  
## MornLow 56.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.599251 24 57.57763 2.800079 4.746348  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.29548 1.6670481 3 57.61316 60.94682 58.46980 59.32645  
## BL/BR:MornLow 57.00000 3.0000000 3 54.00000 60.00000 55.50000 57.00000  
## BLK:MornHigh 58.78070 0.9268216 3 57.71083 59.33890 58.50160 59.29236  
## BLK:MornLow 56.00000 1.7320508 3 54.00000 57.00000 55.50000 57.00000  
## BRN:MornHigh 59.57459 1.6366533 3 57.81062 61.04389 58.83994 59.86925  
## BRN:MornLow 57.33333 3.0550505 3 54.00000 60.00000 56.00000 58.00000  
## WHT:MornHigh 58.02134 0.5782114 3 57.65074 58.68759 57.68821 57.72568  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 58.97798 0.6577164 3 58.28105 59.58780 58.67308 59.06510  
## WT/BLK:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WT/BR:MornHigh 58.94811 0.3277330 3 58.75148 59.32645 58.75895 58.76641  
## WT/BR:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## Q75  
## BL/BR:MornHigh 60.13664  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 59.31563  
## BLK:MornLow 57.00000  
## BRN:MornHigh 60.45657  
## BRN:MornLow 59.00000  
## WHT:MornHigh 58.20664  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 59.32645  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 59.04643  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BRN:MornHigh 59.57459 a  
## BL/BR:MornHigh 59.29548 ab  
## WT/BLK:MornHigh 58.97798 ab  
## WT/BR:MornHigh 58.94811 ab  
## BLK:MornHigh 58.78070 ab  
## WHT:MornHigh 58.02134 ab  
## BRN:MornLow 57.33333 ab  
## BL/BR:MornLow 57.00000 ab  
## WT/BR:MornLow 56.33333 ab  
## BLK:MornLow 56.00000 ab  
## WT/BLK:MornLow 56.00000 ab  
## WHT:MornLow 54.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT59 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 26.629 5.326 1.6034 0.1972969   
## THIregime 1 68.505 68.505 20.6234 0.0001333 \*\*\*  
## Colour:THIregime 5 1.831 0.366 0.1103 0.9889737   
## Residuals 24 79.721 3.322   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.321697   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.61726 2.453189 6 56 62.46265  
## BLK 57.17981 1.984447 6 54 59.39773  
## BRN 58.36206 2.992374 6 54 61.90261  
## WHT 57.01530 2.141883 6 54 59.58780  
## WT/BLK 58.12723 1.982520 6 55 60.63320  
## WT/BR 58.30842 1.607130 6 56 60.19762  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.253488   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 59.61726 a  
## BRN 58.36206 a  
## WT/BR 58.30842 a  
## WT/BLK 58.12723 a  
## BLK 57.17981 a  
## WHT 57.01530 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.321697   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.48114 1.250188 18 57.82058 62.46265  
## MornLow 56.72222 2.191039 18 54.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.253854   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.48114 a  
## MornLow 56.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.321697 24 58.10168 3.136832 5.365565  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.56786 1.7323681 3 59.06510 62.46265 59.62047 60.17584  
## BL/BR:MornLow 58.66667 3.0550505 3 56.00000 62.00000 57.00000 58.00000  
## BLK:MornHigh 58.69296 0.8018235 3 57.82058 59.39773 58.34057 58.86057  
## BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BRN:MornHigh 59.72412 1.9545123 3 58.12424 61.90261 58.63488 59.14552  
## BRN:MornLow 57.00000 3.6055513 3 54.00000 61.00000 55.00000 56.00000  
## WHT:MornHigh 58.69727 0.8054476 3 58.01970 59.58780 58.25201 58.48432  
## WHT:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WT/BLK:MornHigh 59.58780 1.0454000 3 58.54240 60.63320 59.06510 59.58780  
## WT/BLK:MornLow 56.66667 1.5275252 3 55.00000 58.00000 56.00000 57.00000  
## WT/BR:MornHigh 59.61684 0.5668165 3 59.06510 60.19762 59.32645 59.58780  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 61.31924  
## BL/BR:MornLow 60.00000  
## BLK:MornHigh 59.12915  
## BLK:MornLow 56.50000  
## BRN:MornHigh 60.52406  
## BRN:MornLow 58.50000  
## WHT:MornHigh 59.03606  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 60.11050  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 59.89271  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 60.56786 a  
## BRN:MornHigh 59.72412 a  
## WT/BR:MornHigh 59.61684 a  
## WT/BLK:MornHigh 59.58780 a  
## WHT:MornHigh 58.69727 a  
## BLK:MornHigh 58.69296 a  
## BL/BR:MornLow 58.66667 a  
## BRN:MornLow 57.00000 a  
## WT/BR:MornLow 57.00000 a  
## WT/BLK:MornLow 56.66667 a  
## BLK:MornLow 55.66667 a  
## WHT:MornLow 55.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT60 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 86.813 17.363 5.0392 0.002689 \*\*   
## THIregime 1 89.402 89.402 25.9478 3.277e-05 \*\*\*  
## Colour:THIregime 5 3.394 0.679 0.1970 0.960590   
## Residuals 24 82.691 3.445   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.445469   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.07371 1.597059 6 57 60.69854  
## BLK 57.63997 2.068454 6 54 59.84915  
## BRN 55.17045 2.478947 6 52 57.87036  
## WHT 57.63192 2.300245 6 54 60.35648  
## WT/BLK 60.08582 3.658802 6 56 65.07615  
## WT/BR 58.85342 1.856165 6 56 60.72032  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.313549   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.08582 a  
## BL/BR 59.07371 a  
## WT/BR 58.85342 a  
## BLK 57.63997 ab  
## WHT 57.63192 ab  
## BRN 55.17045 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.445469   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.65176 1.884895 18 56.93409 65.07615  
## MornLow 56.50000 2.572479 18 52.00000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.277001   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.65176 a  
## MornLow 56.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.445469 24 58.07588 3.196159 5.464616  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.48075 0.3223022 3 60.11050 60.69854 60.37185 60.63320  
## BL/BR:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BLK:MornHigh 58.94660 1.1140242 3 57.70153 59.84915 58.49532 59.28911  
## BLK:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## BRN:MornHigh 57.34089 0.4800344 3 56.93409 57.87036 57.07616 57.21823  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 58.93051 1.3548018 3 57.66034 60.35648 58.21753 58.77471  
## WHT:MornLow 56.33333 2.5166115 3 54.00000 59.00000 55.00000 56.00000  
## WT/BLK:MornHigh 61.83831 2.8142639 3 59.97983 65.07615 60.21940 60.45897  
## WT/BLK:MornLow 58.33333 4.0414519 3 56.00000 63.00000 56.00000 56.00000  
## WT/BR:MornHigh 60.37351 0.5899428 3 59.69234 60.72032 60.20011 60.70787  
## WT/BR:MornLow 57.33333 1.1547005 3 56.00000 58.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 60.66587  
## BL/BR:MornLow 58.00000  
## BLK:MornHigh 59.56913  
## BLK:MornLow 57.50000  
## BRN:MornHigh 57.54429  
## BRN:MornLow 53.50000  
## WHT:MornHigh 59.56559  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 62.76756  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 60.71409  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.83831 a  
## BL/BR:MornHigh 60.48075 ab  
## WT/BR:MornHigh 60.37351 ab  
## BLK:MornHigh 58.94660 ab  
## WHT:MornHigh 58.93051 ab  
## WT/BLK:MornLow 58.33333 abc  
## BL/BR:MornLow 57.66667 abc  
## BRN:MornHigh 57.34089 abc  
## WT/BR:MornLow 57.33333 abc  
## BLK:MornLow 56.33333 bc  
## WHT:MornLow 56.33333 bc  
## BRN:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT61 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.251 3.650 2.8862 0.03531 \*   
## THIregime 1 72.939 72.939 57.6714 7.832e-08 \*\*\*  
## Colour:THIregime 5 2.652 0.530 0.4193 0.83061   
## Residuals 24 30.354 1.265   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.264731   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.47055 2.045269 6 55 60.51704  
## BLK 59.29263 1.129837 6 58 60.60944  
## BRN 57.00804 1.884919 6 55 59.10531  
## WHT 58.22653 1.968495 6 55 60.54608  
## WT/BLK 58.77304 2.374286 6 55 61.41725  
## WT/BR 58.76962 1.632179 6 57 60.63320  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.007559   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.29263 a  
## WT/BLK 58.77304 ab  
## WT/BR 58.76962 ab  
## BL/BR 58.47055 ab  
## WHT 58.22653 ab  
## BRN 57.00804 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.264731   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.84681 0.947338 18 58.37906 61.41725  
## MornLow 57.00000 1.455214 18 55.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7736886   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.84681 a  
## MornLow 57.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.264731 24 58.4234 1.924918 3.310812  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.94111 0.9850064 3 58.80375 60.51704 59.65314 60.50253  
## BL/BR:MornLow 57.00000 1.7320508 3 55.00000 58.00000 56.50000 58.00000  
## BLK:MornHigh 60.25192 0.3118624 3 60.03583 60.60944 60.07316 60.11050  
## BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BRN:MornHigh 58.68274 0.3674904 3 58.43786 59.10531 58.47146 58.50506  
## BRN:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WHT:MornHigh 59.45307 1.0836385 3 58.37906 60.54608 58.90656 59.43406  
## WHT:MornLow 57.00000 2.0000000 3 55.00000 59.00000 56.00000 57.00000  
## WT/BLK:MornHigh 60.54608 1.2892089 3 59.06510 61.41725 60.11050 61.15590  
## WT/BLK:MornLow 57.00000 1.7320508 3 55.00000 58.00000 56.50000 58.00000  
## WT/BR:MornHigh 60.20591 0.3713467 3 59.96116 60.63320 59.99227 60.02338  
## WT/BR:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## Q75  
## BL/BR:MornHigh 60.50978  
## BL/BR:MornLow 58.00000  
## BLK:MornHigh 60.35997  
## BLK:MornLow 58.50000  
## BRN:MornHigh 58.80519  
## BRN:MornLow 55.50000  
## WHT:MornHigh 59.99007  
## WHT:MornLow 58.00000  
## WT/BLK:MornHigh 61.28658  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 60.32829  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.54608 a  
## BLK:MornHigh 60.25192 ab  
## WT/BR:MornHigh 60.20591 ab  
## BL/BR:MornHigh 59.94111 ab  
## WHT:MornHigh 59.45307 ab  
## BRN:MornHigh 58.68274 ab  
## BLK:MornLow 58.33333 abc  
## WT/BR:MornLow 57.33333 abc  
## BL/BR:MornLow 57.00000 bc  
## WHT:MornLow 57.00000 bc  
## WT/BLK:MornLow 57.00000 bc  
## BRN:MornLow 55.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT62 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 29.016 5.803 3.2227 0.02294 \*   
## THIregime 1 72.819 72.819 40.4390 1.418e-06 \*\*\*  
## Colour:THIregime 5 1.764 0.353 0.1959 0.96105   
## Residuals 24 43.217 1.801   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.800715   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.25912 2.829603 6 54 61.74394  
## BLK 58.53939 1.716980 6 56 60.63320  
## BRN 56.49425 2.159888 6 54 58.96056  
## WHT 58.24767 1.366761 6 57 59.50068  
## WT/BLK 59.27304 1.586757 6 57 61.15590  
## WT/BR 59.05328 1.885325 6 56 61.26044  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.395475   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.27304 a  
## WT/BR 59.05328 a  
## BLK 58.53939 ab  
## BL/BR 58.25912 ab  
## WHT 58.24767 ab  
## BRN 56.49425 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.800715   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.73336 1.090578 18 57.94503 61.74394  
## MornLow 56.88889 1.778595 18 54.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9231868   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.73336 a  
## MornLow 56.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.800715 24 58.31112 2.301289 3.950554  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.85157 1.753735131 3 58.28105 61.74394 58.90539 59.52972  
## BL/BR:MornLow 56.66667 3.055050463 3 54.00000 60.00000 55.00000 56.00000  
## BLK:MornHigh 59.74544 0.820379422 3 59.01532 60.63320 59.30156 59.58780  
## BLK:MornLow 57.33333 1.527525232 3 56.00000 59.00000 56.50000 57.00000  
## BRN:MornHigh 58.32183 0.556128863 3 57.94503 58.96056 58.00247 58.05991  
## BRN:MornLow 54.66667 1.154700538 3 54.00000 56.00000 54.00000 54.00000  
## WHT:MornHigh 59.49535 0.005447931 3 59.48979 59.50068 59.49268 59.49556  
## WHT:MornLow 57.00000 0.000000000 3 57.00000 57.00000 57.00000 57.00000  
## WT/BLK:MornHigh 60.54608 0.657716410 3 59.84915 61.15590 60.24118 60.63320  
## WT/BLK:MornLow 58.00000 1.000000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.43988 0.885857374 3 59.50068 61.26044 60.02961 60.55853  
## WT/BR:MornLow 57.66667 1.527525232 3 56.00000 59.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 60.63683  
## BL/BR:MornLow 58.00000  
## BLK:MornHigh 60.11050  
## BLK:MornLow 58.00000  
## BRN:MornHigh 58.51023  
## BRN:MornLow 55.00000  
## WHT:MornHigh 59.49812  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 60.89455  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.90948  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.54608 a  
## WT/BR:MornHigh 60.43988 a  
## BL/BR:MornHigh 59.85157 a  
## BLK:MornHigh 59.74544 a  
## WHT:MornHigh 59.49535 a  
## BRN:MornHigh 58.32183 ab  
## WT/BLK:MornLow 58.00000 ab  
## WT/BR:MornLow 57.66667 ab  
## BLK:MornLow 57.33333 ab  
## WHT:MornLow 57.00000 ab  
## BL/BR:MornLow 56.66667 ab  
## BRN:MornLow 54.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT63 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 34.128 6.826 5.0860 0.002555 \*\*   
## THIregime 1 61.746 61.746 46.0091 5.138e-07 \*\*\*  
## Colour:THIregime 5 3.243 0.649 0.4833 0.785235   
## Residuals 24 32.209 1.342   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.342035   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.91859 1.603568 6 57 60.89455  
## BLK 60.17222 1.762219 6 57 61.89243  
## BRN 57.04550 1.925266 6 55 59.18572  
## WHT 59.05948 1.369713 6 57 60.69128  
## WT/BLK 57.93153 2.302900 6 54 60.45897  
## WT/BR 58.39720 1.696039 6 56 60.37185  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.068002   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.17222 a  
## WHT 59.05948 ab  
## BL/BR 58.91859 ab  
## WT/BR 58.39720 ab  
## WT/BLK 57.93153 b  
## BRN 57.04550 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.342035   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 59.89706 0.9691882 18 58.28105 61.89243  
## MornLow 57.27778 1.7758364 18 54.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7969828   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 59.89706 a  
## MornLow 57.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.342035 24 58.58742 1.977323 3.410494  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.17051 0.6271414 3 59.79688 60.89455 59.80850 59.82011  
## BL/BR:MornLow 57.66667 1.1547005 3 57.00000 59.00000 57.00000 57.00000  
## BLK:MornHigh 61.01110 1.1484921 3 59.71225 61.89243 60.57043 61.42861  
## BLK:MornLow 59.33333 2.0816660 3 57.00000 61.00000 58.50000 60.00000  
## BRN:MornHigh 58.75767 0.3724570 3 58.50755 59.18572 58.54364 58.57974  
## BRN:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WHT:MornHigh 60.11897 0.5681206 3 59.55513 60.69128 59.83282 60.11050  
## WHT:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BLK:MornHigh 59.52972 1.1235461 3 58.28105 60.45897 59.06510 59.84915  
## WT/BLK:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## WT/BR:MornHigh 59.79439 0.5787076 3 59.21444 60.37185 59.50566 59.79688  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 60.35733  
## BL/BR:MornLow 58.00000  
## BLK:MornHigh 61.66052  
## BLK:MornLow 60.50000  
## BRN:MornHigh 58.88273  
## BRN:MornLow 55.50000  
## WHT:MornHigh 60.40089  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 60.15406  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 60.08437  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 61.01110 a  
## BL/BR:MornHigh 60.17051 ab  
## WHT:MornHigh 60.11897 ab  
## WT/BR:MornHigh 59.79439 ab  
## WT/BLK:MornHigh 59.52972 abc  
## BLK:MornLow 59.33333 abc  
## BRN:MornHigh 58.75767 abc  
## WHT:MornLow 58.00000 abcd  
## BL/BR:MornLow 57.66667 abcd  
## WT/BR:MornLow 57.00000 bcd  
## WT/BLK:MornLow 56.33333 cd  
## BRN:MornLow 55.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT64 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 21.347 4.269 4.2379 0.00666 \*\*   
## THIregime 1 59.081 59.081 58.6460 6.778e-08 \*\*\*  
## Colour:THIregime 5 1.805 0.361 0.3583 0.87180   
## Residuals 24 24.178 1.007   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.007414   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.99772 2.095770 6 56 61.61326  
## BLK 59.98223 1.643882 6 58 62.03499  
## BRN 57.85545 1.718329 6 56 59.73714  
## WHT 59.39544 1.235496 6 58 60.81768  
## WT/BLK 57.92427 1.787501 6 56 59.71848  
## WT/BR 59.19796 1.497934 6 57 60.98167  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.791732   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.98223 a  
## WHT 59.39544 ab  
## WT/BR 59.19796 ab  
## BL/BR 58.99772 ab  
## WT/BLK 57.92427 b  
## BRN 57.85545 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.007414   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.17324 0.8062801 18 59.16964 62.03499  
## MornLow 57.61111 1.4608172 18 56.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6905116   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.17324 a  
## MornLow 57.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.007414 24 58.89218 1.704301 2.954877  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.32878 1.1542003 3 59.37872 61.61326 59.68653 59.99434  
## BL/BR:MornLow 57.66667 2.0816660 3 56.00000 60.00000 56.50000 57.00000  
## BLK:MornHigh 60.96447 0.9281847 3 60.38430 62.03499 60.42921 60.47412  
## BLK:MornLow 59.00000 1.7320508 3 58.00000 61.00000 58.00000 58.00000  
## BRN:MornHigh 59.37757 0.3126675 3 59.16964 59.73714 59.19779 59.22593  
## BRN:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WHT:MornHigh 60.45754 0.3139948 3 60.24118 60.81768 60.27747 60.31377  
## WHT:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BLK:MornHigh 59.51520 0.2476832 3 59.23933 59.71848 59.41357 59.58780  
## WT/BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WT/BR:MornHigh 60.39591 0.5515661 3 59.88649 60.98167 60.10303 60.31958  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 60.80380  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 61.25455  
## BLK:MornLow 59.50000  
## BRN:MornHigh 59.48154  
## BRN:MornLow 56.50000  
## WHT:MornHigh 60.56573  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 59.65314  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 60.65062  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.96447 a  
## WHT:MornHigh 60.45754 ab  
## WT/BR:MornHigh 60.39591 ab  
## BL/BR:MornHigh 60.32878 ab  
## WT/BLK:MornHigh 59.51520 ab  
## BRN:MornHigh 59.37757 ab  
## BLK:MornLow 59.00000 abc  
## WHT:MornLow 58.33333 abc  
## WT/BR:MornLow 58.00000 bc  
## BL/BR:MornLow 57.66667 bc  
## BRN:MornLow 56.33333 c  
## WT/BLK:MornLow 56.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT65 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.314 1.463 1.3374 0.2825   
## THIregime 1 75.143 75.143 68.6967 1.677e-08 \*\*\*  
## Colour:THIregime 5 0.801 0.160 0.1465 0.9792   
## Residuals 24 26.252 1.094   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.093835   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.38823 2.446761 6 56 62.46265  
## BLK 59.26487 1.560589 6 57 61.06086  
## BRN 58.62437 1.916645 6 56 60.78254  
## WHT 58.30752 1.845018 6 56 60.17584  
## WT/BLK 59.13541 1.672084 6 57 60.89455  
## WT/BR 59.61477 1.464120 6 58 61.26044  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.867003   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 59.61477 a  
## BL/BR 59.38823 a  
## BLK 59.26487 a  
## WT/BLK 59.13541 a  
## BRN 58.62437 a  
## WHT 58.30752 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.093835   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.50061 0.6898325 18 59.5878 62.46265  
## MornLow 57.61111 1.2432826 18 56.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7195202   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.50061 a  
## MornLow 57.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.093835 24 59.05586 1.770977 3.079012  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.77646 1.4781945 3 59.70396 62.46265 59.93336 60.16277  
## BL/BR:MornLow 58.00000 2.6457513 3 56.00000 61.00000 56.50000 57.00000  
## BLK:MornHigh 60.52974 0.5375181 3 59.98605 61.06086 60.26417 60.54230  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 60.24874 0.5177791 3 59.74863 60.78254 59.98184 60.21504  
## BRN:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WHT:MornHigh 59.94837 0.3158049 3 59.58780 60.17584 59.83463 60.08146  
## WHT:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WT/BLK:MornHigh 60.60416 0.4297363 3 60.11050 60.89455 60.45897 60.80743  
## WT/BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.89621 0.3154944 3 60.70787 61.26044 60.71409 60.72032  
## WT/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## Q75  
## BL/BR:MornHigh 61.31271  
## BL/BR:MornLow 59.00000  
## BLK:MornHigh 60.80158  
## BLK:MornLow 58.50000  
## BRN:MornHigh 60.49879  
## BRN:MornLow 57.50000  
## WHT:MornHigh 60.12865  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 60.85099  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 60.99038  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 60.89621 a  
## BL/BR:MornHigh 60.77646 a  
## WT/BLK:MornHigh 60.60416 ab  
## BLK:MornHigh 60.52974 ab  
## BRN:MornHigh 60.24874 ab  
## WHT:MornHigh 59.94837 abc  
## WT/BR:MornLow 58.33333 abcd  
## BL/BR:MornLow 58.00000 abcd  
## BLK:MornLow 58.00000 abcd  
## WT/BLK:MornLow 57.66667 bcd  
## BRN:MornLow 57.00000 cd  
## WHT:MornLow 56.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT66 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 5.417 1.083 1.2452 0.3194   
## THIregime 1 70.024 70.024 80.4770 3.921e-09 \*\*\*  
## Colour:THIregime 5 0.290 0.058 0.0666 0.9966   
## Residuals 24 20.883 0.870   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8701088   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.47830 1.768177 6 56 60.47639  
## BLK 59.31679 1.903668 6 56 61.18079  
## BRN 59.36029 1.654926 6 57 61.26791  
## WHT 58.55041 1.842261 6 56 60.63320  
## WT/BLK 59.36016 1.671249 6 57 61.41725  
## WT/BR 59.30208 1.600940 6 57 61.15590  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.66516   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BRN 59.36029 a  
## WT/BLK 59.36016 a  
## BLK 59.31679 a  
## WT/BR 59.30208 a  
## WHT 58.55041 a  
## BL/BR 58.47830 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.8701088   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.45601 0.6225814 18 59.45713 61.41725  
## MornLow 57.66667 1.0846523 18 56.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6417322   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.45601 a  
## MornLow 57.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8701088 24 59.06134 1.579369 2.746137  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.95659 0.5099364 3 59.45713 60.47639 59.69670 59.93627  
## BL/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BLK:MornHigh 60.63358 0.9263291 3 59.56404 61.18079 60.35997 61.15590  
## BLK:MornLow 58.00000 1.7320508 3 56.00000 59.00000 57.50000 59.00000  
## BRN:MornHigh 60.72057 0.5438903 3 60.18019 61.26791 60.44690 60.71362  
## BRN:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WHT:MornHigh 60.10082 0.5229688 3 59.58780 60.63320 59.83463 60.08146  
## WHT:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BLK:MornHigh 60.72032 0.6577164 3 60.11050 61.41725 60.37185 60.63320  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.60416 0.5668165 3 60.02338 61.15590 60.32829 60.63320  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 60.20633  
## BL/BR:MornLow 57.50000  
## BLK:MornHigh 61.16835  
## BLK:MornLow 59.00000  
## BRN:MornHigh 60.99076  
## BRN:MornLow 58.50000  
## WHT:MornHigh 60.35733  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 61.02523  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.89455  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BRN:MornHigh 60.72057 a  
## WT/BLK:MornHigh 60.72032 a  
## BLK:MornHigh 60.63358 a  
## WT/BR:MornHigh 60.60416 a  
## WHT:MornHigh 60.10082 a  
## BL/BR:MornHigh 59.95659 a  
## BLK:MornLow 58.00000 ab  
## BRN:MornLow 58.00000 ab  
## WT/BLK:MornLow 58.00000 ab  
## WT/BR:MornLow 58.00000 ab  
## BL/BR:MornLow 57.00000 b  
## WHT:MornLow 57.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT67 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 9.702 1.940 4.1091 0.007749 \*\*   
## THIregime 1 65.001 65.001 137.6554 1.99e-11 \*\*\*  
## Colour:THIregime 5 0.737 0.147 0.3121 0.900775   
## Residuals 24 11.333 0.472   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.472201   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.60838 1.458377 6 58 61.26044  
## BLK 59.60986 1.458673 6 58 61.24680  
## BRN 59.91783 1.601042 6 58 61.87964  
## WHT 58.60753 1.904279 6 56 60.79654  
## WT/BLK 60.19411 1.496522 6 58 61.93995  
## WT/BR 59.12463 1.652387 6 57 60.84228  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.226684   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.19411 a  
## BRN 59.91783 a  
## BLK 59.60986 ab  
## BL/BR 59.60838 ab  
## WT/BR 59.12463 ab  
## WHT 58.60753 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.472201   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.85411 0.5568522 18 59.68004 61.93995  
## MornLow 58.16667 0.9851844 18 56.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4727489   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.85411 a  
## MornLow 58.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.472201 24 59.51039 1.154704 2.023014  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.88342 0.3265304 3 60.69128 61.26044 60.69491 60.69854  
## BL/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BLK:MornHigh 60.88638 0.3121375 3 60.70448 61.24680 60.70617 60.70787  
## BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BRN:MornHigh 61.16898 0.6154767 3 60.80743 61.87964 60.81366 60.81988  
## BRN:MornLow 58.66667 1.1547005 3 58.00000 60.00000 58.00000 58.00000  
## WHT:MornHigh 60.21505 0.5597004 3 59.68004 60.79654 59.92431 60.16858  
## WHT:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BLK:MornHigh 61.38821 0.5668165 3 60.80743 61.93995 61.11234 61.41725  
## WT/BLK:MornLow 59.00000 1.0000000 3 58.00000 60.00000 58.50000 59.00000  
## WT/BR:MornHigh 60.58259 0.3401020 3 60.19762 60.84228 60.45274 60.70787  
## WT/BR:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 60.97949  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 60.97734  
## BLK:MornLow 58.50000  
## BRN:MornHigh 61.34976  
## BRN:MornLow 59.00000  
## WHT:MornHigh 60.48256  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 61.67860  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 60.77508  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.38821 a  
## BRN:MornHigh 61.16898 a  
## BLK:MornHigh 60.88638 ab  
## BL/BR:MornHigh 60.88342 ab  
## WT/BR:MornHigh 60.58259 abc  
## WHT:MornHigh 60.21505 abcd  
## WT/BLK:MornLow 59.00000 bcde  
## BRN:MornLow 58.66667 cde  
## BL/BR:MornLow 58.33333 de  
## BLK:MornLow 58.33333 de  
## WT/BR:MornLow 57.66667 e  
## WHT:MornLow 57.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT68 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.723 2.545 2.6857 0.04589 \*   
## THIregime 1 68.533 68.533 72.3359 1.05e-08 \*\*\*  
## Colour:THIregime 5 1.490 0.298 0.3146 0.89931   
## Residuals 24 22.738 0.947   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.9474331   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.47926 1.776396 6 56 60.51704  
## BLK 58.55957 1.854188 6 56 60.65696  
## BRN 59.79826 1.942677 6 57 62.20130  
## WHT 59.57038 1.416373 6 58 61.15590  
## WT/BLK 58.34503 2.074899 6 56 61.15590  
## WT/BR 59.52600 1.368754 6 58 61.05136  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.737575   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BRN 59.79826 a  
## WHT 59.57038 a  
## WT/BR 59.52600 a  
## BLK 58.55957 a  
## BL/BR 58.47926 a  
## WT/BLK 58.34503 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.9474331   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.42616 0.7256273 18 59.32645 62.2013  
## MornLow 57.66667 1.2833779 18 56.00000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6696399   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.42616 a  
## MornLow 57.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9474331 24 59.04642 1.648469 2.865561  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.95853 0.5694609 3 59.37872 60.51704 59.67927 59.97983  
## BL/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BLK:MornHigh 60.11914 0.5461239 3 59.56507 60.65696 59.85023 60.13539  
## BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BRN:MornHigh 60.92984 1.1225760 3 60.07565 62.20130 60.29412 60.51258  
## BRN:MornLow 58.66667 2.0816660 3 57.00000 61.00000 57.50000 58.00000  
## WHT:MornHigh 60.80743 0.3017810 3 60.63320 61.15590 60.63320 60.63320  
## WHT:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BLK:MornHigh 60.02338 0.9894551 3 59.32645 61.15590 59.45713 59.58780  
## WT/BLK:MornLow 56.66667 1.1547005 3 56.00000 58.00000 56.00000 56.00000  
## WT/BR:MornHigh 60.71866 0.2881962 3 60.54608 61.05136 60.55231 60.55853  
## WT/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## Q75  
## BL/BR:MornHigh 60.24843  
## BL/BR:MornLow 57.50000  
## BLK:MornHigh 60.39617  
## BLK:MornLow 57.50000  
## BRN:MornHigh 61.35694  
## BRN:MornLow 59.50000  
## WHT:MornHigh 60.89455  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 60.37185  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 60.80494  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BRN:MornHigh 60.92984 a  
## WHT:MornHigh 60.80743 a  
## WT/BR:MornHigh 60.71866 a  
## BLK:MornHigh 60.11914 a  
## WT/BLK:MornHigh 60.02338 a  
## BL/BR:MornHigh 59.95853 a  
## BRN:MornLow 58.66667 ab  
## WHT:MornLow 58.33333 ab  
## WT/BR:MornLow 58.33333 ab  
## BL/BR:MornLow 57.00000 b  
## BLK:MornLow 57.00000 b  
## WT/BLK:MornLow 56.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT69 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.355 2.271 2.7723 0.04096 \*   
## THIregime 1 66.675 66.675 81.3958 3.526e-09 \*\*\*  
## Colour:THIregime 5 0.915 0.183 0.2235 0.94879   
## Residuals 24 19.660 0.819   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.819149   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.81638 1.668943 6 58 62.72400  
## BLK 60.48223 1.665086 6 58 62.49999  
## BRN 59.20064 1.731215 6 57 60.95486  
## WHT 59.68821 1.541034 6 58 61.40188  
## WT/BLK 59.83173 1.836652 6 57 61.67860  
## WT/BR 59.47963 1.773965 6 57 61.45459  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.615662   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 60.81638 a  
## BLK 60.48223 ab  
## WT/BLK 59.83173 ab  
## WHT 59.68821 ab  
## WT/BR 59.47963 ab  
## BRN 59.20064 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.819149   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.27739 0.6635471 18 60.37185 62.724  
## MornLow 58.55556 1.1991282 18 57.00000 61.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6226565   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.27739 a  
## MornLow 58.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.819149 24 59.91647 1.51055 2.664507  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.96609 0.8152277 3 61.10363 62.72400 61.58713 62.07063  
## BL/BR:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BLK:MornHigh 61.63113 0.7987740 3 60.92864 62.49999 61.19670 61.46477  
## BLK:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## BRN:MornHigh 60.73461 0.3165569 3 60.37185 60.95486 60.62449 60.87713  
## BRN:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WHT:MornHigh 61.04309 0.3107238 3 60.86188 61.40188 60.86370 60.86551  
## WHT:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BLK:MornHigh 61.33013 0.6035620 3 60.63320 61.67860 61.15590 61.67860  
## WT/BLK:MornLow 58.33333 1.1547005 3 57.00000 59.00000 58.00000 59.00000  
## WT/BR:MornHigh 60.95927 0.5472113 3 60.37185 61.45459 60.71161 61.05136  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 62.39731  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 61.98238  
## BLK:MornLow 60.00000  
## BRN:MornHigh 60.91599  
## BRN:MornLow 58.00000  
## WHT:MornHigh 61.13369  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 61.67860  
## WT/BLK:MornLow 59.00000  
## WT/BR:MornHigh 61.25297  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 61.96609 a  
## BLK:MornHigh 61.63113 a  
## WT/BLK:MornHigh 61.33013 a  
## WHT:MornHigh 61.04309 a  
## WT/BR:MornHigh 60.95927 ab  
## BRN:MornHigh 60.73461 ab  
## BL/BR:MornLow 59.66667 abc  
## BLK:MornLow 59.33333 abc  
## WHT:MornLow 58.33333 bc  
## WT/BLK:MornLow 58.33333 bc  
## WT/BR:MornLow 58.00000 c  
## BRN:MornLow 57.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT70 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 38.112 7.622 3.9671 0.009173 \*\*   
## THIregime 1 77.501 77.501 40.3361 1.446e-06 \*\*\*  
## Colour:THIregime 5 2.453 0.491 0.2553 0.932915   
## Residuals 24 46.113 1.921   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.92139   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.97367 1.805314 6 58 62.98535  
## BLK 60.04208 1.562573 6 58 61.60393  
## BRN 58.81299 2.764711 6 54 61.75902  
## WHT 61.05866 1.369853 6 59 62.69496  
## WT/BLK 61.81906 2.263605 6 58 64.55345  
## WT/BR 59.43037 2.206518 6 56 61.82794  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.47444   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 61.81906 a  
## WHT 61.05866 ab  
## BL/BR 60.97367 ab  
## BLK 60.04208 ab  
## WT/BR 59.43037 ab  
## BRN 58.81299 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.92139   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.82339 1.210261 18 58.92571 64.55345  
## MornLow 58.88889 1.906302 18 54.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9536187   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.82339 a  
## MornLow 58.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.92139 24 60.35614 2.296605 4.08078  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 62.28067 0.8305393 3 61.36498 62.98535 61.92833 62.49169  
## BL/BR:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BLK:MornHigh 61.41750 0.3089593 3 61.06086 61.60393 61.32428 61.58770  
## BLK:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## BRN:MornHigh 60.62599 1.4994090 3 58.92571 61.75902 60.05947 61.19324  
## BRN:MornLow 57.00000 2.6457513 3 54.00000 59.00000 56.00000 58.00000  
## WHT:MornHigh 62.11731 0.5735626 3 61.54793 62.69496 61.82849 62.10906  
## WHT:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## WT/BLK:MornHigh 63.30478 1.3617350 3 61.85283 64.55345 62.68044 63.50805  
## WT/BLK:MornLow 60.33333 2.0816660 3 58.00000 62.00000 59.50000 61.00000  
## WT/BR:MornHigh 61.19407 0.7117342 3 60.42412 61.82794 60.87713 61.33013  
## WT/BR:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 62.73852  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 61.59581  
## BLK:MornLow 59.00000  
## BRN:MornHigh 61.47613  
## BRN:MornLow 58.50000  
## WHT:MornHigh 62.40201  
## WHT:MornLow 60.50000  
## WT/BLK:MornHigh 64.03075  
## WT/BLK:MornLow 61.50000  
## WT/BR:MornHigh 61.57904  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 63.30478 a  
## BL/BR:MornHigh 62.28067 ab  
## WHT:MornHigh 62.11731 ab  
## BLK:MornHigh 61.41750 abc  
## WT/BR:MornHigh 61.19407 abc  
## BRN:MornHigh 60.62599 abcd  
## WT/BLK:MornLow 60.33333 abcd  
## WHT:MornLow 60.00000 abcd  
## BL/BR:MornLow 59.66667 abcd  
## BLK:MornLow 58.66667 bcd  
## WT/BR:MornLow 57.66667 cd  
## BRN:MornLow 57.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT71 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 47.500 9.500 13.7008 2.238e-06 \*\*\*  
## THIregime 1 84.767 84.767 122.2481 6.675e-11 \*\*\*  
## Colour:THIregime 5 0.826 0.165 0.2383 0.9416   
## Residuals 24 16.642 0.693   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6933981   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.65616 1.959021 6 56 60.95989  
## BLK 57.87771 1.741723 6 56 59.77787  
## BRN 57.99950 2.011186 6 55 60.07029  
## WHT 58.18937 1.720559 6 56 59.91449  
## WT/BLK 61.21681 1.518305 6 59 62.98535  
## WT/BR 59.26733 2.065198 6 56 61.59148  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.486485   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 61.21681 a  
## WT/BR 59.26733 b  
## BL/BR 58.65616 b  
## WHT 58.18937 b  
## BRN 57.99950 b  
## BLK 57.87771 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6933981   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.40229 1.162352 18 58.89087 62.98535  
## MornLow 57.33333 1.571810 18 55.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5728731   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.40229 a  
## MornLow 57.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6933981 24 58.86781 1.414534 2.451471  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.31232 0.6048233 3 59.76203 60.95989 59.98854 60.21504  
## BL/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BLK:MornHigh 59.42209 0.3087640 3 59.22418 59.77787 59.24420 59.26422  
## BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## BRN:MornHigh 59.66566 0.6712141 3 58.89087 60.07029 59.46335 60.03583  
## BRN:MornLow 56.33333 1.1547005 3 55.00000 57.00000 56.00000 57.00000  
## WHT:MornHigh 59.71207 0.3340944 3 59.32645 59.91449 59.61086 59.89527  
## WHT:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WT/BLK:MornHigh 62.43361 0.5668165 3 61.85283 62.98535 62.15774 62.46265  
## WT/BLK:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## WT/BR:MornHigh 60.86800 0.8017915 3 60.00596 61.59148 60.50626 61.00656  
## WT/BR:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 60.58746  
## BL/BR:MornLow 57.50000  
## BLK:MornHigh 59.52105  
## BLK:MornLow 56.50000  
## BRN:MornHigh 60.05306  
## BRN:MornLow 57.00000  
## WHT:MornHigh 59.90488  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 62.72400  
## WT/BLK:MornLow 60.50000  
## WT/BR:MornHigh 61.29902  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.43361 a  
## WT/BR:MornHigh 60.86800 ab  
## BL/BR:MornHigh 60.31232 ab  
## WT/BLK:MornLow 60.00000 abc  
## WHT:MornHigh 59.71207 bc  
## BRN:MornHigh 59.66566 bc  
## BLK:MornHigh 59.42209 bcd  
## WT/BR:MornLow 57.66667 cde  
## BL/BR:MornLow 57.00000 de  
## WHT:MornLow 56.66667 e  
## BLK:MornLow 56.33333 e  
## BRN:MornLow 56.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT72 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 8.344 1.669 1.3391 0.2819   
## THIregime 1 70.986 70.986 56.9614 8.711e-08 \*\*\*  
## Colour:THIregime 5 0.277 0.055 0.0445 0.9987   
## Residuals 24 29.909 1.246   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.246221   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.59212 1.767879 6 58 62.77627  
## BLK 59.76468 1.774311 6 57 61.55980  
## BRN 59.22470 2.026029 6 56 61.49192  
## WHT 59.72447 1.579902 6 58 61.48259  
## WT/BLK 60.38286 1.693456 6 58 62.46265  
## WT/BR 60.40319 2.119507 6 57 62.93308  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.992813   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 60.59212 a  
## WT/BR 60.40319 a  
## WT/BLK 60.38286 a  
## BLK 59.76468 a  
## WHT 59.72447 a  
## BRN 59.22470 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.246221   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.41956 0.7765997 18 59.90946 62.93308  
## MornLow 58.61111 1.2897281 18 56.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7680059   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.41956 a  
## MornLow 58.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.246221 24 60.01534 1.860095 3.286495  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.85090 0.8523858 3 61.09782 62.77627 61.38821 61.67860  
## BL/BR:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## BLK:MornHigh 61.19602 0.6251952 3 60.47412 61.55980 61.01413 61.55415  
## BLK:MornLow 58.33333 1.1547005 3 57.00000 59.00000 58.00000 59.00000  
## BRN:MornHigh 60.78273 0.8038892 3 59.90946 61.49192 60.42814 60.94682  
## BRN:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## WHT:MornHigh 61.11562 0.3179217 3 60.92359 61.48259 60.93213 60.94067  
## WHT:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BLK:MornHigh 61.76572 0.6577164 3 61.15590 62.46265 61.41725 61.67860  
## WT/BLK:MornLow 59.00000 1.0000000 3 58.00000 60.00000 58.50000 59.00000  
## WT/BR:MornHigh 61.80637 1.1506438 3 60.63320 62.93308 61.24302 61.85283  
## WT/BR:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## Q75  
## BL/BR:MornHigh 62.22743  
## BL/BR:MornLow 60.00000  
## BLK:MornHigh 61.55698  
## BLK:MornLow 59.00000  
## BRN:MornHigh 61.21937  
## BRN:MornLow 58.50000  
## WHT:MornHigh 61.21163  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 62.07063  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 62.39296  
## WT/BR:MornLow 60.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 61.85090 a  
## WT/BR:MornHigh 61.80637 a  
## WT/BLK:MornHigh 61.76572 a  
## BLK:MornHigh 61.19602 ab  
## WHT:MornHigh 61.11562 ab  
## BRN:MornHigh 60.78273 abc  
## BL/BR:MornLow 59.33333 abc  
## WT/BLK:MornLow 59.00000 abc  
## WT/BR:MornLow 59.00000 abc  
## BLK:MornLow 58.33333 bc  
## WHT:MornLow 58.33333 bc  
## BRN:MornLow 57.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT73 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 60.413 12.083 9.0932 5.899e-05 \*\*\*  
## THIregime 1 102.565 102.565 77.1897 5.780e-09 \*\*\*  
## Colour:THIregime 5 0.815 0.163 0.1227 0.986   
## Residuals 24 31.890 1.329   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.328746   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.45436 2.004098 6 57 61.54793  
## BLK 58.69025 1.981846 6 56 60.88319  
## BRN 59.62882 1.921704 6 57 61.74829  
## WHT 58.54406 2.653182 6 54 61.18857  
## WT/BLK 62.39922 2.005982 6 59 64.55345  
## WT/BR 60.41075 2.086552 6 58 62.89823  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.057738   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 62.39922 a  
## WT/BR 60.41075 ab  
## BRN 59.62882 b  
## BL/BR 59.45436 b  
## BLK 58.69025 b  
## WHT 58.54406 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.328746   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.54249 1.385167 18 58.91991 64.55345  
## MornLow 58.16667 1.886484 18 54.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.793027   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.54249 a  
## MornLow 58.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.328746 24 59.85458 1.925855 3.393566  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.24205 0.3466510 3 60.86551 61.54793 61.08911 61.31271  
## BL/BR:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BLK:MornHigh 60.38051 0.4984070 3 59.88649 60.88319 60.12917 60.37185  
## BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BRN:MornHigh 61.25763 0.5227226 3 60.70787 61.74829 61.01230 61.31673  
## BRN:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WHT:MornHigh 60.42146 1.3004852 3 58.91991 61.18857 60.03790 61.15590  
## WHT:MornLow 56.66667 2.3094011 3 54.00000 58.00000 56.00000 58.00000  
## WT/BLK:MornHigh 63.79844 1.0892487 3 62.54977 64.55345 63.42093 64.29210  
## WT/BLK:MornLow 61.00000 1.7320508 3 59.00000 62.00000 60.50000 62.00000  
## WT/BR:MornHigh 62.15484 0.6522318 3 61.67860 62.89823 61.78314 61.88768  
## WT/BR:MornLow 58.66667 1.1547005 3 58.00000 60.00000 58.00000 58.00000  
## Q75  
## BL/BR:MornHigh 61.43032  
## BL/BR:MornLow 58.00000  
## BLK:MornHigh 60.62752  
## BLK:MornLow 57.50000  
## BRN:MornHigh 61.53251  
## BRN:MornLow 58.50000  
## WHT:MornHigh 61.17223  
## WHT:MornLow 58.00000  
## WT/BLK:MornHigh 64.42278  
## WT/BLK:MornLow 62.00000  
## WT/BR:MornHigh 62.39296  
## WT/BR:MornLow 59.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 63.79844 a  
## WT/BR:MornHigh 62.15484 ab  
## BRN:MornHigh 61.25763 abc  
## BL/BR:MornHigh 61.24205 abc  
## WT/BLK:MornLow 61.00000 abcd  
## WHT:MornHigh 60.42146 abcd  
## BLK:MornHigh 60.38051 bcde  
## WT/BR:MornLow 58.66667 cdef  
## BRN:MornLow 58.00000 cdef  
## BL/BR:MornLow 57.66667 def  
## BLK:MornLow 57.00000 ef  
## WHT:MornLow 56.66667 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT74 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.915 3.383 1.9095 0.1301   
## THIregime 1 72.884 72.884 41.1381 1.243e-06 \*\*\*  
## Colour:THIregime 5 0.824 0.165 0.0930 0.9925   
## Residuals 24 42.520 1.772   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.771683   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.53355 1.719872 6 58 62.67173  
## BLK 58.92816 2.063391 6 56 61.41725  
## BRN 60.25193 1.988491 6 57 62.58461  
## WHT 59.47009 2.032100 6 56 61.47533  
## WT/BLK 60.76732 1.938062 6 58 63.24670  
## WT/BR 59.25281 2.047076 6 56 61.52926  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.376086   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.76732 a  
## BL/BR 60.53355 a  
## BRN 60.25193 a  
## WHT 59.47009 a  
## WT/BR 59.25281 a  
## BLK 58.92816 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.771683   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.29018 0.9645317 18 59.79233 63.2467  
## MornLow 58.44444 1.6169042 18 56.00000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9157144   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.29018 a  
## MornLow 58.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.771683 24 59.86731 2.223326 3.918577  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.73377 0.8602229 3 60.98167 62.67173 61.26480 61.54793  
## BL/BR:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## BLK:MornHigh 60.52300 0.8247176 3 59.79233 61.41725 60.07587 60.35940  
## BLK:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## BRN:MornHigh 61.50386 1.0877805 3 60.40919 62.58461 60.96348 61.51777  
## BRN:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## WHT:MornHigh 60.94017 0.9165806 3 59.88182 61.47533 60.67259 61.46337  
## WHT:MornLow 58.00000 1.7320508 3 56.00000 59.00000 57.50000 59.00000  
## WT/BLK:MornHigh 62.20130 0.9423108 3 61.41725 63.24670 61.67860 61.93995  
## WT/BLK:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## WT/BR:MornHigh 60.83896 0.7716101 3 60.00596 61.52926 60.49381 60.98167  
## WT/BR:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 62.10983  
## BL/BR:MornLow 60.00000  
## BLK:MornHigh 60.88833  
## BLK:MornLow 58.00000  
## BRN:MornHigh 62.05119  
## BRN:MornLow 60.00000  
## WHT:MornHigh 61.46935  
## WHT:MornLow 59.00000  
## WT/BLK:MornHigh 62.59333  
## WT/BLK:MornLow 60.00000  
## WT/BR:MornHigh 61.25546  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.20130 a  
## BL/BR:MornHigh 61.73377 ab  
## BRN:MornHigh 61.50386 abc  
## WHT:MornHigh 60.94017 abcd  
## WT/BR:MornHigh 60.83896 abcd  
## BLK:MornHigh 60.52300 abcd  
## BL/BR:MornLow 59.33333 abcd  
## WT/BLK:MornLow 59.33333 abcd  
## BRN:MornLow 59.00000 abcd  
## WHT:MornLow 58.00000 bcd  
## WT/BR:MornLow 57.66667 cd  
## BLK:MornLow 57.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT75 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.750 3.750 3.7278 0.01224 \*   
## THIregime 1 68.682 68.682 68.2771 1.772e-08 \*\*\*  
## Colour:THIregime 5 1.850 0.370 0.3678 0.86557   
## Residuals 24 24.142 1.006   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.005937   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.50524 1.346739 6 59 62.00529  
## BLK 59.49125 1.785985 6 57 61.52926  
## BRN 58.92765 2.061082 6 56 61.41725  
## WHT 60.97617 1.649975 6 58 62.54977  
## WT/BLK 59.87529 1.736035 6 58 61.67860  
## WT/BR 59.17856 1.986759 6 56 61.41725  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.790419   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 60.97617 a  
## BL/BR 60.50524 ab  
## WT/BLK 59.87529 ab  
## BLK 59.49125 ab  
## WT/BR 59.17856 b  
## BRN 58.92765 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.005937   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.20694 0.7782955 18 59.79688 62.54977  
## MornLow 58.44444 1.4234268 18 56.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6900054   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.20694 a  
## MornLow 58.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.005937 24 59.82569 1.676477 2.95271  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.67715 0.2843106 3 61.50437 62.00529 61.51308 61.52179  
## BL/BR:MornLow 59.33333 0.5773503 3 59.00000 60.00000 59.00000 59.00000  
## BLK:MornHigh 60.98250 0.5503302 3 60.42867 61.52926 60.70913 60.98959  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 60.52196 0.8132132 3 59.82905 61.41725 60.07431 60.31958  
## BRN:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## WHT:MornHigh 61.95233 0.9733132 3 60.82921 62.54977 61.65362 62.47802  
## WHT:MornLow 60.00000 1.7320508 3 58.00000 61.00000 59.50000 61.00000  
## WT/BLK:MornHigh 61.41725 0.2613500 3 61.15590 61.67860 61.28658 61.41725  
## WT/BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BR:MornHigh 60.69045 0.8229568 3 59.79688 61.41725 60.32705 60.85721  
## WT/BR:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## Q75  
## BL/BR:MornHigh 61.76354  
## BL/BR:MornLow 59.50000  
## BLK:MornHigh 61.25942  
## BLK:MornLow 58.50000  
## BRN:MornHigh 60.86842  
## BRN:MornLow 58.00000  
## WHT:MornHigh 62.51390  
## WHT:MornLow 61.00000  
## WT/BLK:MornHigh 61.54793  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 61.13723  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 61.95233 a  
## BL/BR:MornHigh 61.67715 a  
## WT/BLK:MornHigh 61.41725 a  
## BLK:MornHigh 60.98250 ab  
## WT/BR:MornHigh 60.69045 abc  
## BRN:MornHigh 60.52196 abcd  
## WHT:MornLow 60.00000 abcde  
## BL/BR:MornLow 59.33333 abcde  
## WT/BLK:MornLow 58.33333 bcde  
## BLK:MornLow 58.00000 cde  
## WT/BR:MornLow 57.66667 de  
## BRN:MornLow 57.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT76 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 51.680 10.336 2.4123 0.0659521 .   
## THIregime 1 68.486 68.486 15.9836 0.0005296 \*\*\*  
## Colour:THIregime 5 3.760 0.752 0.1755 0.9691808   
## Residuals 24 102.835 4.285   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.284779   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 57.76075 4.452890 6 50 62.09676  
## BLK 59.09850 1.621502 6 57 60.70448  
## BRN 58.19667 1.727029 6 56 59.94967  
## WHT 61.04536 1.358411 6 59 62.72400  
## WT/BLK 60.69472 2.140970 6 57 62.98535  
## WT/BR 59.47963 1.773965 6 57 61.45459  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.695161   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 61.04536 a  
## WT/BLK 60.69472 a  
## WT/BR 59.47963 a  
## BLK 59.09850 a  
## BRN 58.19667 a  
## BL/BR 57.76075 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.284779   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.75855 1.539181 18 56.16121 62.98535  
## MornLow 58.00000 2.634611 18 50.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.42407   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.75855 a  
## MornLow 58.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.284779 24 59.37927 3.486016 6.093961  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.52149 3.0446470 3 56.16121 62.09676 58.23386 60.30651  
## BL/BR:MornLow 56.00000 5.5677644 3 50.00000 61.00000 53.50000 57.00000  
## BLK:MornHigh 60.53034 0.2989308 3 60.18517 60.70448 60.44327 60.70138  
## BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BRN:MornHigh 59.72668 0.3170068 3 59.36379 59.94967 59.61518 59.86657  
## BRN:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WHT:MornHigh 61.75739 0.8711580 3 61.03291 62.72400 61.27408 61.51526  
## WHT:MornLow 60.33333 1.5275252 3 59.00000 62.00000 59.50000 60.00000  
## WT/BLK:MornHigh 62.05611 1.2513706 3 60.63320 62.98535 61.59148 62.54977  
## WT/BLK:MornLow 59.33333 2.0816660 3 57.00000 61.00000 58.50000 60.00000  
## WT/BR:MornHigh 60.95927 0.5472113 3 60.37185 61.45459 60.71161 61.05136  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 61.20164  
## BL/BR:MornLow 59.00000  
## BLK:MornHigh 60.70293  
## BLK:MornLow 58.00000  
## BRN:MornHigh 59.90812  
## BRN:MornLow 57.00000  
## WHT:MornHigh 62.11963  
## WHT:MornLow 61.00000  
## WT/BLK:MornHigh 62.76756  
## WT/BLK:MornLow 60.50000  
## WT/BR:MornHigh 61.25297  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 62.05611 a  
## WHT:MornHigh 61.75739 a  
## WT/BR:MornHigh 60.95927 a  
## BLK:MornHigh 60.53034 a  
## WHT:MornLow 60.33333 a  
## BRN:MornHigh 59.72668 a  
## BL/BR:MornHigh 59.52149 a  
## WT/BLK:MornLow 59.33333 a  
## WT/BR:MornLow 58.00000 a  
## BLK:MornLow 57.66667 a  
## BRN:MornLow 56.66667 a  
## BL/BR:MornLow 56.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT77 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 47.270 9.454 4.8337 0.003375 \*\*   
## THIregime 1 60.697 60.697 31.0339 9.875e-06 \*\*\*  
## Colour:THIregime 5 4.326 0.865 0.4424 0.814451   
## Residuals 24 46.940 1.956   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.955838   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.76446 1.6221976 6 58 61.56244  
## BLK 59.31280 2.1129203 6 56 61.67860  
## BRN 58.67338 3.1720868 6 54 62.49999  
## WHT 62.05294 0.8822469 6 61 63.05069  
## WT/BLK 59.34564 1.6500471 6 57 61.33013  
## WT/BR 60.97495 1.3166515 6 59 62.64933  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.496524   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 62.05294 a  
## WT/BR 60.97495 ab  
## BL/BR 59.76446 ab  
## WT/BLK 59.34564 b  
## BLK 59.31280 b  
## BRN 58.67338 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.955838   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.31917 1.161263 18 58.74344 63.05069  
## MornLow 58.72222 2.108960 18 54.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9621295   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.31917 a  
## MornLow 58.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.955838 24 60.0207 2.330051 4.1172  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.19559 0.3179769 3 60.99909 61.56244 61.01216 61.02523  
## BL/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BLK:MornHigh 60.95894 0.8357311 3 60.04232 61.67860 60.59911 61.15590  
## BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## BRN:MornHigh 60.34677 1.9377034 3 58.74344 62.49999 59.27016 59.79688  
## BRN:MornLow 57.00000 3.6055513 3 54.00000 61.00000 55.00000 56.00000  
## WHT:MornHigh 62.77254 0.2430590 3 62.60101 63.05069 62.63347 62.66592  
## WHT:MornLow 61.33333 0.5773503 3 61.00000 62.00000 61.00000 61.00000  
## WT/BLK:MornHigh 60.69128 0.6118874 3 60.11050 61.33013 60.37185 60.63320  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 61.94991 0.6944978 3 61.26044 62.64933 61.60020 61.93995  
## WT/BR:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## Q75  
## BL/BR:MornHigh 61.29383  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 61.41725  
## BLK:MornLow 58.50000  
## BRN:MornHigh 61.14843  
## BRN:MornLow 58.50000  
## WHT:MornHigh 62.85830  
## WHT:MornLow 61.50000  
## WT/BLK:MornHigh 60.98167  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 62.29464  
## WT/BR:MornLow 60.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 62.77254 a  
## WT/BR:MornHigh 61.94991 ab  
## WHT:MornLow 61.33333 abc  
## BL/BR:MornHigh 61.19559 abc  
## BLK:MornHigh 60.95894 abcd  
## WT/BLK:MornHigh 60.69128 abcd  
## BRN:MornHigh 60.34677 abcd  
## WT/BR:MornLow 60.00000 abcd  
## BL/BR:MornLow 58.33333 bcd  
## WT/BLK:MornLow 58.00000 bcd  
## BLK:MornLow 57.66667 cd  
## BRN:MornLow 57.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT78 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 22.563 4.513 2.4811 0.06016 .   
## THIregime 1 57.113 57.113 31.4030 9.094e-06 \*\*\*  
## Colour:THIregime 5 1.730 0.346 0.1902 0.96340   
## Residuals 24 43.649 1.819   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.818715   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 60.81662 1.677045 6 58 62.72400  
## BLK 59.58642 1.882832 6 57 61.72838  
## BRN 59.74382 2.780657 6 56 63.13469  
## WHT 61.32301 1.156823 6 60 62.62599  
## WT/BLK 59.06282 1.583933 6 57 60.63320  
## WT/BR 60.69130 1.600546 6 58 62.46265  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.407418   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 61.32301 a  
## BL/BR 60.81662 a  
## WT/BR 60.69130 a  
## BRN 59.74382 a  
## BLK 59.58642 a  
## WT/BLK 59.06282 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.818715   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.46355 0.9999153 18 59.86925 63.13469  
## MornLow 58.94444 1.7311072 18 56.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9277895   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.46355 a  
## MornLow 58.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.818715 24 60.204 2.240047 3.97025  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.96657 0.8548098 3 61.03974 62.72400 61.58785 62.13596  
## BL/BR:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BLK:MornHigh 61.17284 0.5589847 3 60.61047 61.72838 60.89507 61.17966  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 61.15430 1.7402281 3 59.86925 63.13469 60.16411 60.45897  
## BRN:MornLow 58.33333 3.2145503 3 56.00000 62.00000 56.50000 57.00000  
## WHT:MornHigh 62.31269 0.2718165 3 62.13981 62.62599 62.15603 62.17226  
## WHT:MornLow 60.33333 0.5773503 3 60.00000 61.00000 60.00000 60.00000  
## WT/BLK:MornHigh 60.45897 0.3017810 3 60.11050 60.63320 60.37185 60.63320  
## WT/BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WT/BR:MornHigh 61.71594 0.9598982 3 60.63320 62.46265 61.34258 62.05196  
## WT/BR:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## Q75  
## BL/BR:MornHigh 62.42998  
## BL/BR:MornLow 60.50000  
## BLK:MornHigh 61.45402  
## BLK:MornLow 58.50000  
## BRN:MornHigh 61.79683  
## BRN:MornLow 59.50000  
## WHT:MornHigh 62.39913  
## WHT:MornLow 60.50000  
## WT/BLK:MornHigh 60.63320  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 62.25730  
## WT/BR:MornLow 60.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 62.31269 a  
## BL/BR:MornHigh 61.96657 ab  
## WT/BR:MornHigh 61.71594 ab  
## BLK:MornHigh 61.17284 abc  
## BRN:MornHigh 61.15430 abc  
## WT/BLK:MornHigh 60.45897 abc  
## WHT:MornLow 60.33333 abc  
## BL/BR:MornLow 59.66667 abc  
## WT/BR:MornLow 59.66667 abc  
## BRN:MornLow 58.33333 bc  
## BLK:MornLow 58.00000 bc  
## WT/BLK:MornLow 57.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT79 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 41.913 8.383 6.2401 0.0007672 \*\*\*  
## THIregime 1 55.705 55.705 41.4669 1.168e-06 \*\*\*  
## Colour:THIregime 5 3.416 0.683 0.5086 0.7669190   
## Residuals 24 32.241 1.343   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.343363   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 61.60404 1.612296 6 59 63.45578  
## BLK 59.40402 1.697603 6 57 61.35502  
## BRN 59.38572 1.680973 6 57 61.31673  
## WHT 60.14350 1.909074 6 57 62.35504  
## WT/BLK 58.52621 1.851192 6 56 60.89455  
## WT/BR 58.40010 1.701146 6 56 60.42412  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.069026   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 61.60404 a  
## WHT 60.14350 ab  
## BLK 59.40402 b  
## BRN 59.38572 b  
## WT/BLK 58.52621 b  
## WT/BR 58.40010 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.343363   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.82120 1.072935 18 59.23933 63.45578  
## MornLow 58.33333 1.847096 18 56.00000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7973771   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.82120 a  
## MornLow 58.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.343363 24 59.57726 1.945432 3.412181  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 62.20808 1.1849729 3 61.09782 63.45578 61.58422 62.07063  
## BL/BR:MornLow 61.00000 2.0000000 3 59.00000 63.00000 60.00000 61.00000  
## BLK:MornHigh 60.80804 0.5392778 3 60.27681 61.35502 60.53455 60.79228  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 60.77144 0.5509293 3 60.21504 61.31673 60.49879 60.78254  
## BRN:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WHT:MornHigh 61.28700 1.0902390 3 60.17584 62.35504 60.75299 61.33013  
## WHT:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## WT/BLK:MornHigh 60.05242 0.7611292 3 59.41357 60.89455 59.63136 59.84915  
## WT/BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BR:MornHigh 59.80020 0.5949049 3 59.23933 60.42412 59.48824 59.73714  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 62.76320  
## BL/BR:MornLow 62.00000  
## BLK:MornHigh 61.07365  
## BLK:MornLow 58.50000  
## BRN:MornHigh 61.04964  
## BRN:MornLow 58.50000  
## WHT:MornHigh 61.84258  
## WHT:MornLow 60.00000  
## WT/BLK:MornHigh 60.37185  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 60.08063  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 62.20808 a  
## WHT:MornHigh 61.28700 ab  
## BL/BR:MornLow 61.00000 ab  
## BLK:MornHigh 60.80804 ab  
## BRN:MornHigh 60.77144 ab  
## WT/BLK:MornHigh 60.05242 abc  
## WT/BR:MornHigh 59.80020 abc  
## WHT:MornLow 59.00000 abc  
## BLK:MornLow 58.00000 bc  
## BRN:MornLow 58.00000 bc  
## WT/BLK:MornLow 57.00000 c  
## WT/BR:MornLow 57.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT80 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 57.655 11.531 11.4794 9.726e-06 \*\*\*  
## THIregime 1 56.451 56.451 56.1983 9.777e-08 \*\*\*  
## Colour:THIregime 5 4.181 0.836 0.8325 0.5394   
## Residuals 24 24.108 1.004   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.004496   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 62.85971 0.7262126 6 62 63.76940  
## BLK 59.20521 2.3592278 6 55 61.45134  
## BRN 59.51595 1.8080047 6 57 61.56659  
## WHT 60.01360 1.6926290 6 58 62.07831  
## WT/BLK 59.57038 1.4163733 6 58 61.15590  
## WT/BR 59.34854 1.6476284 6 57 61.26044  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.789136   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 62.85971 a  
## WHT 60.01360 b  
## WT/BLK 59.57038 b  
## BRN 59.51595 b  
## WT/BR 59.34854 b  
## BLK 59.20521 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.004496   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.33780 1.123128 18 59.3389 63.7694  
## MornLow 58.83333 1.947849 18 55.0000 63.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6895111   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.33780 a  
## MornLow 58.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.004496 24 60.08556 1.668031 2.950595  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 63.38609 0.3923153 3 62.98535 63.76940 63.19443 63.40351  
## BL/BR:MornLow 62.33333 0.5773503 3 62.00000 63.00000 62.00000 62.00000  
## BLK:MornHigh 60.74375 1.2166490 3 59.33890 61.45134 60.38995 61.44101  
## BLK:MornLow 57.66667 2.3094011 3 55.00000 59.00000 57.00000 59.00000  
## BRN:MornHigh 61.03189 0.5271763 3 60.51258 61.56659 60.76455 61.01651  
## BRN:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WHT:MornHigh 61.36052 0.6216882 3 60.99256 62.07831 61.00163 61.01071  
## WHT:MornLow 58.66667 1.1547005 3 58.00000 60.00000 58.00000 58.00000  
## WT/BLK:MornHigh 60.80743 0.3017810 3 60.63320 61.15590 60.63320 60.63320  
## WT/BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BR:MornHigh 60.69709 0.5753219 3 60.11050 61.26044 60.41541 60.72032  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 63.58646  
## BL/BR:MornLow 62.50000  
## BLK:MornHigh 61.44617  
## BLK:MornLow 59.00000  
## BRN:MornHigh 61.29155  
## BRN:MornLow 58.50000  
## WHT:MornHigh 61.54451  
## WHT:MornLow 59.00000  
## WT/BLK:MornHigh 60.89455  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.99038  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 63.38609 a  
## BL/BR:MornLow 62.33333 a  
## WHT:MornHigh 61.36052 ab  
## BRN:MornHigh 61.03189 abc  
## WT/BLK:MornHigh 60.80743 abcd  
## BLK:MornHigh 60.74375 abcd  
## WT/BR:MornHigh 60.69709 abcd  
## WHT:MornLow 58.66667 bcde  
## WT/BLK:MornLow 58.33333 cde  
## BRN:MornLow 58.00000 de  
## WT/BR:MornLow 58.00000 de  
## BLK:MornLow 57.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT81 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 35.310 7.062 11.2802 1.12e-05 \*\*\*  
## THIregime 1 53.651 53.651 85.6970 2.17e-09 \*\*\*  
## Colour:THIregime 5 2.577 0.515 0.8233 0.5454   
## Residuals 24 15.025 0.626   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.626052   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 61.52691 1.031804 6 60 62.67173  
## BLK 59.27694 1.810351 6 57 61.06086  
## BRN 59.75148 1.761773 6 57 61.55798  
## WHT 61.56562 1.487026 6 59 63.24670  
## WT/BLK 59.28756 1.593468 6 57 61.15590  
## WT/BR 59.58283 1.433318 6 58 61.23057  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.412454   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 61.56562 a  
## BL/BR 61.52691 a  
## BRN 59.75148 b  
## WT/BR 59.58283 b  
## WT/BLK 59.28756 b  
## BLK 59.27694 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.626052   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.38600 0.9064411 18 59.93627 63.2467  
## MornLow 58.94444 1.5135553 18 57.00000 62.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5443425   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.38600 a  
## MornLow 58.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.626052 24 60.16522 1.315103 2.329382  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 62.38715 0.3288967 3 62.02707 62.67173 62.24486 62.46265  
## BL/BR:MornLow 60.66667 0.5773503 3 60.00000 61.00000 60.50000 61.00000  
## BLK:MornHigh 60.88722 0.2848074 3 60.55853 61.06086 60.80040 61.04227  
## BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BRN:MornHigh 61.16962 0.6267966 3 60.44652 61.55798 60.97544 61.50437  
## BRN:MornLow 58.33333 1.1547005 3 57.00000 59.00000 58.00000 59.00000  
## WHT:MornHigh 62.46457 0.8777460 3 61.51526 63.24670 62.07351 62.63176  
## WHT:MornLow 60.66667 1.5275252 3 59.00000 62.00000 60.00000 61.00000  
## WT/BLK:MornHigh 60.57512 0.6118874 3 59.93627 61.15590 60.28473 60.63320  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.83232 0.3448926 3 60.63320 61.23057 60.63320 60.63320  
## WT/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## Q75  
## BL/BR:MornHigh 62.56719  
## BL/BR:MornLow 61.00000  
## BLK:MornHigh 61.05157  
## BLK:MornLow 58.00000  
## BRN:MornHigh 61.53117  
## BRN:MornLow 59.00000  
## WHT:MornHigh 62.93923  
## WHT:MornLow 61.50000  
## WT/BLK:MornHigh 60.89455  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.93189  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 62.46457 a  
## BL/BR:MornHigh 62.38715 a  
## BRN:MornHigh 61.16962 a  
## BLK:MornHigh 60.88722 a  
## WT/BR:MornHigh 60.83232 a  
## BL/BR:MornLow 60.66667 a  
## WHT:MornLow 60.66667 a  
## WT/BLK:MornHigh 60.57512 ab  
## BRN:MornLow 58.33333 bc  
## WT/BR:MornLow 58.33333 bc  
## WT/BLK:MornLow 58.00000 c  
## BLK:MornLow 57.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT82 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 44.375 8.875 4.6336 0.004225 \*\*   
## THIregime 1 51.852 51.852 27.0713 2.487e-05 \*\*\*  
## Colour:THIregime 5 3.298 0.660 0.3444 0.880758   
## Residuals 24 45.969 1.915   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.915375   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.78279 1.936861 6 57 62.20130  
## BLK 60.73980 1.434189 6 59 62.49999  
## BRN 59.04408 1.564313 6 57 60.59835  
## WHT 61.65474 1.629167 6 59 63.47901  
## WT/BLK 59.36742 1.671168 6 57 61.33013  
## WT/BR 58.27865 2.553698 6 54 61.24302  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.470564   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 61.65474 a  
## BLK 60.73980 ab  
## BL/BR 59.78279 ab  
## WT/BLK 59.36742 ab  
## BRN 59.04408 b  
## WT/BR 58.27865 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.915375   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.01138 1.172341 18 58.31839 63.47901  
## MornLow 58.61111 2.033221 18 54.00000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.952125   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.01138 a  
## MornLow 58.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.915375 24 59.81125 2.313897 4.074388  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.89891 1.1437111 3 60.05823 62.20130 60.24771 60.43719  
## BL/BR:MornLow 58.66667 2.0816660 3 57.00000 61.00000 57.50000 58.00000  
## BLK:MornHigh 61.81294 0.5950175 3 61.46477 62.49999 61.46942 61.47407  
## BLK:MornLow 59.66667 1.1547005 3 59.00000 61.00000 59.00000 59.00000  
## BRN:MornHigh 60.42150 0.3041602 3 60.07029 60.59835 60.33308 60.59586  
## BRN:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WHT:MornHigh 62.30948 1.1616376 3 61.15590 63.47901 61.72472 62.29354  
## WHT:MornLow 61.00000 2.0000000 3 59.00000 63.00000 60.00000 61.00000  
## WT/BLK:MornHigh 60.73484 0.6103350 3 60.11050 61.33013 60.43719 60.76388  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 59.89063 1.4746601 3 58.31839 61.24302 59.21444 60.11050  
## WT/BR:MornLow 56.66667 2.5166115 3 54.00000 59.00000 55.50000 57.00000  
## Q75  
## BL/BR:MornHigh 61.31924  
## BL/BR:MornLow 59.50000  
## BLK:MornHigh 61.98703  
## BLK:MornLow 60.00000  
## BRN:MornHigh 60.59711  
## BRN:MornLow 58.00000  
## WHT:MornHigh 62.88628  
## WHT:MornLow 62.00000  
## WT/BLK:MornHigh 61.04700  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.67676  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 62.30948 a  
## BLK:MornHigh 61.81294 ab  
## WHT:MornLow 61.00000 abc  
## BL/BR:MornHigh 60.89891 abc  
## WT/BLK:MornHigh 60.73484 abcd  
## BRN:MornHigh 60.42150 abcd  
## WT/BR:MornHigh 59.89063 abcd  
## BLK:MornLow 59.66667 abcd  
## BL/BR:MornLow 58.66667 abcd  
## WT/BLK:MornLow 58.00000 bcd  
## BRN:MornLow 57.66667 cd  
## WT/BR:MornLow 56.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT83 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.035 1.207 0.9137 0.4888   
## THIregime 1 60.109 60.109 45.4974 5.621e-07 \*\*\*  
## Colour:THIregime 5 0.561 0.112 0.0849 0.9939   
## Residuals 24 31.708 1.321   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.321146   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.77432 1.283029 6 58 61.10363  
## BLK 59.35644 1.650219 6 57 61.25546  
## BRN 59.58248 2.270111 6 56 62.27099  
## WHT 59.61117 1.459967 6 58 61.24814  
## WT/BLK 59.24400 1.558225 6 57 61.15590  
## WT/BR 58.51791 2.095972 6 55 60.63320  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.051845   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 59.77432 a  
## WHT 59.61117 a  
## BRN 59.58248 a  
## BLK 59.35644 a  
## WT/BLK 59.24400 a  
## WT/BR 58.51791 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.321146   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.63988 0.7420008 18 58.84109 62.27099  
## MornLow 58.05556 1.3048427 18 55.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7907559   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.63988 a  
## MornLow 58.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.321146 24 59.34772 1.93674 3.383848  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.88197 0.3184539 3 60.51704 61.10363 60.77113 61.02523  
## BL/BR:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## BLK:MornHigh 60.71287 0.5369346 3 60.18178 61.25546 60.44158 60.70138  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 60.83162 1.3671479 3 59.55046 62.27099 60.11194 60.67341  
## BRN:MornLow 58.33333 2.5166115 3 56.00000 61.00000 57.00000 58.00000  
## WHT:MornHigh 60.88900 0.3112173 3 60.69854 61.24814 60.70943 60.72032  
## WHT:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BLK:MornHigh 60.48801 0.6538588 3 59.84915 61.15590 60.15406 60.45897  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.03583 1.0346777 3 58.84109 60.63320 59.73714 60.63320  
## WT/BR:MornLow 57.00000 1.7320508 3 55.00000 58.00000 56.50000 58.00000  
## Q75  
## BL/BR:MornHigh 61.06443  
## BL/BR:MornLow 59.00000  
## BLK:MornHigh 60.97842  
## BLK:MornLow 58.50000  
## BRN:MornHigh 61.47220  
## BRN:MornLow 59.50000  
## WHT:MornHigh 60.98423  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 60.80743  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.63320  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 60.88900 a  
## BL/BR:MornHigh 60.88197 a  
## BRN:MornHigh 60.83162 a  
## BLK:MornHigh 60.71287 a  
## WT/BLK:MornHigh 60.48801 a  
## WT/BR:MornHigh 60.03583 ab  
## BL/BR:MornLow 58.66667 ab  
## BRN:MornLow 58.33333 ab  
## WHT:MornLow 58.33333 ab  
## BLK:MornLow 58.00000 ab  
## WT/BLK:MornLow 58.00000 ab  
## WT/BR:MornLow 57.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT84 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 42.169 8.434 6.4041 0.0006523 \*\*\*  
## THIregime 1 52.167 52.167 39.6121 1.662e-06 \*\*\*  
## Colour:THIregime 5 3.100 0.620 0.4708 0.7941961   
## Residuals 24 31.606 1.317   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.316934   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 61.72213 1.058002 6 60 62.85468  
## BLK 59.25730 1.791123 6 57 61.05634  
## BRN 60.01681 1.696285 6 58 62.08929  
## WHT 61.33297 1.171516 6 60 62.69325  
## WT/BLK 59.43971 2.234926 6 56 62.20130  
## WT/BR 58.78705 1.949974 6 56 61.26044  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.048572   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 61.72213 a  
## WHT 61.33297 ab  
## BRN 60.01681 abc  
## WT/BLK 59.43971 bc  
## BLK 59.25730 c  
## WT/BR 58.78705 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.316934   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.29643 1.114013 18 59.0651 62.85468  
## MornLow 58.88889 1.811366 18 56.0000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7894945   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.29643 a  
## MornLow 58.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.316934 24 60.09266 1.90968 3.37845  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 62.44426 0.4837423 3 61.91091 62.85468 62.23905 62.56719  
## BL/BR:MornLow 61.00000 1.0000000 3 60.00000 62.00000 60.50000 61.00000  
## BLK:MornHigh 60.84793 0.3108485 3 60.49065 61.05634 60.74373 60.99682  
## BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BRN:MornHigh 61.36696 0.6256518 3 60.99507 62.08929 61.00579 61.01651  
## BRN:MornLow 58.66667 1.1547005 3 58.00000 60.00000 58.00000 58.00000  
## WHT:MornHigh 62.33262 0.3161420 3 62.10329 62.69325 62.15230 62.20130  
## WHT:MornLow 60.33333 0.5773503 3 60.00000 61.00000 60.00000 60.00000  
## WT/BLK:MornHigh 60.54608 1.5753430 3 59.06510 62.20130 59.71848 60.37185  
## WT/BLK:MornLow 58.33333 2.5166115 3 56.00000 61.00000 57.00000 58.00000  
## WT/BR:MornHigh 60.24076 0.9125893 3 59.50068 61.26044 59.73092 59.96116  
## WT/BR:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 62.71093  
## BL/BR:MornLow 61.50000  
## BLK:MornHigh 61.02658  
## BLK:MornLow 58.00000  
## BRN:MornHigh 61.55290  
## BRN:MornLow 59.00000  
## WHT:MornHigh 62.44728  
## WHT:MornLow 60.50000  
## WT/BLK:MornHigh 61.28658  
## WT/BLK:MornLow 59.50000  
## WT/BR:MornHigh 60.61080  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 62.44426 a  
## WHT:MornHigh 62.33262 a  
## BRN:MornHigh 61.36696 ab  
## BL/BR:MornLow 61.00000 abc  
## BLK:MornHigh 60.84793 abc  
## WT/BLK:MornHigh 60.54608 abcd  
## WHT:MornLow 60.33333 abcd  
## WT/BR:MornHigh 60.24076 abcd  
## BRN:MornLow 58.66667 bcd  
## WT/BLK:MornLow 58.33333 bcd  
## BLK:MornLow 57.66667 cd  
## WT/BR:MornLow 57.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT85 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.150 3.230 2.4975 0.05887 .   
## THIregime 1 60.807 60.807 47.0149 4.316e-07 \*\*\*  
## Colour:THIregime 5 1.508 0.302 0.2331 0.94416   
## Residuals 24 31.040 1.293   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.293351   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 58.21701 2.023365 6 55 60.42412  
## BLK 58.81318 1.672140 6 57 60.63320  
## BRN 59.25370 1.551127 6 57 61.04389  
## WHT 60.31543 1.542309 6 58 62.23034  
## WT/BLK 59.77335 1.504272 6 58 61.80928  
## WT/BR 59.09186 2.175626 6 56 61.85283  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.030146   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 60.31543 a  
## WT/BLK 59.77335 ab  
## BRN 59.25370 ab  
## WT/BR 59.09186 ab  
## BLK 58.81318 ab  
## BL/BR 58.21701 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.293351   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.54373 0.8315103 18 58.83279 62.23034  
## MornLow 57.94444 1.4741786 18 55.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7823935   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.54373 a  
## MornLow 57.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.293351 24 59.24409 1.919611 3.348063  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 59.76736 0.8312434 3 58.83279 60.42412 59.43898 60.04516  
## BL/BR:MornLow 56.66667 1.5275252 3 55.00000 58.00000 56.00000 57.00000  
## BLK:MornHigh 60.29303 0.2948585 3 60.11050 60.63320 60.12295 60.13539  
## BLK:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## BRN:MornHigh 60.50741 0.5474213 3 59.94967 61.04389 60.23916 60.52866  
## BRN:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WHT:MornHigh 61.29754 0.8484659 3 60.57171 62.23034 60.83113 61.09056  
## WHT:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## WT/BLK:MornHigh 60.88003 0.8059273 3 60.37185 61.80928 60.41541 60.45897  
## WT/BLK:MornLow 58.66667 1.1547005 3 58.00000 60.00000 58.00000 58.00000  
## WT/BR:MornHigh 60.51704 1.1859818 3 59.58780 61.85283 59.84915 60.11050  
## WT/BR:MornLow 57.66667 2.0816660 3 56.00000 60.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 60.23464  
## BL/BR:MornLow 57.50000  
## BLK:MornHigh 60.38430  
## BLK:MornLow 57.50000  
## BRN:MornHigh 60.78628  
## BRN:MornLow 58.50000  
## WHT:MornHigh 61.66045  
## WHT:MornLow 60.00000  
## WT/BLK:MornHigh 61.13412  
## WT/BLK:MornLow 59.00000  
## WT/BR:MornHigh 60.98167  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 61.29754 a  
## WT/BLK:MornHigh 60.88003 ab  
## WT/BR:MornHigh 60.51704 abc  
## BRN:MornHigh 60.50741 abc  
## BLK:MornHigh 60.29303 abc  
## BL/BR:MornHigh 59.76736 abcd  
## WHT:MornLow 59.33333 abcd  
## WT/BLK:MornLow 58.66667 abcd  
## BRN:MornLow 58.00000 abcd  
## WT/BR:MornLow 57.66667 bcd  
## BLK:MornLow 57.33333 cd  
## BL/BR:MornLow 56.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT86 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.060 6.012 8.8783 7.034e-05 \*\*\*  
## THIregime 1 64.662 64.662 95.4911 7.698e-10 \*\*\*  
## Colour:THIregime 5 2.216 0.443 0.6545 0.661   
## Residuals 24 16.252 0.677   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6771563   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.61909 1.918687 6 57 61.79476  
## BLK 59.77640 1.633437 6 58 61.56497  
## BRN 58.95889 1.959837 6 56 60.93189  
## WHT 61.02844 1.332953 6 59 62.56066  
## WT/BLK 59.96936 1.487703 6 58 61.50437  
## WT/BR 61.68911 1.563839 6 59 63.50805  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.468972   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BR 61.68911 a  
## WHT 61.02844 ab  
## WT/BLK 59.96936 bc  
## BLK 59.77640 bc  
## BL/BR 59.61909 bc  
## BRN 58.95889 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6771563   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.51376 0.8411481 18 59.90946 63.50805  
## MornLow 58.83333 1.4652846 18 56.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5661239   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.51376 a  
## MornLow 58.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6771563 24 60.17355 1.367536 2.42259  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.23818 0.5822883 3 60.63320 61.79476 60.95989 61.28658  
## BL/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BLK:MornHigh 61.21947 0.2993653 3 61.03710 61.56497 61.04672 61.05634  
## BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BRN:MornHigh 60.58444 0.5846334 3 59.90946 60.93189 60.41072 60.91197  
## BRN:MornLow 57.33333 1.1547005 3 56.00000 58.00000 57.00000 58.00000  
## WHT:MornHigh 62.05689 0.5184736 3 61.52486 62.56066 61.80500 62.08514  
## WHT:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## WT/BLK:MornHigh 61.27206 0.3298184 3 60.89455 61.50437 61.15590 61.41725  
## WT/BLK:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## WT/BR:MornHigh 62.71155 0.8027902 3 61.90261 63.50805 62.31331 62.72400  
## WT/BR:MornLow 60.66667 1.5275252 3 59.00000 62.00000 60.00000 61.00000  
## Q75  
## BL/BR:MornHigh 61.54067  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 61.31065  
## BLK:MornLow 58.50000  
## BRN:MornHigh 60.92193  
## BRN:MornLow 58.00000  
## WHT:MornHigh 62.32290  
## WHT:MornLow 60.50000  
## WT/BLK:MornHigh 61.46081  
## WT/BLK:MornLow 59.00000  
## WT/BR:MornHigh 63.11603  
## WT/BR:MornLow 61.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BR:MornHigh 62.71155 a  
## WHT:MornHigh 62.05689 ab  
## WT/BLK:MornHigh 61.27206 ab  
## BL/BR:MornHigh 61.23818 ab  
## BLK:MornHigh 61.21947 ab  
## WT/BR:MornLow 60.66667 abc  
## BRN:MornHigh 60.58444 abc  
## WHT:MornLow 60.00000 bcd  
## WT/BLK:MornLow 58.66667 cde  
## BLK:MornLow 58.33333 cde  
## BL/BR:MornLow 58.00000 de  
## BRN:MornLow 57.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT87 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.342 2.268 3.0605 0.0282 \*   
## THIregime 1 69.700 69.700 94.0359 8.93e-10 \*\*\*  
## Colour:THIregime 5 1.718 0.344 0.4635 0.7994   
## Residuals 24 17.789 0.741   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7412101   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.07371 1.597059 6 57 60.69854  
## BLK 59.77605 1.929330 6 57 62.15585  
## BRN 58.21540 1.746984 6 56 59.98988  
## WHT 59.75196 1.259125 6 58 61.03974  
## WT/BLK 59.62877 1.942537 6 57 61.85283  
## WT/BR 58.90279 1.776996 6 57 60.94682  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.53688   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.77605 a  
## WHT 59.75196 ab  
## WT/BLK 59.62877 ab  
## BL/BR 59.07371 ab  
## WT/BR 58.90279 ab  
## BRN 58.21540 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7412101   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.61623 0.7007953 18 59.40112 62.15585  
## MornLow 57.83333 1.1504475 18 56.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5922945   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.61623 a  
## MornLow 57.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7412101 24 59.22478 1.453675 2.534581  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.48075 0.3223022 3 60.11050 60.69854 60.37185 60.63320  
## BL/BR:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BLK:MornHigh 60.88543 1.1314835 3 59.98605 62.15585 60.25023 60.51440  
## BLK:MornLow 58.66667 2.0816660 3 57.00000 61.00000 57.50000 58.00000  
## BRN:MornHigh 59.76414 0.3174787 3 59.40112 59.98988 59.65127 59.90142  
## BRN:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WHT:MornHigh 60.83726 0.3107526 3 60.47946 61.03974 60.73601 60.99256  
## WHT:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## WT/BLK:MornHigh 61.25754 0.6891767 3 60.50253 61.85283 60.95989 61.41725  
## WT/BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.47224 0.4140008 3 60.18517 60.94682 60.23495 60.28473  
## WT/BR:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## Q75  
## BL/BR:MornHigh 60.66587  
## BL/BR:MornLow 58.00000  
## BLK:MornHigh 61.33513  
## BLK:MornLow 59.50000  
## BRN:MornHigh 59.94565  
## BRN:MornLow 57.00000  
## WHT:MornHigh 61.01615  
## WHT:MornLow 59.00000  
## WT/BLK:MornHigh 61.63504  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 60.61578  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.25754 a  
## BLK:MornHigh 60.88543 ab  
## WHT:MornHigh 60.83726 ab  
## BL/BR:MornHigh 60.48075 abc  
## WT/BR:MornHigh 60.47224 abc  
## BRN:MornHigh 59.76414 abcd  
## BLK:MornLow 58.66667 bcde  
## WHT:MornLow 58.66667 bcde  
## WT/BLK:MornLow 58.00000 cde  
## BL/BR:MornLow 57.66667 de  
## WT/BR:MornLow 57.33333 de  
## BRN:MornLow 56.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT88 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.410 3.082 4.6744 0.004034 \*\*   
## THIregime 1 73.160 73.160 110.9618 1.763e-10 \*\*\*  
## Colour:THIregime 5 1.144 0.229 0.3471 0.879036   
## Residuals 24 15.824 0.659   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6593276   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.38484 1.680981 6 57 61.33013  
## BLK 58.74613 1.897846 6 56 61.05634  
## BRN 57.78988 2.096616 6 55 60.19092  
## WHT 59.52900 1.375006 6 58 61.09782  
## WT/BLK 59.71558 1.573416 6 58 61.50437  
## WT/BR 59.38795 1.684058 6 57 61.33013  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.449505   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 59.71558 a  
## WHT 59.52900 a  
## WT/BR 59.38795 a  
## BL/BR 59.38484 a  
## BLK 58.74613 ab  
## BRN 57.78988 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.6593276   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.51779 0.7020076 18 58.96056 61.50437  
## MornLow 57.66667 1.1881771 18 55.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5586215   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.51779 a  
## MornLow 57.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6593276 24 59.09223 1.374106 2.390485  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 60.76968 0.5575694 3 60.21504 61.33013 60.48946 60.76388  
## BL/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BLK:MornHigh 60.15892 0.8265942 3 59.42872 61.05634 59.71021 59.99170  
## BLK:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## BRN:MornHigh 59.57976 0.6152171 3 58.96056 60.19092 59.27418 59.58780  
## BRN:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WHT:MornHigh 60.72466 0.3231823 3 60.53519 61.09782 60.53808 60.54096  
## WHT:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BLK:MornHigh 61.09782 0.3520778 3 60.89455 61.50437 60.89455 60.89455  
## WT/BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BR:MornHigh 60.77591 0.5575763 3 60.21504 61.33013 60.49879 60.78254  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 61.04700  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 60.52402  
## BLK:MornLow 58.00000  
## BRN:MornHigh 59.88936  
## BRN:MornLow 56.50000  
## WHT:MornHigh 60.81939  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 61.19946  
## WT/BLK:MornLow 58.50000  
## WT/BR:MornHigh 61.05634  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.09782 a  
## WT/BR:MornHigh 60.77591 a  
## BL/BR:MornHigh 60.76968 a  
## WHT:MornHigh 60.72466 a  
## BLK:MornHigh 60.15892 ab  
## BRN:MornHigh 59.57976 abc  
## WHT:MornLow 58.33333 bcd  
## WT/BLK:MornLow 58.33333 bcd  
## BL/BR:MornLow 58.00000 bcd  
## WT/BR:MornLow 58.00000 bcd  
## BLK:MornLow 57.33333 cd  
## BRN:MornLow 56.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT89 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.420 2.084 1.9509 0.1229   
## THIregime 1 70.818 70.818 66.2968 2.307e-08 \*\*\*  
## Colour:THIregime 5 0.471 0.094 0.0882 0.9934   
## Residuals 24 25.637 1.068   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.068191   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.66694 1.519021 6 58 61.36498  
## BLK 58.83283 1.837472 6 56 60.68072  
## BRN 59.16318 1.691347 6 57 60.87445  
## WHT 59.14015 1.953595 6 56 61.34038  
## WT/BLK 60.51323 2.010389 6 57 62.72400  
## WT/BR 59.43234 1.726970 6 57 61.41725  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.844988   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.51323 a  
## BL/BR 59.66694 a  
## WT/BR 59.43234 a  
## BRN 59.16318 a  
## WHT 59.14015 a  
## BLK 58.83283 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.068191   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 60.86066 0.7507897 18 59.63758 62.724  
## MornLow 58.05556 1.2589549 18 56.00000 61.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7110358   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 60.86066 a  
## MornLow 58.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.068191 24 59.45811 1.738254 3.042705  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.00054 0.3158004 3 60.80743 61.36498 60.81832 60.82921  
## BL/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BLK:MornHigh 60.33232 0.6016600 3 59.63758 60.68072 60.15812 60.67865  
## BLK:MornLow 57.33333 1.1547005 3 56.00000 58.00000 57.00000 58.00000  
## BRN:MornHigh 60.65969 0.3157236 3 60.29718 60.87445 60.55231 60.80743  
## BRN:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WHT:MornHigh 60.61363 0.8334069 3 59.70396 61.34038 60.25025 60.79654  
## WHT:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## WT/BLK:MornHigh 61.69312 1.2626909 3 60.28473 62.72400 61.17768 62.07063  
## WT/BLK:MornLow 59.33333 2.0816660 3 57.00000 61.00000 58.50000 60.00000  
## WT/BR:MornHigh 60.86468 0.5488731 3 60.31958 61.41725 60.58840 60.85721  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 61.09710  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 60.67969  
## BLK:MornLow 58.00000  
## BRN:MornHigh 60.84094  
## BRN:MornLow 58.00000  
## WHT:MornHigh 61.06846  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 62.39731  
## WT/BLK:MornLow 60.50000  
## WT/BR:MornHigh 61.13723  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.69312 a  
## BL/BR:MornHigh 61.00054 ab  
## WT/BR:MornHigh 60.86468 ab  
## BRN:MornHigh 60.65969 abc  
## WHT:MornHigh 60.61363 abc  
## BLK:MornHigh 60.33232 abcd  
## WT/BLK:MornLow 59.33333 abcd  
## BL/BR:MornLow 58.33333 bcd  
## WT/BR:MornLow 58.00000 bcd  
## BRN:MornLow 57.66667 cd  
## WHT:MornLow 57.66667 cd  
## BLK:MornLow 57.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT90 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.188 2.238 2.1204 0.09767 .   
## THIregime 1 75.655 75.655 71.6926 1.139e-08 \*\*\*  
## Colour:THIregime 5 0.813 0.163 0.1540 0.97676   
## Residuals 24 25.326 1.055   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.055267   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 59.73518 1.591238 6 58 61.50437  
## BLK 59.91519 1.428424 6 58 61.34597  
## BRN 58.65602 1.954244 6 56 60.85721  
## WHT 59.63686 1.487074 6 58 61.30109  
## WT/BLK 60.46998 2.541364 6 57 63.76940  
## WT/BR 59.28476 1.815872 6 57 61.06878  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.833793   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 60.46998 a  
## BLK 59.91519 a  
## BL/BR 59.73518 a  
## WHT 59.63686 a  
## WT/BR 59.28476 a  
## BRN 58.65602 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.055267   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 61.06599 0.7980639 18 59.72719 63.7694  
## MornLow 58.16667 1.2485285 18 56.00000 62.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7067214   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 61.06599 a  
## MornLow 58.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.055267 24 59.61633 1.723122 3.024243  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data2[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 61.13702 0.3181945 3 60.94682 61.50437 60.95335 60.95989  
## BL/BR:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BLK:MornHigh 61.16370 0.3020836 3 60.81501 61.34597 61.07257 61.33013  
## BLK:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## BRN:MornHigh 60.31205 0.5660587 3 59.72719 60.85721 60.03947 60.35175  
## BRN:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WHT:MornHigh 60.94039 0.3124064 3 60.75619 61.30109 60.76003 60.76388  
## WHT:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## WT/BLK:MornHigh 61.93995 1.6321302 3 60.63320 63.76940 61.02523 61.41725  
## WT/BLK:MornLow 59.00000 2.6457513 3 57.00000 62.00000 57.50000 58.00000  
## WT/BR:MornHigh 60.90285 0.2355846 3 60.63320 61.06878 60.81988 61.00656  
## WT/BR:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 61.23213  
## BL/BR:MornLow 58.50000  
## BLK:MornHigh 61.33805  
## BLK:MornLow 59.00000  
## BRN:MornHigh 60.60448  
## BRN:MornLow 57.50000  
## WHT:MornHigh 61.03248  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 62.59333  
## WT/BLK:MornLow 60.00000  
## WT/BR:MornHigh 61.03767  
## WT/BR:MornLow 58.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 61.93995 a  
## BLK:MornHigh 61.16370 ab  
## BL/BR:MornHigh 61.13702 ab  
## WHT:MornHigh 60.94039 ab  
## WT/BR:MornHigh 60.90285 ab  
## BRN:MornHigh 60.31205 abc  
## WT/BLK:MornLow 59.00000 abcd  
## BLK:MornLow 58.66667 bcd  
## BL/BR:MornLow 58.33333 bcd  
## WHT:MornLow 58.33333 bcd  
## WT/BR:MornLow 57.66667 cd  
## BRN:MornLow 57.00000 d  
##   
## attr(,"class")  
## [1] "group"

# Rectal Temperature (Sheet three)

# Fit the Third model for Rectal Temperature

## [1] "---- RECTEM1 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 145.449 29.090 6.4972 0.0005953 \*\*\*  
## THIregime 1 61.759 61.759 13.7939 0.0010817 \*\*   
## Colour:THIregime 5 11.086 2.217 0.4952 0.7766098   
## Residuals 24 107.455 4.477   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.477273   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.29876 2.1954201 6 48 52.61847  
## BLK 52.81902 2.8176309 6 48 55.76982  
## BRN 56.23474 0.7877978 6 55 57.14853  
## WHT 51.12569 2.5575881 6 48 54.27368  
## WT/BLK 54.68919 3.7316019 6 48 57.84547  
## WT/BR 53.35795 1.4880461 6 52 54.77896  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.777252   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.23474 a  
## WT/BLK 54.68919 ab  
## WT/BR 53.35795 abc  
## BLK 52.81902 abc  
## WHT 51.12569 bc  
## BL/BR 50.29876 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.477273   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.39734 2.012881 18 51.90411 57.84547  
## MornLow 51.77778 3.387790 18 48.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.455707   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.39734 a  
## MornLow 51.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.477273 24 53.08756 3.985786 6.229342  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.26419 0.35721374 3 51.90411 52.61847 52.08706 52.27000  
## BL/BR:MornLow 48.33333 0.57735027 3 48.00000 49.00000 48.00000 48.00000  
## BLK:MornHigh 53.97137 1.87896777 3 52.02110 55.76982 53.07215 54.12321  
## BLK:MornLow 51.66667 3.51188458 3 48.00000 55.00000 50.00000 52.00000  
## BRN:MornHigh 56.46947 0.62149950 3 55.92890 57.14853 56.12994 56.33098  
## BRN:MornLow 56.00000 1.00000000 3 55.00000 57.00000 55.50000 56.00000  
## WHT:MornHigh 52.91804 1.17568424 3 52.17776 54.27368 52.24021 52.30267  
## WHT:MornLow 49.33333 2.30940108 3 48.00000 52.00000 48.00000 48.00000  
## WT/BLK:MornHigh 56.04506 2.82200633 3 52.79270 57.84547 55.14485 57.49700  
## WT/BLK:MornLow 53.33333 4.61880215 3 48.00000 56.00000 52.00000 56.00000  
## WT/BR:MornHigh 54.71590 0.06001307 3 54.65949 54.77896 54.68438 54.70927  
## WT/BR:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 52.44423  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 54.94651  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.73976  
## BRN:MornLow 56.50000  
## WHT:MornHigh 53.28818  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 57.67123  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 54.74411  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.46947 a  
## WT/BLK:MornHigh 56.04506 a  
## BRN:MornLow 56.00000 a  
## WT/BR:MornHigh 54.71590 ab  
## BLK:MornHigh 53.97137 abc  
## WT/BLK:MornLow 53.33333 abc  
## WHT:MornHigh 52.91804 abc  
## BL/BR:MornHigh 52.26419 abc  
## WT/BR:MornLow 52.00000 abc  
## BLK:MornLow 51.66667 abc  
## WHT:MornLow 49.33333 bc  
## BL/BR:MornLow 48.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM2 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 92.598 18.520 5.8352 0.001156 \*\*  
## THIregime 1 40.857 40.857 12.8732 0.001481 \*\*  
## Colour:THIregime 5 8.869 1.774 0.5589 0.730277   
## Residuals 24 76.171 3.174   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.173793   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.27390 2.0137755 6 48.00000 53.70743  
## BLK 52.46700 1.4926746 6 50.00000 53.96255  
## BRN 55.99745 0.1154127 6 55.80828 56.17283  
## WHT 52.00214 2.2121005 6 48.00000 54.09945  
## WT/BLK 51.52703 3.1060073 6 46.00000 54.36080  
## WT/BR 51.79108 2.0837475 6 48.00000 53.73356  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.180229   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.99745 a  
## BLK 52.46700 b  
## WHT 52.00214 b  
## WT/BR 51.79108 b  
## WT/BLK 51.52703 b  
## BL/BR 51.27390 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.173793   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.57509 1.593998 18 50.44055 56.17283  
## MornLow 51.44444 2.812205 18 46.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.225621   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.57509 a  
## MornLow 51.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.173793 24 52.50977 3.392729 5.244749  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.54781 1.1268299 3 51.45691 53.70743 51.96800 52.47908  
## BL/BR:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## BLK:MornHigh 53.60067 0.6174450 3 52.88774 53.96255 53.41973 53.95173  
## BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BRN:MornHigh 55.99489 0.1824298 3 55.80828 56.17283 55.90592 56.00357  
## BRN:MornLow 56.00000 0.0000000 3 56.00000 56.00000 56.00000 56.00000  
## WHT:MornHigh 53.33761 1.2448692 3 51.90104 54.09945 52.95668 54.01233  
## WHT:MornLow 50.66667 2.3094011 3 48.00000 52.00000 50.00000 52.00000  
## WT/BLK:MornHigh 53.05405 2.2633574 3 50.44055 54.36080 52.40068 54.36080  
## WT/BLK:MornLow 50.00000 3.4641016 3 46.00000 52.00000 49.00000 52.00000  
## WT/BR:MornHigh 52.91549 1.3148236 3 51.39883 53.73356 52.50646 53.61409  
## WT/BR:MornLow 50.66667 2.3094011 3 48.00000 52.00000 50.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.09325  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.95714  
## BLK:MornLow 52.00000  
## BRN:MornHigh 56.08820  
## BRN:MornLow 56.00000  
## WHT:MornHigh 54.05589  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.67382  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornLow 56.00000 a  
## BRN:MornHigh 55.99489 a  
## BLK:MornHigh 53.60067 ab  
## WHT:MornHigh 53.33761 ab  
## WT/BLK:MornHigh 53.05405 ab  
## WT/BR:MornHigh 52.91549 ab  
## BL/BR:MornHigh 52.54781 ab  
## BLK:MornLow 51.33333 ab  
## WHT:MornLow 50.66667 b  
## WT/BR:MornLow 50.66667 b  
## BL/BR:MornLow 50.00000 b  
## WT/BLK:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM3 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 33.476 6.695 1.1139 0.379333   
## THIregime 1 61.760 61.760 10.2755 0.003789 \*\*  
## Colour:THIregime 5 4.578 0.916 0.1523 0.977314   
## Residuals 24 144.250 6.010   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 6.010401   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.80864 2.205950 6 48 54.09945  
## BLK 53.34675 2.750632 6 49 56.33280  
## BRN 54.46585 1.748970 6 52 56.59099  
## WHT 51.65955 3.082691 6 46 54.49148  
## WT/BLK 52.45566 2.675036 6 48 55.40620  
## WT/BR 53.12232 3.157171 6 48 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.376439   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 54.46585 a  
## BLK 53.34675 a  
## WT/BR 53.12232 a  
## WT/BLK 52.45566 a  
## BL/BR 51.80864 a  
## WHT 51.65955 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 6.010401   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.11959 1.605208 18 51.16311 56.59099  
## MornLow 51.50000 2.854305 18 46.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.686626   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.11959 a  
## MornLow 51.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 6.010401 24 52.80979 4.642343 7.217506  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.28394 1.141332 3 51.97961 54.09945 52.87619 53.77276  
## BL/BR:MornLow 50.33333 2.081666 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 54.36016 1.870984 3 52.61089 56.33280 53.37384 54.13679  
## BLK:MornLow 52.33333 3.511885 3 49.00000 56.00000 50.50000 52.00000  
## BRN:MornHigh 55.26503 1.182305 3 54.32059 56.59099 54.60205 54.88350  
## BRN:MornLow 53.66667 2.081666 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 53.31910 1.869530 3 51.16311 54.49148 52.73291 54.30272  
## WHT:MornLow 50.00000 3.464102 3 46.00000 52.00000 49.00000 52.00000  
## WT/BLK:MornHigh 54.24464 1.718945 3 52.27000 55.40620 53.66387 55.05773  
## WT/BLK:MornLow 50.66667 2.309401 3 48.00000 52.00000 50.00000 52.00000  
## WT/BR:MornHigh 54.24464 2.267266 3 51.92153 56.45160 53.14117 54.36080  
## WT/BR:MornLow 52.00000 4.000000 3 48.00000 56.00000 50.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.93611  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 55.23480  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.73724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 54.39710  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 55.23197  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 55.40620  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.26503 a  
## BLK:MornHigh 54.36016 a  
## WT/BLK:MornHigh 54.24464 a  
## WT/BR:MornHigh 54.24464 a  
## BRN:MornLow 53.66667 a  
## WHT:MornHigh 53.31910 a  
## BL/BR:MornHigh 53.28394 a  
## BLK:MornLow 52.33333 a  
## WT/BR:MornLow 52.00000 a  
## WT/BLK:MornLow 50.66667 a  
## BL/BR:MornLow 50.33333 a  
## WHT:MornLow 50.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM4 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 62.000 12.400 3.4611 0.017003 \*   
## THIregime 1 50.508 50.508 14.0976 0.000977 \*\*\*  
## Colour:THIregime 5 5.858 1.172 0.3270 0.891681   
## Residuals 24 85.985 3.583   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.582723   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.95783 2.722421 6 48 55.58043  
## BLK 54.19879 1.915130 6 52 56.51978  
## BRN 54.40158 2.027603 6 52 56.89388  
## WHT 51.49278 2.690677 6 47 54.47696  
## WT/BLK 51.46895 2.239664 6 48 54.36080  
## WT/BR 54.58694 1.011870 6 53 55.75467  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.378904   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 54.58694 a  
## BRN 54.40158 a  
## BLK 54.19879 a  
## BL/BR 52.95783 a  
## WHT 51.49278 a  
## WT/BLK 51.46895 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.582723   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.36896 1.492006 18 51.48595 56.89388  
## MornLow 52.00000 2.612189 18 47.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.302188   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.36896 a  
## MornLow 52.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.582723 24 53.18448 3.558949 5.572397  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 54.24900 1.7872528 3 52.21773 55.58043 53.58328 54.94884  
## BL/BR:MornLow 51.66667 3.2145503 3 48.00000 54.00000 50.50000 53.00000  
## BLK:MornHigh 55.06424 1.2605307 3 54.33591 56.51978 54.33648 54.33704  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 55.46983 1.2333432 3 54.74411 56.89388 54.75780 54.77149  
## BRN:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WHT:MornHigh 53.31889 1.3273978 3 51.87029 54.47696 52.73985 53.60942  
## WHT:MornLow 49.66667 2.5166115 3 47.00000 52.00000 48.50000 50.00000  
## WT/BLK:MornHigh 52.93789 1.4376450 3 51.48595 54.36080 52.22644 52.96693  
## WT/BLK:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BR:MornHigh 55.17389 0.7253912 3 54.36080 55.75467 54.88350 55.40620  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.26464  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.42841  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.83269  
## BRN:MornLow 54.00000  
## WHT:MornHigh 54.04319  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.66387  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 55.58043  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.46983 a  
## WT/BR:MornHigh 55.17389 ab  
## BLK:MornHigh 55.06424 ab  
## BL/BR:MornHigh 54.24900 ab  
## WT/BR:MornLow 54.00000 ab  
## BLK:MornLow 53.33333 ab  
## BRN:MornLow 53.33333 ab  
## WHT:MornHigh 53.31889 ab  
## WT/BLK:MornHigh 52.93789 ab  
## BL/BR:MornLow 51.66667 ab  
## WT/BLK:MornLow 50.00000 ab  
## WHT:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM5 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 53.487 10.697 4.2992 0.0062009 \*\*   
## THIregime 1 45.535 45.535 18.3002 0.0002605 \*\*\*  
## Colour:THIregime 5 4.568 0.914 0.3672 0.8659696   
## Residuals 24 59.718 2.488   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.488246   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.01330 2.234236 6 48 54.12849  
## BLK 53.85399 2.121579 6 51 56.33797  
## BRN 55.15897 1.746047 6 52 56.45160  
## WHT 51.58702 2.250678 6 48 54.18657  
## WT/BLK 52.87580 1.393782 6 51 54.36080  
## WT/BR 52.25892 1.553875 6 50 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.815891   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.15897 a  
## BLK 53.85399 ab  
## WT/BLK 52.87580 ab  
## WT/BR 52.25892 b  
## BL/BR 52.01330 b  
## WHT 51.58702 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.488246   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.08267 1.266617 18 51.85184 56.4516  
## MornLow 51.83333 2.307277 18 48.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.08521   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.08267 a  
## MornLow 51.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.488246 24 52.958 2.97862 4.643892  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.35993 1.3061217 3 51.85184 54.12849 52.97565 54.09945  
## BL/BR:MornLow 50.66667 2.3094011 3 48.00000 52.00000 50.00000 52.00000  
## BLK:MornHigh 54.70797 1.4369664 3 53.62427 56.33797 53.89297 54.16168  
## BLK:MornLow 53.00000 2.6457513 3 51.00000 56.00000 51.50000 52.00000  
## BRN:MornHigh 55.65128 1.2495096 3 54.21146 56.45160 55.25111 56.29077  
## BRN:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WHT:MornHigh 53.17405 1.0525851 3 52.08552 54.18657 52.66779 53.25006  
## WHT:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BLK:MornHigh 54.08493 0.3704593 3 53.66387 54.36080 53.94700 54.23013  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.51784 0.5307297 3 53.00178 54.06211 53.24571 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 54.11397  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 55.24982  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.37118  
## BRN:MornLow 56.00000  
## WHT:MornHigh 53.71831  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.29546  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.77587  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.65128 a  
## BLK:MornHigh 54.70797 ab  
## BRN:MornLow 54.66667 ab  
## WT/BLK:MornHigh 54.08493 abc  
## WT/BR:MornHigh 53.51784 abc  
## BL/BR:MornHigh 53.35993 abc  
## WHT:MornHigh 53.17405 abc  
## BLK:MornLow 53.00000 abc  
## WT/BLK:MornLow 51.66667 abc  
## WT/BR:MornLow 51.00000 bc  
## BL/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM6 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 52.138 10.428 2.1479 0.094113 .   
## THIregime 1 62.412 62.412 12.8554 0.001491 \*\*  
## Colour:THIregime 5 5.239 1.048 0.2158 0.952346   
## Residuals 24 116.518 4.855   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.854906   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.07604 4.562464 6 44 56.45160  
## BLK 54.82963 1.693504 6 52 56.70050  
## BRN 55.14283 1.725227 6 52 56.77326  
## WHT 52.02027 2.143317 6 49 54.53503  
## WT/BLK 53.55791 1.714881 6 52 55.40620  
## WT/BR 53.60676 1.624353 6 51 55.25686  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.933323   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.14283 a  
## BLK 54.82963 a  
## WT/BR 53.60676 a  
## WT/BLK 53.55791 a  
## BL/BR 52.07604 a  
## WHT 52.02027 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.854906   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.85559 1.548884 18 50.1792 56.77326  
## MornLow 52.22222 2.798225 18 44.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.515854   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 54.85559 a  
## MornLow 52.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.854906 24 53.53891 4.115484 6.48673  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.81874 3.2551200 3 50.17920 56.45160 52.50231 54.82542  
## BL/BR:MornLow 50.33333 5.6862407 3 44.00000 55.00000 48.00000 52.00000  
## BLK:MornHigh 55.65927 1.0511946 3 54.59839 56.70050 55.13865 55.67891  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 55.95232 1.0685712 3 54.74411 56.77326 55.54185 56.33959  
## BRN:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WHT:MornHigh 53.70721 0.7835161 3 52.97718 54.53503 53.29330 53.60942  
## WHT:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BLK:MornHigh 55.11581 0.2661458 3 54.88350 55.40620 54.97062 55.05773  
## WT/BLK:MornLow 52.00000 0.0000000 3 52.00000 52.00000 52.00000 52.00000  
## WT/BR:MornHigh 54.88018 0.6309887 3 54.15172 55.25686 54.69184 55.23197  
## WT/BR:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.63851  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.18971  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.55643  
## BRN:MornLow 55.50000  
## WHT:MornHigh 54.07223  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 55.23197  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 55.24441  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.95232 a  
## BLK:MornHigh 55.65927 a  
## WT/BLK:MornHigh 55.11581 a  
## WT/BR:MornHigh 54.88018 a  
## BRN:MornLow 54.33333 a  
## BLK:MornLow 54.00000 a  
## BL/BR:MornHigh 53.81874 a  
## WHT:MornHigh 53.70721 a  
## WT/BR:MornLow 52.33333 a  
## WT/BLK:MornLow 52.00000 a  
## BL/BR:MornLow 50.33333 a  
## WHT:MornLow 50.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM7 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 34.456 6.891 1.3545 0.276113   
## THIregime 1 44.641 44.641 8.7744 0.006788 \*\*  
## Colour:THIregime 5 3.184 0.637 0.1252 0.985326   
## Residuals 24 122.103 5.088   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 5.087626   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.20621 3.959260 6 44 54.65119  
## BLK 54.32225 1.646834 6 52 56.17780  
## BRN 53.22143 1.058477 6 52 54.47281  
## WHT 52.99040 3.073493 6 48 56.13217  
## WT/BLK 52.94840 1.660558 6 51 55.14485  
## WT/BR 51.99269 1.507828 6 50 53.48963  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 4.026491   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.32225 a  
## BRN 53.22143 a  
## WHT 52.99040 a  
## WT/BLK 52.94840 a  
## WT/BR 51.99269 a  
## BL/BR 51.20621 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 5.087626   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.89379 1.490024 18 49.55196 56.1778  
## MornLow 51.66667 2.678894 18 44.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.55176   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.89379 a  
## MornLow 51.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 5.087626 24 52.78023 4.273526 6.640382  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.74575 2.7830621 3 49.55196 54.65119 51.79304 54.03411  
## BL/BR:MornLow 49.66667 4.9328829 3 44.00000 53.00000 48.00000 52.00000  
## BLK:MornHigh 54.97783 1.0758512 3 54.09945 56.17780 54.37784 54.65624  
## BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BRN:MornHigh 54.10953 0.3184882 3 53.87831 54.47281 53.92790 53.97749  
## BRN:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WHT:MornHigh 53.98080 2.1617630 3 51.80879 56.13217 52.90512 54.00144  
## WHT:MornLow 52.00000 4.0000000 3 48.00000 56.00000 50.00000 52.00000  
## WT/BLK:MornHigh 54.23013 0.7948650 3 53.70743 55.14485 53.77276 53.83810  
## WT/BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.31872 0.2747590 3 53.00178 53.48963 53.23326 53.46474  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 54.34265  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.41702  
## BLK:MornLow 54.50000  
## BRN:MornHigh 54.22515  
## BRN:MornLow 52.50000  
## WHT:MornHigh 55.06681  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 54.49148  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.47719  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.97783 a  
## WT/BLK:MornHigh 54.23013 a  
## BRN:MornHigh 54.10953 a  
## WHT:MornHigh 53.98080 a  
## BLK:MornLow 53.66667 a  
## WT/BR:MornHigh 53.31872 a  
## BL/BR:MornHigh 52.74575 a  
## BRN:MornLow 52.33333 a  
## WHT:MornLow 52.00000 a  
## WT/BLK:MornLow 51.66667 a  
## WT/BR:MornLow 50.66667 a  
## BL/BR:MornLow 49.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM8 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 73.742 14.748 5.1525 0.0023771 \*\*   
## THIregime 1 48.894 48.894 17.0815 0.0003763 \*\*\*  
## Colour:THIregime 5 6.891 1.378 0.4815 0.7865471   
## Residuals 24 68.698 2.862   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.862399   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.16410 2.228553 6 48 53.95426  
## BLK 55.09891 1.705053 6 52 56.26153  
## BRN 54.03761 1.833522 6 52 56.19025  
## WHT 51.22086 2.867646 6 46 53.95426  
## WT/BLK 52.51343 1.853968 6 50 54.88350  
## WT/BR 52.29086 1.414357 6 51 53.62902  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.02019   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.09891 a  
## BRN 54.03761 ab  
## WT/BLK 52.51343 ab  
## WT/BR 52.29086 ab  
## WHT 51.22086 b  
## BL/BR 51.16410 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.862399   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.88637 1.432517 18 50.79414 56.26153  
## MornLow 51.55556 2.594615 18 46.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.163944   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.88637 a  
## MornLow 51.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.862399 24 52.72096 3.209089 4.980816  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.66154 1.1644018 3 51.69503 53.95426 52.01518 52.33534  
## BL/BR:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## BLK:MornHigh 55.53114 1.1722574 3 54.17899 56.26153 55.16595 56.15291  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 54.74188 1.2582405 3 53.91852 56.19025 54.01769 54.11687  
## BRN:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WHT:MornHigh 52.77505 1.7258691 3 50.79414 53.95426 52.18545 53.57675  
## WHT:MornLow 49.66667 3.2145503 3 46.00000 52.00000 48.50000 51.00000  
## WT/BLK:MornHigh 54.02685 0.8494806 3 53.18473 54.88350 53.59853 54.01233  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.58173 0.0450098 3 53.53941 53.62902 53.55808 53.57675  
## WT/BR:MornLow 51.00000 0.0000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.14480  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 56.20722  
## BLK:MornLow 56.00000  
## BRN:MornHigh 55.15356  
## BRN:MornLow 54.00000  
## WHT:MornHigh 53.76550  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.44792  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.60289  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 55.53114 a  
## BRN:MornHigh 54.74188 a  
## BLK:MornLow 54.66667 a  
## WT/BLK:MornHigh 54.02685 ab  
## WT/BR:MornHigh 53.58173 ab  
## BRN:MornLow 53.33333 ab  
## WHT:MornHigh 52.77505 ab  
## BL/BR:MornHigh 52.66154 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## BL/BR:MornLow 49.66667 b  
## WHT:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM9 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 34.719 6.944 1.4739 0.23513   
## THIregime 1 54.016 54.016 11.4656 0.00244 \*\*  
## Colour:THIregime 5 3.282 0.656 0.1393 0.98137   
## Residuals 24 113.068 4.711   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.711172   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.85369 4.010689 6 44 54.99966  
## BLK 53.93708 1.796393 6 52 56.01980  
## BRN 52.12687 2.266886 6 48 54.36080  
## WHT 51.33080 2.049556 6 48 53.77276  
## WT/BLK 52.41905 1.749953 6 50 54.62215  
## WT/BR 51.68208 1.535839 6 50 53.40252  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.87466   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.93708 a  
## WT/BLK 52.41905 a  
## BRN 52.12687 a  
## WT/BR 51.68208 a  
## WHT 51.33080 a  
## BL/BR 50.85369 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.711172   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.28319 1.466673 18 49.39515 56.0198  
## MornLow 50.83333 2.595245 18 44.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.493247   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.28319 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.711172 24 52.05826 4.169412 6.389986  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.37406 2.8189075 3 49.39515 54.99966 51.06126 52.72736  
## BL/BR:MornLow 49.33333 5.0332230 3 44.00000 54.00000 47.00000 50.00000  
## BLK:MornHigh 54.54082 1.2809029 3 53.78832 56.01980 53.80133 53.81434  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 53.25375 1.4273750 3 51.64276 54.36080 52.70022 53.75768  
## BRN:MornLow 51.00000 2.6457513 3 48.00000 53.00000 50.00000 52.00000  
## WHT:MornHigh 52.66160 1.0902390 3 51.59356 53.77276 52.10602 52.61847  
## WHT:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BLK:MornHigh 53.83810 0.7840500 3 53.05405 54.62215 53.44608 53.83810  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.03082 0.3261159 3 52.79270 53.40252 52.84497 52.89724  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.86351  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 54.91707  
## BLK:MornLow 54.00000  
## BRN:MornHigh 54.05924  
## BRN:MornLow 52.50000  
## WHT:MornHigh 53.19561  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.23013  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.14988  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.54082 a  
## WT/BLK:MornHigh 53.83810 a  
## BLK:MornLow 53.33333 a  
## BRN:MornHigh 53.25375 a  
## WT/BR:MornHigh 53.03082 a  
## WHT:MornHigh 52.66160 a  
## BL/BR:MornHigh 52.37406 a  
## BRN:MornLow 51.00000 a  
## WT/BLK:MornLow 51.00000 a  
## WT/BR:MornLow 50.33333 a  
## WHT:MornLow 50.00000 a  
## BL/BR:MornLow 49.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM10 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.554 3.911 2.3385 0.0728 .   
## THIregime 1 46.310 46.310 27.6913 2.142e-05 \*\*\*  
## Colour:THIregime 5 2.045 0.409 0.2446 0.9385   
## Residuals 24 40.137 1.672   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.672361   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.86031 2.119474 6 49 54.82542  
## BLK 54.05604 1.845781 6 52 56.24707  
## BRN 53.10547 1.211004 6 52 54.22141  
## WHT 51.53596 2.093239 6 48 53.67476  
## WT/BLK 52.73786 1.258634 6 51 54.09945  
## WT/BR 52.84282 1.538459 6 51 54.77896  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.308523   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.05604 a  
## BRN 53.10547 ab  
## BL/BR 52.86031 ab  
## WT/BR 52.84282 ab  
## WT/BLK 52.73786 ab  
## WHT 51.53596 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.672361   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.99060 0.9115088 18 51.99328 56.24707  
## MornLow 51.72222 1.6735153 18 48.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8896764   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.99060 a  
## MornLow 51.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.672361 24 52.85641 2.446625 3.807154  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 54.05396 1.27386537 3 52.58362 54.82542 53.66822 54.75283  
## BL/BR:MornLow 51.66667 2.30940108 3 49.00000 53.00000 51.00000 53.00000  
## BLK:MornHigh 54.77874 1.27162796 3 54.03722 56.24707 54.04458 54.05193  
## BLK:MornLow 53.33333 2.30940108 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 54.21095 0.01073116 3 54.19997 54.22141 54.20571 54.21146  
## BRN:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.07191 0.93628537 3 51.99328 53.67476 52.77049 53.54771  
## WHT:MornLow 50.00000 1.73205081 3 48.00000 51.00000 49.50000 51.00000  
## WT/BLK:MornHigh 53.80906 0.42973631 3 53.31540 54.09945 53.66387 54.01233  
## WT/BLK:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 54.01897 0.65864044 3 53.61409 54.77896 53.63898 53.66387  
## WT/BR:MornLow 51.66667 1.15470054 3 51.00000 53.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 54.78912  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 55.14950  
## BLK:MornLow 54.00000  
## BRN:MornHigh 54.21644  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.61123  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.05589  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.22141  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.77874 a  
## BRN:MornHigh 54.21095 a  
## BL/BR:MornHigh 54.05396 a  
## WT/BR:MornHigh 54.01897 a  
## WT/BLK:MornHigh 53.80906 a  
## BLK:MornLow 53.33333 ab  
## WHT:MornHigh 53.07191 ab  
## BRN:MornLow 52.00000 ab  
## BL/BR:MornLow 51.66667 ab  
## WT/BLK:MornLow 51.66667 ab  
## WT/BR:MornLow 51.66667 ab  
## WHT:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM11 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 109.684 21.937 5.4600 0.001709 \*\*  
## THIregime 1 54.622 54.622 13.5953 0.001157 \*\*  
## Colour:THIregime 5 9.389 1.878 0.4674 0.796664   
## Residuals 24 96.424 4.018   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.017687   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.70868 3.432017 6 44 53.77276  
## BLK 54.46806 1.534350 6 52 56.00018  
## BRN 52.67107 1.175991 6 51 53.87295  
## WHT 50.59607 3.588941 6 44 53.90344  
## WT/BLK 54.22457 1.085627 6 53 55.58043  
## WT/BR 52.72220 1.584924 6 51 54.56988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.578139   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.46806 a  
## WT/BLK 54.22457 a  
## WT/BR 52.72220 ab  
## BRN 52.67107 ab  
## WHT 50.59607 b  
## BL/BR 49.70868 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.017687   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.63022 1.765633 18 49.49969 56.00018  
## MornLow 51.16667 3.091735 18 44.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.378971   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.63022 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.017687 24 52.39844 3.825337 5.900971  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.75069 2.1457147 3 49.49969 53.77276 50.73965 51.97961  
## BL/BR:MornLow 47.66667 3.5118846 3 44.00000 51.00000 46.00000 48.00000  
## BLK:MornHigh 54.93612 1.1083043 3 53.78832 56.00018 54.40409 55.01986  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 53.67548 0.3123267 3 53.31540 53.87295 53.57675 53.83810  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.19214 2.3577416 3 49.50276 53.90344 51.33649 53.17021  
## WHT:MornLow 49.00000 4.3588989 3 44.00000 52.00000 47.50000 51.00000  
## WT/BLK:MornHigh 55.11581 0.4798012 3 54.62215 55.58043 54.88350 55.14485  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 54.11107 0.3997253 3 53.83810 54.56988 53.88166 53.92522  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.87619  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 55.51002  
## BLK:MornLow 55.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.53682  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 55.36264  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 54.24755  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 55.11581 a  
## BLK:MornHigh 54.93612 a  
## WT/BR:MornHigh 54.11107 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornHigh 53.67548 ab  
## WT/BLK:MornLow 53.33333 abc  
## WHT:MornHigh 52.19214 abc  
## BL/BR:MornHigh 51.75069 abc  
## BRN:MornLow 51.66667 abc  
## WT/BR:MornLow 51.33333 abc  
## WHT:MornLow 49.00000 bc  
## BL/BR:MornLow 47.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM12 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 118.968 23.794 5.0782 0.002577 \*\*  
## THIregime 1 43.193 43.193 9.2186 0.005693 \*\*  
## Colour:THIregime 5 10.476 2.095 0.4472 0.811062   
## Residuals 24 112.449 4.685   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.685389   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.92040 3.312754 6 45 53.25006  
## BLK 54.87614 1.697566 6 52 56.00000  
## BRN 52.98995 1.321730 6 51 54.54748  
## WHT 50.97976 3.240202 6 45 53.60942  
## WT/BLK 52.21578 1.993186 6 49 54.70927  
## WT/BR 51.92341 1.774478 6 49 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.864043   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.87614 a  
## BRN 52.98995 ab  
## WT/BLK 52.21578 abc  
## WT/BR 51.92341 abc  
## WHT 50.97976 bc  
## BL/BR 48.92040 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.685389   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.07959 1.848923 18 49.49969 55.90617  
## MornLow 50.88889 3.287926 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.489155   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.07959 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.685389 24 51.98424 4.163908 6.372477  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.84080 2.0909393 3 49.49969 53.25006 49.63617 49.77266  
## BL/BR:MornLow 47.00000 3.4641016 3 45.00000 51.00000 45.00000 45.00000  
## BLK:MornHigh 55.08561 1.3188489 3 53.56430 55.90617 54.67533 55.78635  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 53.64657 0.8606085 3 52.83291 54.54748 53.19612 53.55933  
## BRN:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WHT:MornHigh 52.29285 2.1774562 3 49.77949 53.60942 51.63456 53.48963  
## WHT:MornLow 49.66667 4.0414519 3 45.00000 52.00000 48.50000 52.00000  
## WT/BLK:MornHigh 53.43156 1.2237747 3 52.27000 54.70927 52.79270 53.31540  
## WT/BLK:MornLow 51.00000 2.0000000 3 49.00000 53.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.18016 0.8946259 3 52.19533 53.94264 52.79892 53.40252  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 51.51136  
## BL/BR:MornLow 48.00000  
## BLK:MornHigh 55.84626  
## BLK:MornLow 56.00000  
## BRN:MornHigh 54.05340  
## BRN:MornLow 53.00000  
## WHT:MornHigh 53.54953  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.01233  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.67258  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 55.08561 a  
## BLK:MornLow 54.66667 a  
## BRN:MornHigh 53.64657 a  
## WT/BLK:MornHigh 53.43156 a  
## WT/BR:MornHigh 53.18016 ab  
## BRN:MornLow 52.33333 ab  
## WHT:MornHigh 52.29285 ab  
## WT/BLK:MornLow 51.00000 ab  
## BL/BR:MornHigh 50.84080 ab  
## WT/BR:MornLow 50.66667 ab  
## WHT:MornLow 49.66667 ab  
## BL/BR:MornLow 47.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM13 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 61.368 12.274 3.0173 0.029812 \*   
## THIregime 1 49.699 49.699 12.2176 0.001864 \*\*  
## Colour:THIregime 5 6.061 1.212 0.2980 0.909191   
## Residuals 24 97.627 4.068   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.067803   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.73475 2.296097 6 46 52.13933  
## BLK 53.79827 1.734193 6 52 56.00000  
## BRN 52.50823 1.756368 6 50 54.62215  
## WHT 50.71601 3.647646 6 44 53.60942  
## WT/BLK 52.32467 1.646935 6 50 54.36080  
## WT/BR 51.96780 1.815303 6 49 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.600387   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.79827 a  
## BRN 52.50823 ab  
## WT/BLK 52.32467 ab  
## WT/BR 51.96780 ab  
## WHT 50.71601 ab  
## BL/BR 49.73475 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.067803   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.01658 1.515725 18 49.22604 55.69131  
## MornLow 50.66667 2.722456 18 44.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.387545   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.01658 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.067803 24 51.84162 3.890464 5.937661  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.46949 1.0733644 3 50.23147 52.13933 51.13458 52.03769  
## BL/BR:MornLow 48.00000 1.7320508 3 46.00000 49.00000 47.50000 49.00000  
## BLK:MornHigh 54.26321 1.2396510 3 53.46474 55.69131 53.54915 53.63357  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 53.34980 1.1198372 3 52.51393 54.62215 52.71362 52.91332  
## BRN:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## WHT:MornHigh 52.09868 2.4888950 3 49.22604 53.60942 51.34332 53.46059  
## WHT:MornLow 49.33333 4.6188022 3 44.00000 52.00000 48.00000 52.00000  
## WT/BLK:MornHigh 53.64935 0.7188225 3 52.92338 54.36080 53.29362 53.66387  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.26894 0.9089126 3 52.27000 54.04718 52.87982 53.48963  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.08851  
## BL/BR:MornLow 49.00000  
## BLK:MornHigh 54.66244  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.76774  
## BRN:MornLow 52.50000  
## WHT:MornHigh 53.53501  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.01233  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.26321 a  
## WT/BLK:MornHigh 53.64935 ab  
## BRN:MornHigh 53.34980 ab  
## BLK:MornLow 53.33333 ab  
## WT/BR:MornHigh 53.26894 ab  
## WHT:MornHigh 52.09868 ab  
## BRN:MornLow 51.66667 ab  
## BL/BR:MornHigh 51.46949 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 50.66667 ab  
## WHT:MornLow 49.33333 ab  
## BL/BR:MornLow 48.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM14 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 78.438 15.688 6.2864 0.0007327 \*\*\*  
## THIregime 1 44.603 44.603 17.8735 0.0002959 \*\*\*  
## Colour:THIregime 5 7.160 1.432 0.5739 0.7193670   
## Residuals 24 59.892 2.495   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.495489   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.48096 2.289229 6 46 52.03769  
## BLK 53.79827 1.734193 6 52 56.00000  
## BRN 52.69960 1.045500 6 51 53.95011  
## WHT 50.41628 3.022372 6 45 53.51141  
## WT/BLK 52.71608 1.220046 6 51 54.01233  
## WT/BR 52.23403 1.538419 6 50 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.819986   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.79827 a  
## WT/BLK 52.71608 ab  
## BRN 52.69960 ab  
## WT/BR 52.23403 abc  
## WHT 50.41628 bc  
## BL/BR 49.48096 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.495489   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.00397 1.422072 18 49.68725 55.69131  
## MornLow 50.77778 2.556550 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.086788   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.00397 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.495489 24 51.89087 3.044296 4.650646  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.29526 0.9450199 3 50.23147 52.03769 50.92405 51.61663  
## BL/BR:MornLow 47.66667 1.5275252 3 46.00000 49.00000 47.00000 48.00000  
## BLK:MornHigh 54.26321 1.2396510 3 53.46474 55.69131 53.54915 53.63357  
## BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## BRN:MornHigh 53.39920 0.5141576 3 52.93209 53.95011 53.12374 53.31540  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 51.83257 1.9542922 3 49.68725 53.51141 50.99314 52.29904  
## WHT:MornLow 49.00000 3.6055513 3 45.00000 52.00000 47.50000 50.00000  
## WT/BLK:MornHigh 53.76550 0.2900257 3 53.44608 54.01233 53.64209 53.83810  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.46806 0.5902000 3 52.86737 54.04718 53.17850 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 51.82716  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 54.66244  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.63275  
## BRN:MornLow 52.50000  
## WHT:MornHigh 52.90523  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.92522  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.26321 a  
## WT/BLK:MornHigh 53.76550 a  
## WT/BR:MornHigh 53.46806 ab  
## BRN:MornHigh 53.39920 ab  
## BLK:MornLow 53.33333 ab  
## BRN:MornLow 52.00000 abc  
## WHT:MornHigh 51.83257 abc  
## WT/BLK:MornLow 51.66667 abc  
## BL/BR:MornHigh 51.29526 abc  
## WT/BR:MornLow 51.00000 abc  
## WHT:MornLow 49.00000 bc  
## BL/BR:MornLow 47.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM15 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 179.264 35.853 18.212 1.786e-07 \*\*\*  
## THIregime 1 46.414 46.414 23.576 5.997e-05 \*\*\*  
## Colour:THIregime 5 15.563 3.113 1.581 0.2034   
## Residuals 24 47.248 1.969   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.968679   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 47.77725 2.3647265 6 45 50.30988  
## BLK 54.79287 1.6897945 6 52 56.00000  
## BRN 53.13182 0.6594565 6 52 53.87295  
## WHT 50.11656 2.7160904 6 46 53.41341  
## WT/BLK 52.32467 1.6469349 6 50 54.36080  
## WT/BR 51.66963 1.6950854 6 49 53.41994  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.504705   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.79287 a  
## BRN 53.13182 ab  
## WT/BLK 52.32467 abc  
## WT/BR 51.66963 bc  
## WHT 50.11656 cd  
## BL/BR 47.77725 d  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.968679   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.77094 1.872006 18 49.29061 55.74709  
## MornLow 50.50000 3.276476 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9652827   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.77094 a  
## MornLow 50.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.968679 24 51.63547 2.717311 4.130693  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 49.88784 0.5317395 3 49.29061 50.30988 49.67683 50.06304  
## BL/BR:MornLow 45.66667 0.5773503 3 45.00000 46.00000 45.50000 46.00000  
## BLK:MornHigh 54.91906 1.3256703 3 53.39007 55.74709 54.50505 55.62003  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 53.59698 0.3236658 3 53.24073 53.87295 53.45900 53.67727  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 51.56645 1.6742126 3 50.14845 53.41341 50.64297 51.13748  
## WHT:MornLow 48.66667 3.0550505 3 46.00000 52.00000 47.00000 48.00000  
## WT/BLK:MornHigh 53.64935 0.7188225 3 52.92338 54.36080 53.29362 53.66387  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.00593 0.7020541 3 52.19533 53.41994 52.79892 53.40252  
## WT/BR:MornLow 50.33333 1.1547005 3 49.00000 51.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 50.18646  
## BL/BR:MornLow 46.00000  
## BLK:MornHigh 55.68356  
## BLK:MornLow 56.00000  
## BRN:MornHigh 53.77511  
## BRN:MornLow 53.00000  
## WHT:MornHigh 52.27544  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 54.01233  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.41123  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.91906 a  
## BLK:MornLow 54.66667 a  
## WT/BLK:MornHigh 53.64935 ab  
## BRN:MornHigh 53.59698 ab  
## WT/BR:MornHigh 53.00593 ab  
## BRN:MornLow 52.66667 abc  
## WHT:MornHigh 51.56645 abc  
## WT/BLK:MornLow 51.00000 abc  
## WT/BR:MornLow 50.33333 bc  
## BL/BR:MornHigh 49.88784 bc  
## WHT:MornLow 48.66667 cd  
## BL/BR:MornLow 45.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM16 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 100.077 20.015 8.2953 0.0001149 \*\*\*  
## THIregime 1 63.203 63.203 26.1940 3.083e-05 \*\*\*  
## Colour:THIregime 5 7.803 1.561 0.6468 0.6665385   
## Residuals 24 57.909 2.413   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.412865   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.66323 2.4695645 6 45 51.39883  
## BLK 52.42699 0.9348479 6 51 53.40630  
## BRN 52.17911 1.7702212 6 49 53.91277  
## WHT 48.85397 3.2315559 6 45 52.95604  
## WT/BLK 52.51312 1.7248125 6 50 54.70927  
## WT/BR 51.98025 1.5028665 6 50 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.772909   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.51312 a  
## BLK 52.42699 a  
## BRN 52.17911 a  
## WT/BR 51.98025 a  
## WHT 48.85397 b  
## BL/BR 48.66323 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.412865   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.42778 1.584450 18 49.51131 54.70927  
## MornLow 49.77778 2.691065 18 45.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.068645   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.42778 a  
## MornLow 49.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.412865 24 51.10278 3.039639 4.573008  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.65979 0.9771090 3 49.55196 51.39883 50.29027 51.02859  
## BL/BR:MornLow 46.66667 1.5275252 3 45.00000 48.00000 46.00000 47.00000  
## BLK:MornHigh 53.18731 0.3424280 3 52.79270 53.40630 53.07781 53.36292  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.02488 1.1639878 3 51.70709 53.91277 52.58094 53.45479  
## BRN:MornLow 51.33333 2.0816660 3 49.00000 53.00000 50.50000 52.00000  
## WHT:MornHigh 50.70795 1.9482595 3 49.51131 52.95604 49.58390 49.65650  
## WHT:MornLow 47.00000 3.4641016 3 45.00000 51.00000 45.00000 45.00000  
## WT/BLK:MornHigh 53.69291 0.9635487 3 52.79270 54.70927 53.18473 53.57675  
## WT/BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.29383 0.3697332 3 52.86737 53.52448 53.17850 53.48963  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 51.21371  
## BL/BR:MornLow 47.50000  
## BLK:MornHigh 53.38461  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.68378  
## BRN:MornLow 52.50000  
## WHT:MornHigh 51.30627  
## WHT:MornLow 48.00000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.50706  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.69291 a  
## WT/BR:MornHigh 53.29383 a  
## BLK:MornHigh 53.18731 a  
## BRN:MornHigh 53.02488 a  
## BLK:MornLow 51.66667 a  
## BRN:MornLow 51.33333 ab  
## WT/BLK:MornLow 51.33333 ab  
## WHT:MornHigh 50.70795 abc  
## WT/BR:MornLow 50.66667 abc  
## BL/BR:MornHigh 50.65979 abc  
## WHT:MornLow 47.00000 bc  
## BL/BR:MornLow 46.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM17 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 119.158 23.832 6.3549 0.0006846 \*\*\*  
## THIregime 1 57.094 57.094 15.2245 0.0006750 \*\*\*  
## Colour:THIregime 5 10.498 2.100 0.5599 0.7295564   
## Residuals 24 90.003 3.750   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.750113   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.68703 1.977815 6 48 52.90886  
## BLK 54.15858 2.383469 6 50 56.00000  
## BRN 53.20139 2.406794 6 49 55.58043  
## WHT 48.82620 3.246220 6 44 52.92338  
## WT/BLK 53.18040 1.293063 6 52 54.36080  
## WT/BR 52.83577 1.980815 6 50 55.33153  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.456936   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.15858 a  
## BRN 53.20139 ab  
## WT/BLK 53.18040 ab  
## WT/BR 52.83577 ab  
## BL/BR 50.68703 bc  
## WHT 48.82620 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 3.750113   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.40757 1.746954 18 49.56426 55.88138  
## MornLow 50.88889 3.141541 18 44.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.332261   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.40757 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.750113 24 52.14823 3.713493 5.701086  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.37406 0.4911101 3 51.94331 52.90886 52.10666 52.27000  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 54.65050 1.7728613 3 52.61847 55.88138 54.03506 55.45165  
## BLK:MornLow 53.66667 3.2145503 3 50.00000 56.00000 52.50000 55.00000  
## BRN:MornHigh 54.06945 1.6993301 3 52.22979 55.58043 53.31396 54.39814  
## BRN:MornLow 52.33333 3.0550505 3 49.00000 55.00000 51.00000 53.00000  
## WHT:MornHigh 50.98574 1.7380233 3 49.56426 52.92338 50.01692 50.46959  
## WHT:MornLow 46.66667 3.0550505 3 44.00000 50.00000 45.00000 46.00000  
## WT/BLK:MornHigh 54.36080 0.0000000 3 54.36080 54.36080 54.36080 54.36080  
## WT/BLK:MornLow 52.00000 0.0000000 3 52.00000 52.00000 52.00000 52.00000  
## WT/BR:MornHigh 54.00487 1.1727536 3 53.10632 55.33153 53.34154 53.57675  
## WT/BR:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.58943  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 55.66652  
## BLK:MornLow 55.50000  
## BRN:MornHigh 54.98928  
## BRN:MornLow 54.00000  
## WHT:MornHigh 51.69648  
## WHT:MornLow 48.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.45414  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.65050 a  
## WT/BLK:MornHigh 54.36080 a  
## BRN:MornHigh 54.06945 a  
## WT/BR:MornHigh 54.00487 a  
## BLK:MornLow 53.66667 a  
## BL/BR:MornHigh 52.37406 a  
## BRN:MornLow 52.33333 ab  
## WT/BLK:MornLow 52.00000 ab  
## WT/BR:MornLow 51.66667 ab  
## WHT:MornHigh 50.98574 ab  
## BL/BR:MornLow 49.00000 ab  
## WHT:MornLow 46.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM18 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 123.032 24.606 5.3418 0.001938 \*\*  
## THIregime 1 61.844 61.844 13.4258 0.001225 \*\*  
## Colour:THIregime 5 8.929 1.786 0.3877 0.852304   
## Residuals 24 110.552 4.606   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.606347   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.11485 4.114634 6 43 54.25626  
## BLK 53.72709 1.484858 6 52 55.56528  
## BRN 53.49312 2.276693 6 51 56.17283  
## WHT 49.11532 2.646804 6 46 52.43334  
## WT/BLK 53.76782 1.645416 6 51 55.75467  
## WT/BR 52.64587 1.494527 6 51 54.28613  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.831312   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 53.76782 a  
## BLK 53.72709 a  
## BRN 53.49312 a  
## WT/BR 52.64587 ab  
## BL/BR 50.11485 ab  
## WHT 49.11532 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 4.606347   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.45469 1.878872 18 48.90149 56.17283  
## MornLow 50.83333 3.276476 18 43.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.476541   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.45469 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.606347 24 52.14401 4.115986 6.318497  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.89637 2.7332758 3 48.90149 54.25626 50.71642 52.53135  
## BL/BR:MornLow 48.33333 5.0332230 3 43.00000 53.00000 46.00000 49.00000  
## BLK:MornHigh 54.45418 0.9623029 3 53.88788 55.56528 53.89863 53.90938  
## BLK:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## BRN:MornHigh 54.31957 1.6049689 3 53.39007 56.17283 53.39294 53.39582  
## BRN:MornLow 52.66667 2.8867513 3 51.00000 56.00000 51.00000 51.00000  
## WHT:MornHigh 51.23065 1.0440905 3 50.55671 52.43334 50.62930 50.70190  
## WHT:MornLow 47.00000 1.7320508 3 46.00000 49.00000 46.00000 46.00000  
## WT/BLK:MornHigh 54.86898 0.8930344 3 53.96878 55.75467 54.42614 54.88350  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 53.95840 0.2871409 3 53.75098 54.28613 53.79454 53.83810  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.39381  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.73733  
## BLK:MornLow 53.50000  
## BRN:MornHigh 54.78432  
## BRN:MornLow 53.50000  
## WHT:MornHigh 51.56762  
## WHT:MornLow 47.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 54.06211  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 54.86898 a  
## BLK:MornHigh 54.45418 ab  
## BRN:MornHigh 54.31957 ab  
## WT/BR:MornHigh 53.95840 ab  
## BLK:MornLow 53.00000 abc  
## BRN:MornLow 52.66667 abc  
## WT/BLK:MornLow 52.66667 abc  
## BL/BR:MornHigh 51.89637 abc  
## WT/BR:MornLow 51.33333 abc  
## WHT:MornHigh 51.23065 abc  
## BL/BR:MornLow 48.33333 bc  
## WHT:MornLow 47.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM19 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 202.952 40.590 16.3574 4.741e-07 \*\*\*  
## THIregime 1 55.208 55.208 22.2480 8.533e-05 \*\*\*  
## Colour:THIregime 5 17.276 3.455 1.3924 0.2624   
## Residuals 24 59.555 2.481   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.481469   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.12297 2.409089 6 47 53.83810  
## BLK 53.88571 1.261675 6 52 55.38347  
## BRN 55.08404 1.722551 6 52 56.31221  
## WHT 47.84733 3.142965 6 43 51.45328  
## WT/BLK 53.73878 1.243505 6 52 55.05773  
## WT/BR 51.75135 2.149525 6 48 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.812054   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.08404 a  
## BLK 53.88571 ab  
## WT/BLK 53.73878 ab  
## WT/BR 51.75135 b  
## BL/BR 51.12297 b  
## WHT 47.84733 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.481469   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.47673 1.967124 18 49.10305 56.31221  
## MornLow 51.00000 3.547990 18 43.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.083731   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.47673 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.481469 24 52.23836 3.015538 4.637563  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.57926 1.3466712 3 51.15926 53.83810 51.94985 52.74043  
## BL/BR:MornLow 49.66667 2.5166115 3 47.00000 52.00000 48.50000 50.00000  
## BLK:MornHigh 54.43808 0.8549169 3 53.71930 55.38347 53.96538 54.21146  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 55.50142 1.2498044 3 54.06211 56.31221 55.09603 56.12994  
## BRN:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WHT:MornHigh 50.36133 1.1839102 3 49.10305 51.45328 49.81536 50.52767  
## WHT:MornLow 45.33333 2.0816660 3 43.00000 47.00000 44.50000 46.00000  
## WT/BLK:MornHigh 54.81090 0.2900257 3 54.49148 55.05773 54.68749 54.88350  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 53.16938 1.0887850 3 51.95638 54.06211 52.72301 53.48963  
## WT/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.28927  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.79747  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.22108  
## BRN:MornLow 56.00000  
## WHT:MornHigh 50.99047  
## WHT:MornLow 46.50000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 53.77587  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.50142 a  
## WT/BLK:MornHigh 54.81090 ab  
## BRN:MornLow 54.66667 ab  
## BLK:MornHigh 54.43808 ab  
## BLK:MornLow 53.33333 abc  
## WT/BR:MornHigh 53.16938 abc  
## WT/BLK:MornLow 52.66667 abc  
## BL/BR:MornHigh 52.57926 abc  
## WHT:MornHigh 50.36133 bc  
## WT/BR:MornLow 50.33333 bc  
## BL/BR:MornLow 49.66667 cd  
## WHT:MornLow 45.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM20 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 236.343 47.269 43.339 3.031e-11 \*\*\*  
## THIregime 1 64.211 64.211 58.873 6.555e-08 \*\*\*  
## Colour:THIregime 5 21.410 4.282 3.926 0.009636 \*\*   
## Residuals 24 26.176 1.091   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.090678   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.01354 1.8466159 6 49 54.16479  
## BLK 53.84208 0.7049452 6 53 54.76987  
## BRN 54.39086 1.7010400 6 52 56.37693  
## WHT 46.56874 3.2096065 6 43 49.88518  
## WT/BLK 52.41905 1.7499535 6 50 54.62215  
## WT/BR 52.77893 1.4815863 6 51 54.65949  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.864307   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 54.39086 a  
## BLK 53.84208 ab  
## WT/BR 52.77893 ab  
## WT/BLK 52.41905 b  
## BL/BR 52.01354 b  
## WHT 46.56874 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.090678   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.33773 1.969316 18 49.10305 56.37693  
## MornLow 50.66667 3.580996 18 43.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.718481   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.33773 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.090678 24 52.0022 2.00829 3.074565  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.36041 0.8657084 3 52.44423 54.16479 52.95822 53.47221  
## BL/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BLK:MornHigh 54.35083 0.3640886 3 54.11190 54.76987 54.14131 54.17073  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 55.11505 1.1520237 3 54.11955 56.37693 54.48410 54.84865  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 49.47081 0.3931427 3 49.10305 49.88518 49.26362 49.42419  
## WHT:MornLow 43.66667 0.5773503 3 43.00000 44.00000 43.50000 44.00000  
## WT/BLK:MornHigh 53.83810 0.7840500 3 53.05405 54.62215 53.44608 53.83810  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.89120 0.6655833 3 53.48963 54.65949 53.50706 53.52448  
## WT/BR:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.81850  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.47030  
## BLK:MornLow 53.50000  
## BRN:MornHigh 55.61279  
## BRN:MornLow 54.50000  
## WHT:MornHigh 49.65469  
## WHT:MornLow 44.00000  
## WT/BLK:MornHigh 54.23013  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 54.09198  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.11505 a  
## BLK:MornHigh 54.35083 ab  
## WT/BR:MornHigh 53.89120 abc  
## WT/BLK:MornHigh 53.83810 abc  
## BRN:MornLow 53.66667 abcd  
## BL/BR:MornHigh 53.36041 abcd  
## BLK:MornLow 53.33333 abcd  
## WT/BR:MornLow 51.66667 bcde  
## WT/BLK:MornLow 51.00000 cde  
## BL/BR:MornLow 50.66667 de  
## WHT:MornHigh 49.47081 e  
## WHT:MornLow 43.66667 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM21 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 203.873 40.775 24.1519 1.219e-08 \*\*\*  
## THIregime 1 64.107 64.107 37.9722 2.290e-06 \*\*\*  
## Colour:THIregime 5 16.266 3.253 1.9269 0.127   
## Residuals 24 40.518 1.688   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.688261   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.51465 2.514288 6 45 51.63114  
## BLK 51.81668 1.144038 6 50 53.17285  
## BRN 53.21789 1.791797 6 50 54.60473  
## WHT 46.21372 2.980373 6 42 49.30803  
## WT/BLK 51.50494 1.350569 6 50 53.05405  
## WT/BR 51.73881 1.621904 6 49 53.61409  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.319471   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.21789 a  
## BLK 51.81668 a  
## WT/BR 51.73881 a  
## WT/BLK 51.50494 a  
## BL/BR 48.51465 b  
## WHT 46.21372 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.688261   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.83556 1.912152 18 48.05573 54.60473  
## MornLow 49.16667 3.417085 18 42.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8938957   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.83556 a  
## MornLow 49.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.688261 24 50.50111 2.572876 3.825209  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.36263 1.1071020 3 49.59116 51.63114 49.72837 49.86558  
## BL/BR:MornLow 46.66667 2.0816660 3 45.00000 49.00000 45.50000 46.00000  
## BLK:MornHigh 52.63336 0.5207417 3 52.13364 53.17285 52.36361 52.59358  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.76911 1.3347179 3 52.22979 54.60473 53.35130 54.47281  
## BRN:MornLow 52.66667 2.3094011 3 50.00000 54.00000 52.00000 54.00000  
## WHT:MornHigh 48.76078 0.6408892 3 48.05573 49.30803 48.48715 48.91857  
## WHT:MornLow 43.66667 1.5275252 3 42.00000 45.00000 43.00000 44.00000  
## WT/BLK:MornHigh 52.67654 0.3298184 3 52.44423 53.05405 52.48779 52.53135  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.81095 0.8914173 3 51.85184 53.61409 52.40939 52.96693  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 50.74836  
## BL/BR:MornLow 47.50000  
## BLK:MornHigh 52.88321  
## BLK:MornLow 51.50000  
## BRN:MornHigh 54.53877  
## BRN:MornLow 54.00000  
## WHT:MornHigh 49.11330  
## WHT:MornLow 44.50000  
## WT/BLK:MornHigh 52.79270  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.29051  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.76911 a  
## WT/BR:MornHigh 52.81095 a  
## WT/BLK:MornHigh 52.67654 a  
## BRN:MornLow 52.66667 a  
## BLK:MornHigh 52.63336 a  
## BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 50.66667 ab  
## BL/BR:MornHigh 50.36263 abc  
## WT/BLK:MornLow 50.33333 abc  
## WHT:MornHigh 48.76078 bc  
## BL/BR:MornLow 46.66667 cd  
## WHT:MornLow 43.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM22 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 160.490 32.098 58.4547 1.186e-12 \*\*\*  
## THIregime 1 40.177 40.177 73.1681 9.459e-09 \*\*\*  
## Colour:THIregime 5 11.467 2.293 4.1765 0.007158 \*\*   
## Residuals 24 13.179 0.549   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5491076   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.00944 1.8771639 6 46 49.91785  
## BLK 52.39941 0.8988693 6 51 53.31540  
## BRN 53.94219 1.1183007 6 52 55.00000  
## WHT 48.56877 2.2533208 6 46 51.28994  
## WT/BLK 49.66976 1.1893895 6 48 50.96325  
## WT/BR 51.41565 0.9434408 6 50 52.49401  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.322811   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.94219 a  
## BLK 52.39941 b  
## WT/BR 51.41565 b  
## WT/BLK 49.66976 c  
## WHT 48.56877 cd  
## BL/BR 48.00944 d  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5491076   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.72396 1.695273 18 49.48227 54.95817  
## MornLow 49.61111 2.831314 18 46.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5097952   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.72396 a  
## MornLow 49.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5491076 24 50.66754 1.46251 2.181545  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 49.68554 0.2192388 3 49.48227 49.91785 49.56938 49.65650  
## BL/BR:MornLow 46.33333 0.5773503 3 46.00000 47.00000 46.00000 46.00000  
## BLK:MornHigh 53.13215 0.2754166 3 52.81543 53.31540 53.04052 53.26562  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 54.21771 0.7519441 3 53.45479 54.95817 53.84748 54.24018  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 50.47087 0.7115695 3 50.00497 51.28994 50.06134 50.11771  
## WHT:MornLow 46.66667 1.1547005 3 46.00000 48.00000 46.00000 46.00000  
## WT/BLK:MornHigh 50.67286 0.4297363 3 50.17920 50.96325 50.52767 50.87613  
## WT/BLK:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## WT/BR:MornHigh 52.16463 0.4571069 3 51.64276 52.49401 51.99994 52.35712  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 49.78718  
## BL/BR:MornLow 46.50000  
## BLK:MornHigh 53.29051  
## BLK:MornLow 52.00000  
## BRN:MornHigh 54.59917  
## BRN:MornLow 54.50000  
## WHT:MornHigh 50.70382  
## WHT:MornLow 47.00000  
## WT/BLK:MornHigh 50.91969  
## WT/BLK:MornLow 49.00000  
## WT/BR:MornHigh 52.42557  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.21771 a  
## BRN:MornLow 53.66667 ab  
## BLK:MornHigh 53.13215 ab  
## WT/BR:MornHigh 52.16463 abc  
## BLK:MornLow 51.66667 bcd  
## WT/BLK:MornHigh 50.67286 cde  
## WT/BR:MornLow 50.66667 cde  
## WHT:MornHigh 50.47087 cde  
## BL/BR:MornHigh 49.68554 de  
## WT/BLK:MornLow 48.66667 ef  
## WHT:MornLow 46.66667 fg  
## BL/BR:MornLow 46.33333 g  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM23 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 106.286 21.257 79.121 4.098e-14 \*\*\*  
## THIregime 1 55.787 55.787 207.645 2.593e-13 \*\*\*  
## Colour:THIregime 5 8.910 1.782 6.633 0.0005217 \*\*\*  
## Residuals 24 6.448 0.269   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2686639   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.62634 1.9295205 6 47 51.80538  
## BLK 52.14166 0.9811593 6 51 53.33813  
## BRN 53.24421 0.7579703 6 52 54.08203  
## WHT 48.07661 2.2761143 6 46 50.27721  
## WT/BLK 51.57754 1.4369591 6 50 53.31540  
## WT/BR 51.80270 1.3127097 6 50 53.14117  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9252814   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.24421 a  
## BLK 52.14166 b  
## WT/BR 51.80270 b  
## WT/BLK 51.57754 b  
## BL/BR 49.62634 c  
## WHT 48.07661 d  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2686639   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.32302 1.309326 18 50.03401 54.08203  
## MornLow 49.83333 2.332633 18 46.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3565921   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.32302 a  
## MornLow 49.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2686639 24 51.07818 1.014774 1.525949  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.25267 0.6105100 3 50.59736 51.80538 50.97632 51.35528  
## BL/BR:MornLow 48.00000 1.0000000 3 47.00000 49.00000 47.50000 48.00000  
## BLK:MornHigh 52.95000 0.3363828 3 52.74292 53.33813 52.75593 52.76894  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.82176 0.3198137 3 53.46474 54.08203 53.69163 53.91852  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 50.15322 0.1216705 3 50.03401 50.27721 50.09123 50.14845  
## WHT:MornLow 46.00000 0.0000000 3 46.00000 46.00000 46.00000 46.00000  
## WT/BLK:MornHigh 52.82174 0.4297363 3 52.53135 53.31540 52.57491 52.61847  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.93872 0.3209360 3 52.56869 53.14117 52.83750 53.10632  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 51.58033  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 53.05353  
## BLK:MornLow 51.50000  
## BRN:MornHigh 54.00027  
## BRN:MornLow 53.00000  
## WHT:MornHigh 50.21283  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 52.96693  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.12374  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.82176 a  
## BLK:MornHigh 52.95000 a  
## WT/BR:MornHigh 52.93872 a  
## WT/BLK:MornHigh 52.82174 ab  
## BRN:MornLow 52.66667 abc  
## BLK:MornLow 51.33333 bcd  
## BL/BR:MornHigh 51.25267 cd  
## WT/BR:MornLow 50.66667 d  
## WT/BLK:MornLow 50.33333 d  
## WHT:MornHigh 50.15322 d  
## BL/BR:MornLow 48.00000 e  
## WHT:MornLow 46.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM24 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 90.403 18.081 10.8258 1.553e-05 \*\*\*  
## THIregime 1 56.021 56.021 33.5423 5.701e-06 \*\*\*  
## Colour:THIregime 5 7.176 1.435 0.8593 0.5223   
## Residuals 24 40.084 1.670   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.670154   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.73391 2.767643 6 47 54.09945  
## BLK 51.62635 1.340939 6 50 53.31540  
## BRN 52.01988 1.330692 6 50 53.57675  
## WHT 47.83884 2.533055 6 45 50.86524  
## WT/BLK 51.41056 1.258078 6 50 52.92338  
## WT/BR 52.85516 1.195116 6 51 54.36080  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.306999   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.85516 a  
## BRN 52.01988 a  
## BLK 51.62635 a  
## WT/BLK 51.41056 a  
## BL/BR 50.73391 a  
## WHT 47.83884 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.670154   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.32823 1.396703 18 49.51131 54.3608  
## MornLow 49.83333 2.479326 18 45.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8890891   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.32823 a  
## MornLow 49.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.670154 24 51.08078 2.530001 3.804641  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.13449 1.7121456 3 50.96325 54.09945 51.15200 51.34076  
## BL/BR:MornLow 49.33333 3.2145503 3 47.00000 53.00000 47.50000 48.00000  
## BLK:MornHigh 52.58603 0.6316508 3 52.22022 53.31540 52.22135 52.22248  
## BLK:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## BRN:MornHigh 53.03975 0.5535378 3 52.47104 53.57675 52.77126 53.07147  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 50.01102 0.7433361 3 49.51131 50.86524 49.58390 49.65650  
## WHT:MornLow 45.66667 1.1547005 3 45.00000 47.00000 45.00000 45.00000  
## WT/BLK:MornHigh 52.48779 0.3772262 3 52.27000 52.92338 52.27000 52.27000  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 53.71033 0.6138686 3 53.14117 54.36080 53.38509 53.62902  
## WT/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 52.72010  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 52.76894  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.32411  
## BRN:MornLow 51.50000  
## WHT:MornHigh 50.26087  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 52.59669  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.99491  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.71033 a  
## BRN:MornHigh 53.03975 ab  
## BLK:MornHigh 52.58603 ab  
## WT/BLK:MornHigh 52.48779 ab  
## BL/BR:MornHigh 52.13449 ab  
## WT/BR:MornLow 52.00000 ab  
## BRN:MornLow 51.00000 ab  
## BLK:MornLow 50.66667 ab  
## WT/BLK:MornLow 50.33333 ab  
## WHT:MornHigh 50.01102 ab  
## BL/BR:MornLow 49.33333 bc  
## WHT:MornLow 45.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM25 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 156.686 31.337 38.4464 1.078e-10 \*\*\*  
## THIregime 1 74.018 74.018 90.8100 1.249e-09 \*\*\*  
## Colour:THIregime 5 11.033 2.207 2.7071 0.04462 \*   
## Residuals 24 19.562 0.815   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8150874   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 48.03975 2.238865 6 46 50.30988  
## BLK 51.30136 1.138519 6 50 52.62639  
## BRN 52.22369 1.466914 6 50 54.02478  
## WHT 46.98536 2.763420 6 43 49.85977  
## WT/BLK 51.36731 1.695634 6 49 53.57675  
## WT/BR 52.35258 1.396535 6 50 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.611652   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.35258 a  
## BRN 52.22369 a  
## WT/BLK 51.36731 a  
## BLK 51.30136 a  
## BL/BR 48.03975 b  
## WHT 46.98536 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8150874   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.81224 1.686206 18 48.39587 54.02478  
## MornLow 48.94444 2.858881 18 43.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6211109   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.81224 a  
## MornLow 48.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8150874 24 50.37834 1.792083 2.657893  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 50.07950 0.2226041 3 49.86558 50.30988 49.96431 50.06304  
## BL/BR:MornLow 46.00000 0.0000000 3 46.00000 46.00000 46.00000 46.00000  
## BLK:MornHigh 52.26939 0.3098126 3 52.07088 52.62639 52.09090 52.11092  
## BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BRN:MornHigh 53.11404 0.8173526 3 52.44423 54.02478 52.65867 52.87312  
## BRN:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WHT:MornHigh 49.30405 0.7930441 3 48.39587 49.85977 49.02619 49.65650  
## WHT:MornLow 44.66667 1.5275252 3 43.00000 46.00000 44.00000 45.00000  
## WT/BLK:MornHigh 52.73462 0.7611292 3 52.09577 53.57675 52.31356 52.53135  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.37182 0.6525927 3 52.61847 53.76343 53.17601 53.73356  
## WT/BR:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## Q75  
## BL/BR:MornHigh 50.18646  
## BL/BR:MornLow 46.00000  
## BLK:MornHigh 52.36865  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.44895  
## BRN:MornLow 52.00000  
## WHT:MornHigh 49.75814  
## WHT:MornLow 45.50000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.74849  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.37182 a  
## BRN:MornHigh 53.11404 a  
## WT/BLK:MornHigh 52.73462 ab  
## BLK:MornHigh 52.26939 abc  
## BRN:MornLow 51.33333 abcd  
## WT/BR:MornLow 51.33333 abcd  
## BLK:MornLow 50.33333 bcd  
## BL/BR:MornHigh 50.07950 bcd  
## WT/BLK:MornLow 50.00000 cd  
## WHT:MornHigh 49.30405 d  
## BL/BR:MornLow 46.00000 e  
## WHT:MornLow 44.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM26 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 149.816 29.963 33.836 4.085e-10 \*\*\*  
## THIregime 1 62.688 62.688 70.790 1.278e-08 \*\*\*  
## Colour:THIregime 5 12.796 2.559 2.890 0.03514 \*   
## Residuals 24 21.253 0.886   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8855497   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.33790 1.880253 6 48 52.33534  
## BLK 51.99909 1.309594 6 50 53.54266  
## BRN 53.52560 1.435858 6 51 55.04433  
## WHT 47.50590 2.845635 6 44 50.54816  
## WT/BLK 52.59267 1.100861 6 51 53.83810  
## WT/BR 52.95639 1.651009 6 51 55.10751  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.67987   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.52560 a  
## WT/BR 52.95639 a  
## WT/BLK 52.59267 a  
## BLK 51.99909 ab  
## BL/BR 50.33790 b  
## WHT 47.50590 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8855497   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.80585 1.597159 18 49.30803 55.10751  
## MornLow 50.16667 2.874840 18 44.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6474013   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.80585 a  
## MornLow 50.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8855497 24 51.48626 1.827743 2.770396  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.00913 0.3549413 3 51.63114 52.33534 51.84603 52.06092  
## BL/BR:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## BLK:MornHigh 52.99819 0.5413221 3 52.46007 53.54266 52.72595 52.99182  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 54.38454 0.7794668 3 53.52448 55.04433 54.05465 54.58481  
## BRN:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WHT:MornHigh 50.01180 0.6367878 3 49.30803 50.54816 49.74362 50.17920  
## WHT:MornLow 45.00000 1.0000000 3 44.00000 46.00000 44.50000 45.00000  
## WT/BLK:MornHigh 53.51867 0.3520778 3 53.14117 53.83810 53.35896 53.57675  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.91277 1.0346777 3 53.31540 55.10751 53.31540 53.31540  
## WT/BR:MornLow 52.00000 1.7320508 3 51.00000 54.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.19813  
## BL/BR:MornLow 49.00000  
## BLK:MornHigh 53.26724  
## BLK:MornLow 51.50000  
## BRN:MornHigh 54.81457  
## BRN:MornLow 53.50000  
## WHT:MornHigh 50.36368  
## WHT:MornLow 45.50000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.21146  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.38454 a  
## WT/BR:MornHigh 53.91277 a  
## WT/BLK:MornHigh 53.51867 ab  
## BLK:MornHigh 52.99819 ab  
## BRN:MornLow 52.66667 abc  
## BL/BR:MornHigh 52.00913 abc  
## WT/BR:MornLow 52.00000 abc  
## WT/BLK:MornLow 51.66667 abc  
## BLK:MornLow 51.00000 bcd  
## WHT:MornHigh 50.01180 cd  
## BL/BR:MornLow 48.66667 d  
## WHT:MornLow 45.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM27 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 115.502 23.100 19.4755 9.575e-08 \*\*\*  
## THIregime 1 62.547 62.547 52.7321 1.676e-07 \*\*\*  
## Colour:THIregime 5 8.798 1.760 1.4835 0.2321   
## Residuals 24 28.467 1.186   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.186131   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.26095 2.075010 6 47 52.72736  
## BLK 52.67283 1.024290 6 51 53.88562  
## BRN 51.27145 2.000352 6 48 53.61409  
## WHT 47.55876 2.668406 6 44 50.67115  
## WT/BLK 52.62171 1.120348 6 51 53.83810  
## WT/BR 52.18964 1.493552 6 50 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.944176   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.67283 a  
## WT/BLK 52.62171 a  
## WT/BR 52.18964 ab  
## BRN 51.27145 ab  
## BL/BR 50.26095 b  
## WHT 47.55876 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.186131   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.41400 1.488322 18 49.19914 53.94264  
## MornLow 49.77778 2.602161 18 44.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7492616   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.41400 a  
## MornLow 49.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.186131 24 51.09589 2.131476 3.206283  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.85523 0.8975746 3 50.93421 52.72736 51.41916 51.90411  
## BL/BR:MornLow 48.66667 1.5275252 3 47.00000 50.00000 48.00000 49.00000  
## BLK:MornHigh 53.34567 0.5145919 3 52.86088 53.88562 53.07569 53.29051  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 52.54290 1.0741318 3 51.46585 53.61409 52.00731 52.54877  
## BRN:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WHT:MornHigh 49.78419 0.7810721 3 49.19914 50.67115 49.34070 49.48227  
## WHT:MornLow 45.33333 1.5275252 3 44.00000 47.00000 44.50000 45.00000  
## WT/BLK:MornHigh 53.57675 0.2613500 3 53.31540 53.83810 53.44608 53.57675  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.37929 0.5753219 3 52.79270 53.94264 53.09761 53.40252  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.31574  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 53.58806  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.08143  
## BRN:MornLow 51.00000  
## WHT:MornHigh 50.07671  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.67258  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.57675 a  
## WT/BR:MornHigh 53.37929 a  
## BLK:MornHigh 53.34567 a  
## BRN:MornHigh 52.54290 ab  
## BLK:MornLow 52.00000 ab  
## BL/BR:MornHigh 51.85523 abc  
## WT/BLK:MornLow 51.66667 abc  
## WT/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.00000 bc  
## WHT:MornHigh 49.78419 bc  
## BL/BR:MornLow 48.66667 c  
## WHT:MornLow 45.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM28 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 186.381 37.276 15.6268 7.125e-07 \*\*\*  
## THIregime 1 60.637 60.637 25.4202 3.739e-05 \*\*\*  
## Colour:THIregime 5 14.780 2.956 1.2392 0.3219   
## Residuals 24 57.250 2.385   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.385401   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 49.38465 2.1931439 6 46 52.00865  
## BLK 53.06541 0.8978942 6 52 54.11190  
## BRN 54.30616 2.7927114 6 51 58.00000  
## WHT 47.50017 2.9908887 6 43 50.51742  
## WT/BLK 52.03428 1.3576901 6 50 53.70743  
## WT/BR 51.82966 1.5261959 6 50 53.75098  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.757083   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 54.30616 a  
## BLK 53.06541 a  
## WT/BLK 52.03428 ab  
## WT/BR 51.82966 ab  
## BL/BR 49.38465 bc  
## WHT 47.50017 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.385401   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.65122 1.901489 18 49.10113 57.21555  
## MornLow 50.05556 3.403670 18 43.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.062546   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.65122 a  
## MornLow 50.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.385401 24 51.35339 3.007541 4.546908  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.10264 0.9148494 3 50.17920 52.00865 50.64963 51.12006  
## BL/BR:MornLow 47.66667 1.5275252 3 46.00000 49.00000 47.00000 48.00000  
## BLK:MornHigh 53.79748 0.2727577 3 53.62427 54.11190 53.64028 53.65629  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 54.94566 1.9844108 3 53.53941 57.21555 53.81072 54.08203  
## BRN:MornLow 53.66667 3.7859389 3 51.00000 58.00000 51.50000 52.00000  
## WHT:MornHigh 50.00034 0.7816555 3 49.10113 50.51742 49.74180 50.38247  
## WHT:MornLow 45.00000 1.7320508 3 43.00000 46.00000 44.50000 46.00000  
## WT/BLK:MornHigh 53.06857 0.6317210 3 52.44423 53.70743 52.74914 53.05405  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.99265 0.6574118 3 52.58362 53.75098 52.61349 52.64336  
## WT/BR:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 51.56436  
## BL/BR:MornLow 48.50000  
## BLK:MornHigh 53.88409  
## BLK:MornLow 52.50000  
## BRN:MornHigh 55.64879  
## BRN:MornLow 55.00000  
## WHT:MornHigh 50.44994  
## WHT:MornLow 46.00000  
## WT/BLK:MornHigh 53.38074  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.19717  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.94566 a  
## BLK:MornHigh 53.79748 ab  
## BRN:MornLow 53.66667 ab  
## WT/BLK:MornHigh 53.06857 ab  
## WT/BR:MornHigh 52.99265 ab  
## BLK:MornLow 52.33333 ab  
## BL/BR:MornHigh 51.10264 abc  
## WT/BLK:MornLow 51.00000 abc  
## WT/BR:MornLow 50.66667 abc  
## WHT:MornHigh 50.00034 bc  
## BL/BR:MornLow 47.66667 cd  
## WHT:MornLow 45.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM29 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 72.206 14.441 6.8874 0.0004089 \*\*\*  
## THIregime 1 72.293 72.293 34.4785 4.673e-06 \*\*\*  
## Colour:THIregime 5 5.304 1.061 0.5060 0.7688185   
## Residuals 24 50.322 2.097   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.096742   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.44838 1.752573 6 49 53.51141  
## BLK 51.89238 1.578529 6 50 53.83810  
## BRN 53.18219 2.808410 6 50 56.53202  
## WHT 48.91713 2.688060 6 45 51.87029  
## WT/BLK 52.88306 1.750441 6 50 54.88350  
## WT/BR 52.51270 1.357805 6 51 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.584888   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.18219 a  
## WT/BLK 52.88306 a  
## WT/BR 52.51270 a  
## BLK 51.89238 a  
## BL/BR 51.44838 ab  
## WHT 48.91713 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.096742   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.22306 1.362402 18 50.40788 56.53202  
## MornLow 50.38889 2.379790 18 45.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.996184   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.22306 a  
## MornLow 50.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.096742 24 51.80597 2.79507 4.262927  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.89676 0.6207947 3 52.27000 53.51141 52.58943 52.90886  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.11810 0.6236359 3 52.74725 53.83810 52.75809 52.76894  
## BLK:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## BRN:MornHigh 54.36437 1.8775559 3 53.24571 56.53202 53.28055 53.31540  
## BRN:MornLow 52.00000 3.4641016 3 50.00000 56.00000 50.00000 50.00000  
## WHT:MornHigh 51.16759 0.7328685 3 50.40788 51.87029 50.81624 51.22460  
## WHT:MornLow 46.66667 1.5275252 3 45.00000 48.00000 46.00000 47.00000  
## WT/BLK:MornHigh 54.09945 0.9423108 3 53.05405 54.88350 53.70743 54.36080  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 53.69208 0.3209360 3 53.48963 54.06211 53.50706 53.52448  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.21013  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.30352  
## BLK:MornLow 51.00000  
## BRN:MornHigh 54.92371  
## BRN:MornLow 53.00000  
## WHT:MornHigh 51.54744  
## WHT:MornLow 47.50000  
## WT/BLK:MornHigh 54.62215  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 53.79330  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.36437 a  
## WT/BLK:MornHigh 54.09945 ab  
## WT/BR:MornHigh 53.69208 ab  
## BLK:MornHigh 53.11810 ab  
## BL/BR:MornHigh 52.89676 ab  
## BRN:MornLow 52.00000 ab  
## WT/BLK:MornLow 51.66667 ab  
## WT/BR:MornLow 51.33333 ab  
## WHT:MornHigh 51.16759 ab  
## BLK:MornLow 50.66667 abc  
## BL/BR:MornLow 50.00000 bc  
## WHT:MornLow 46.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM30 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.849 5.770 2.9214 0.0337391 \*   
## THIregime 1 42.350 42.350 21.4433 0.0001062 \*\*\*  
## Colour:THIregime 5 1.389 0.278 0.1407 0.9809670   
## Residuals 24 47.400 1.975   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.974996   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.65031 1.855243 6 49 53.94264  
## BLK 52.43095 1.627723 6 50 54.42898  
## BRN 53.76066 1.646067 6 51 55.52682  
## WHT 51.97100 1.487916 6 50 53.47874  
## WT/BLK 51.00463 2.402414 6 47 53.83810  
## WT/BR 51.35684 1.200606 6 50 52.79270  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.50872   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.76066 a  
## BLK 52.43095 ab  
## WHT 51.97100 ab  
## BL/BR 51.65031 ab  
## WT/BR 51.35684 ab  
## WT/BLK 51.00463 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.974996   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.11369 1.155374 18 50.57123 55.52682  
## MornLow 50.94444 1.797784 18 47.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.96683   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.11369 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.974996 24 52.02907 2.701078 4.137314  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.63395 1.1699657 3 51.68922 53.94264 51.97961 52.27000  
## BL/BR:MornLow 50.66667 2.0816660 3 49.00000 53.00000 49.50000 50.00000  
## BLK:MornHigh 53.52858 0.8222236 3 52.81759 54.42898 53.07837 53.33916  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 54.52131 1.0188469 3 53.48963 55.52682 54.01856 54.54748  
## BRN:MornLow 53.00000 2.0000000 3 51.00000 55.00000 52.00000 53.00000  
## WHT:MornHigh 53.27533 0.3123506 3 52.91569 53.47874 53.17362 53.43156  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.34260 1.6508168 3 50.57123 53.83810 51.59485 52.61847  
## WT/BLK:MornLow 49.66667 2.5166115 3 47.00000 52.00000 48.50000 50.00000  
## WT/BR:MornHigh 52.38035 0.3572137 3 52.16546 52.79270 52.17417 52.18288  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.10632  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.88407  
## BLK:MornLow 52.00000  
## BRN:MornHigh 55.03715  
## BRN:MornLow 54.00000  
## WHT:MornHigh 53.45515  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.22828  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.48779  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.52131 a  
## BLK:MornHigh 53.52858 ab  
## WHT:MornHigh 53.27533 ab  
## BRN:MornLow 53.00000 ab  
## BL/BR:MornHigh 52.63395 ab  
## WT/BR:MornHigh 52.38035 ab  
## WT/BLK:MornHigh 52.34260 ab  
## BLK:MornLow 51.33333 ab  
## BL/BR:MornLow 50.66667 ab  
## WHT:MornLow 50.66667 ab  
## WT/BR:MornLow 50.33333 b  
## WT/BLK:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM31 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 94.902 18.980 9.5670 4.036e-05 \*\*\*  
## THIregime 1 33.601 33.601 16.9366 0.0003935 \*\*\*  
## Colour:THIregime 5 4.547 0.909 0.4583 0.8031130   
## Residuals 24 47.615 1.984   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.983954   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.92999 2.1796704 6 48 54.04718  
## BLK 54.86442 1.6199154 6 52 56.36070  
## BRN 54.62016 0.9991706 6 53 55.85921  
## WHT 51.83020 1.6914195 6 50 53.68436  
## WT/BLK 50.35913 2.1107338 6 47 52.96693  
## WT/BR 51.85943 1.2095699 6 50 53.39007  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.514404   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 54.86442 a  
## BRN 54.62016 a  
## BL/BR 51.92999 b  
## WT/BR 51.85943 b  
## WHT 51.83020 b  
## WT/BLK 50.35913 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.983954   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.54333 1.623102 18 50.44055 56.3607  
## MornLow 51.61111 2.452823 18 47.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9690203   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.54333 a  
## MornLow 51.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.983954 24 52.57722 2.678972 4.146687  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.85997 1.5108878 3 51.15926 54.04718 52.26637 53.37348  
## BL/BR:MornLow 51.00000 2.6457513 3 48.00000 53.00000 50.00000 52.00000  
## BLK:MornHigh 55.39551 1.1750821 3 54.08700 56.36070 54.91292 55.73883  
## BLK:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## BRN:MornHigh 55.24033 0.5848468 3 54.69682 55.85921 54.93089 55.16495  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 53.32707 0.3115460 3 53.11213 53.68436 53.14843 53.18473  
## WHT:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 51.71826 1.2634420 3 50.44055 52.96693 51.09392 51.74730  
## WT/BLK:MornLow 49.00000 2.0000000 3 47.00000 51.00000 48.00000 49.00000  
## WT/BR:MornHigh 52.71886 0.6646751 3 52.06092 53.39007 52.38325 52.70558  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.71033  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.04976  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.51208  
## BRN:MornLow 54.50000  
## WHT:MornHigh 53.43454  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.35712  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 53.04783  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 55.39551 a  
## BRN:MornHigh 55.24033 a  
## BLK:MornLow 54.33333 ab  
## BRN:MornLow 54.00000 ab  
## WHT:MornHigh 53.32707 ab  
## BL/BR:MornHigh 52.85997 abc  
## WT/BR:MornHigh 52.71886 abc  
## WT/BLK:MornHigh 51.71826 abc  
## BL/BR:MornLow 51.00000 bc  
## WT/BR:MornLow 51.00000 bc  
## WHT:MornLow 50.33333 bc  
## WT/BLK:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM32 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 25.859 5.172 3.1626 0.02475 \*   
## THIregime 1 39.977 39.977 24.4463 4.787e-05 \*\*\*  
## Colour:THIregime 5 1.653 0.331 0.2022 0.95840   
## Residuals 24 39.247 1.635   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.635295   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.99073 1.310048 6 50 53.57675  
## BLK 53.71103 2.054313 6 51 56.02394  
## BRN 52.64564 1.152860 6 51 53.83810  
## WHT 51.36101 1.653366 6 49 53.22828  
## WT/BLK 51.28019 2.061729 6 48 53.83810  
## WT/BR 51.66746 1.387643 6 50 53.46474  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.282797   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.71103 a  
## BRN 52.64564 ab  
## BL/BR 51.99073 ab  
## WT/BR 51.66746 ab  
## WHT 51.36101 b  
## WT/BLK 51.28019 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.635295   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.16313 1.023682 18 51.2246 56.02394  
## MornLow 51.05556 1.696787 18 48.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.879762   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.16313 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.635295 24 52.10934 2.454045 3.764728  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.98145 0.5881719 3 52.40068 53.57675 52.68380 52.96693  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 54.42206 1.4261179 3 53.29051 56.02394 53.62112 53.95173  
## BLK:MornLow 53.00000 2.6457513 3 51.00000 56.00000 51.50000 52.00000  
## BRN:MornHigh 53.62462 0.3379469 3 53.23498 53.83810 53.51787 53.80076  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.72202 0.5262925 3 52.17776 53.22828 52.46890 52.76003  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 52.56039 1.3077176 3 51.22460 53.83810 51.92153 52.61847  
## WT/BLK:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BR:MornHigh 52.66825 0.6897851 3 52.27000 53.46474 52.27000 52.27000  
## WT/BR:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.27184  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.98783  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.99416  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.22828  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.86737  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.42206 a  
## BRN:MornHigh 53.62462 ab  
## BLK:MornLow 53.00000 ab  
## BL/BR:MornHigh 52.98145 ab  
## WHT:MornHigh 52.72202 ab  
## WT/BR:MornHigh 52.66825 ab  
## WT/BLK:MornHigh 52.56039 ab  
## BRN:MornLow 51.66667 ab  
## BL/BR:MornLow 51.00000 ab  
## WT/BR:MornLow 50.66667 ab  
## WHT:MornLow 50.00000 b  
## WT/BLK:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM33 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.688 1.338 1.9690 0.1200   
## THIregime 1 47.538 47.538 69.9738 1.42e-08 \*\*\*  
## Colour:THIregime 5 0.575 0.115 0.1693 0.9715   
## Residuals 24 16.305 0.679   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6793715   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.02969 1.342712 6 50 53.60579  
## BLK 52.15355 1.453062 6 50 53.83810  
## BRN 52.41148 1.250860 6 51 53.83810  
## WHT 52.16314 1.462787 6 50 53.87077  
## WT/BLK 51.07723 1.932112 6 48 53.31540  
## WT/BR 51.72636 1.237715 6 50 53.01671  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.471373   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.41148 a  
## WHT 52.16314 a  
## BLK 52.15355 a  
## BL/BR 52.02969 a  
## WT/BR 51.72636 a  
## WT/BLK 51.07723 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6793715   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.07604 0.6163146 18 51.35528 53.87077  
## MornLow 50.77778 1.0032627 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5670492   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.07604 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6793715 24 51.92691 1.587308 2.426549  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.05937 0.5713366 3 52.46601 53.60579 52.78617 53.10632  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.30710 0.5351935 3 52.76781 53.83810 53.04160 53.31540  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.48963 0.3017810 3 53.31540 53.83810 53.31540 53.31540  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.32629 0.5391169 3 52.79270 53.87077 53.05405 53.31540  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.48779 1.0150120 3 51.35528 53.31540 52.07399 52.79270  
## WT/BLK:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## WT/BR:MornHigh 52.78606 0.3572571 3 52.37454 53.01671 52.67074 52.96693  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.35605  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.57675  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.57675  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.59308  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.99182  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.48963 a  
## WHT:MornHigh 53.32629 ab  
## BLK:MornHigh 53.30710 ab  
## BL/BR:MornHigh 53.05937 abc  
## WT/BR:MornHigh 52.78606 abc  
## WT/BLK:MornHigh 52.48779 abc  
## BRN:MornLow 51.33333 abcd  
## BL/BR:MornLow 51.00000 bcd  
## BLK:MornLow 51.00000 bcd  
## WHT:MornLow 51.00000 bcd  
## WT/BR:MornLow 50.66667 cd  
## WT/BLK:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM34 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.099 2.420 5.0715 0.002596 \*\*   
## THIregime 1 47.091 47.091 98.6968 5.586e-10 \*\*\*  
## Colour:THIregime 5 0.960 0.192 0.4026 0.842162   
## Residuals 24 11.451 0.477   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.477123   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.23373 1.534689 6 49 53.05405  
## BLK 51.53153 1.376739 6 50 53.09139  
## BRN 52.57071 1.078178 6 51 53.69871  
## WHT 51.03018 1.705043 6 49 53.08309  
## WT/BLK 50.88122 1.392810 6 49 52.27000  
## WT/BR 51.94821 1.280678 6 50 53.53941  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.23306   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.57071 a  
## WT/BR 51.94821 ab  
## BLK 51.53153 ab  
## BL/BR 51.23373 b  
## WHT 51.03018 b  
## WT/BLK 50.88122 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.477123   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.67631 0.6054803 18 51.7473 53.69871  
## MornLow 50.38889 1.0369009 18 49.0000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4752063   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.67631 a  
## MornLow 50.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.477123 24 51.5326 1.340396 2.03353  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46746 0.5673518 3 51.92153 53.05405 52.17417 52.42681  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 52.72974 0.3132592 3 52.54271 53.09139 52.54891 52.55511  
## BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BRN:MornHigh 53.47476 0.3477425 3 53.07415 53.69871 53.36279 53.65142  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.39370 0.5975508 3 52.02402 53.08309 52.04901 52.07399  
## WHT:MornLow 49.66667 1.1547005 3 49.00000 51.00000 49.00000 49.00000  
## WT/BLK:MornHigh 52.09577 0.3017810 3 51.74730 52.27000 52.00865 52.27000  
## WT/BLK:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## WT/BR:MornHigh 52.89641 0.6348698 3 52.27000 53.53941 52.57491 52.87982  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.74043  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 52.82325  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.67507  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.57854  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 52.27000  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 53.20962  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.47476 a  
## WT/BR:MornHigh 52.89641 ab  
## BLK:MornHigh 52.72974 ab  
## BL/BR:MornHigh 52.46746 ab  
## WHT:MornHigh 52.39370 ab  
## WT/BLK:MornHigh 52.09577 abc  
## BRN:MornLow 51.66667 abcd  
## WT/BR:MornLow 51.00000 bcd  
## BLK:MornLow 50.33333 cd  
## BL/BR:MornLow 50.00000 d  
## WHT:MornLow 49.66667 d  
## WT/BLK:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM35 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.062 3.012 3.2639 0.02177 \*   
## THIregime 1 41.295 41.295 44.7412 6.426e-07 \*\*\*  
## Colour:THIregime 5 0.869 0.174 0.1882 0.96422   
## Residuals 24 22.152 0.923   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9229795   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.12532 1.428809 6 49 52.79270  
## BLK 52.24098 1.293920 6 50 53.51993  
## BRN 51.97619 1.293110 6 50 53.52448  
## WHT 50.68939 1.843612 6 48 52.90886  
## WT/BLK 50.46772 1.687869 6 48 52.61847  
## WT/BR 51.59320 1.107882 6 50 52.79270  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.715004   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.24098 a  
## BRN 51.97619 ab  
## WT/BR 51.59320 ab  
## BL/BR 51.12532 ab  
## WHT 50.68939 ab  
## WT/BLK 50.46772 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9229795   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.41982 0.7848356 18 50.7019 53.52448  
## MornLow 50.27778 1.2744344 18 48.0000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6609416   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.41982 a  
## MornLow 50.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9229795 24 51.3488 1.870965 2.828339  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.25064 0.5519936 3 51.68922 52.79270 51.97961 52.27000  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.14863 0.6170677 3 52.43631 53.51993 52.96297 53.48963  
## BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BRN:MornHigh 52.95238 0.5669992 3 52.39062 53.52448 52.66633 52.94204  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.04545 0.8045224 3 51.31684 52.90886 51.61374 51.91064  
## WHT:MornLow 49.33333 1.5275252 3 48.00000 51.00000 48.50000 49.00000  
## WT/BLK:MornHigh 51.60211 0.9635487 3 50.70190 52.61847 51.09392 51.48595  
## WT/BLK:MornLow 49.33333 1.5275252 3 48.00000 51.00000 48.50000 49.00000  
## WT/BR:MornHigh 52.51973 0.3997253 3 52.06092 52.79270 52.38325 52.70558  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.53135  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.50478  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.23326  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.40975  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 52.05221  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 52.74914  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.14863 a  
## BRN:MornHigh 52.95238 a  
## WT/BR:MornHigh 52.51973 ab  
## BL/BR:MornHigh 52.25064 ab  
## WHT:MornHigh 52.04545 abc  
## WT/BLK:MornHigh 51.60211 abc  
## BLK:MornLow 51.33333 abc  
## BRN:MornLow 51.00000 abc  
## WT/BR:MornLow 50.66667 abc  
## BL/BR:MornLow 50.00000 bc  
## WHT:MornLow 49.33333 c  
## WT/BLK:MornLow 49.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM36 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.738 6.148 3.2808 0.02131 \*   
## THIregime 1 52.657 52.657 28.1021 1.942e-05 \*\*\*  
## Colour:THIregime 5 2.614 0.523 0.2790 0.92006   
## Residuals 24 44.971 1.874   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.873773   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.88553 1.399058 6 50 53.31540  
## BLK 53.10092 1.386739 6 51 54.79260  
## BRN 51.91062 1.424668 6 50 53.35561  
## WHT 50.02082 2.945388 6 46 53.60579  
## WT/BLK 52.23030 1.545112 6 50 54.09945  
## WT/BR 52.10833 1.753730 6 49 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.443586   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.10092 a  
## WT/BLK 52.23030 ab  
## WT/BR 52.10833 ab  
## BRN 51.91062 ab  
## BL/BR 51.88553 ab  
## WHT 50.02082 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.873773   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.08550 1.038165 18 50.42518 54.7926  
## MornLow 50.66667 1.878673 18 46.00000 54.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9417281   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.08550 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.873773 24 51.87609 2.638708 4.029897  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.10438 0.3212879 3 52.73462 53.31540 52.99888 53.26313  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.86852 0.8406496 3 53.14909 54.79260 53.40648 53.66387  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.15457 0.3140321 3 52.79270 53.35561 53.05405 53.31540  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 51.70830 1.6769506 3 50.42518 53.60579 50.75955 51.09393  
## WHT:MornLow 48.33333 3.2145503 3 46.00000 52.00000 46.50000 47.00000  
## WT/BLK:MornHigh 53.46059 0.6538588 3 52.79270 54.09945 53.14117 53.48963  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.21667 1.0018543 3 52.06092 53.83810 52.90595 53.75098  
## WT/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.28927  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.22823  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.33550  
## BRN:MornLow 51.00000  
## WHT:MornHigh 52.34986  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.79454  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.86852 a  
## WT/BLK:MornHigh 53.46059 a  
## WT/BR:MornHigh 53.21667 a  
## BRN:MornHigh 53.15457 a  
## BL/BR:MornHigh 53.10438 a  
## BLK:MornLow 52.33333 ab  
## WHT:MornHigh 51.70830 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## BL/BR:MornLow 50.66667 ab  
## BRN:MornLow 50.66667 ab  
## WHT:MornLow 48.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM37 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.606 1.321 1.9093 0.1301   
## THIregime 1 41.127 41.127 59.4312 6.04e-08 \*\*\*  
## Colour:THIregime 5 0.134 0.027 0.0386 0.9991   
## Residuals 24 16.608 0.692   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6920115   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.76840 1.276913 6 50 53.05405  
## BLK 52.35183 1.565296 6 50 54.26990  
## BRN 52.36151 1.396340 6 50 53.76343  
## WHT 51.84228 1.352705 6 50 53.19924  
## WT/BLK 51.09144 1.415108 6 49 52.79270  
## WT/BR 51.99757 1.308056 6 50 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.484998   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.36151 a  
## BLK 52.35183 a  
## WT/BR 51.99757 a  
## WHT 51.84228 a  
## BL/BR 51.76840 a  
## WT/BLK 51.09144 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6920115   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.97101 0.6346908 18 51.48595 54.2699  
## MornLow 50.83333 0.9851844 18 49.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5722999   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.97101 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6920115 24 51.90217 1.60277 2.449019  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.87014 0.3185466 3 52.50231 53.05405 52.77818 53.05405  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.37033 0.8246400 3 52.65015 54.26990 52.92055 53.19095  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.38969 0.6079758 3 52.68816 53.76343 53.20282 53.71748  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.01789 0.3082103 3 52.66203 53.19924 52.92722 53.19241  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.18288 0.6577164 3 51.48595 52.79270 51.87798 52.27000  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 52.99514 0.5404463 3 52.44423 53.52448 52.73047 53.01671  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.05405  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.73042  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.74045  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.19583  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.53135  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.27060  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.38969 a  
## BLK:MornHigh 53.37033 a  
## WHT:MornHigh 53.01789 ab  
## WT/BR:MornHigh 52.99514 ab  
## BL/BR:MornHigh 52.87014 ab  
## WT/BLK:MornHigh 52.18288 abc  
## BLK:MornLow 51.33333 abc  
## BRN:MornLow 51.33333 abc  
## WT/BR:MornLow 51.00000 abc  
## BL/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.66667 bc  
## WT/BLK:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM38 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.676 6.535 4.8452 0.003332 \*\*   
## THIregime 1 58.074 58.074 43.0560 8.708e-07 \*\*\*  
## Colour:THIregime 5 1.823 0.365 0.2703 0.924906   
## Residuals 24 32.371 1.349   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.348795   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.41813 1.710226 6 49 53.31540  
## BLK 52.56182 1.790412 6 50 54.72442  
## BRN 51.34775 1.644707 6 49 53.27519  
## WHT 50.78245 2.183325 6 47 53.18473  
## WT/BLK 53.69523 1.427717 6 52 55.58043  
## WT/BR 51.81524 1.677112 6 50 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.073204   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 53.69523 a  
## BLK 52.56182 ab  
## WT/BR 51.81524 ab  
## BL/BR 51.41813 b  
## BRN 51.34775 b  
## WHT 50.78245 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.348795   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.20687 1.053560 18 50.97862 55.58043  
## MornLow 50.66667 1.680336 18 47.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7989875   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.20687 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.348795 24 51.93677 2.236135 3.419073  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.83626 0.5281167 3 52.27000 53.31540 52.59669 52.92338  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.45697 1.1299177 3 52.55511 54.72442 52.82325 53.09139  
## BLK:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## BRN:MornHigh 52.69550 0.5597932 3 52.15799 53.27519 52.40565 52.65331  
## BRN:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WHT:MornHigh 52.23157 1.1331918 3 50.97862 53.18473 51.75499 52.53135  
## WHT:MornLow 49.33333 2.0816660 3 47.00000 51.00000 48.50000 50.00000  
## WT/BLK:MornHigh 54.72379 0.7673358 3 54.09945 55.58043 54.29546 54.49148  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 53.29715 0.3320928 3 53.01671 53.66387 53.11379 53.21086  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.11939  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.90790  
## BLK:MornLow 52.50000  
## BRN:MornHigh 52.96425  
## BRN:MornLow 50.50000  
## WHT:MornHigh 52.85804  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 55.03595  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 53.43736  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 54.72379 a  
## BLK:MornHigh 53.45697 ab  
## WT/BR:MornHigh 53.29715 abc  
## BL/BR:MornHigh 52.83626 abc  
## BRN:MornHigh 52.69550 abcd  
## WT/BLK:MornLow 52.66667 abcd  
## WHT:MornHigh 52.23157 abcd  
## BLK:MornLow 51.66667 abcd  
## WT/BR:MornLow 50.33333 bcd  
## BL/BR:MornLow 50.00000 cd  
## BRN:MornLow 50.00000 cd  
## WHT:MornLow 49.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM39 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 22.163 4.433 4.1019 0.007815 \*\*   
## THIregime 1 44.152 44.152 40.8580 1.31e-06 \*\*\*  
## Colour:THIregime 5 1.741 0.348 0.3222 0.894653   
## Residuals 24 25.935 1.081   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080619   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.35292 1.189315 6 51 53.70743  
## BLK 52.62111 1.518618 6 50 54.31535  
## BRN 52.93108 1.241961 6 51 54.36080  
## WHT 50.57973 2.244373 6 47 53.17021  
## WT/BLK 51.45412 1.499306 6 49 53.05405  
## WT/BR 52.03906 1.348055 6 50 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.85569   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.93108 a  
## BLK 52.62111 a  
## BL/BR 52.35292 ab  
## WT/BR 52.03906 ab  
## WT/BLK 51.45412 ab  
## WHT 50.57973 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080619   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10378 0.8422975 18 51.07086 54.3608  
## MornLow 50.88889 1.4907120 18 47.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7151602   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10378 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.080619 24 51.99634 1.999234 3.060354  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.37251 0.2901032 3 53.19924 53.70743 53.20505 53.21086  
## BL/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BLK:MornHigh 53.57555 0.8362294 3 52.66825 54.31535 53.20566 53.74306  
## BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## BRN:MornHigh 53.86216 0.5054074 3 53.35025 54.36080 53.61284 53.87544  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 52.15947 1.0518342 3 51.07086 53.17021 51.65410 52.23733  
## WHT:MornLow 49.00000 2.0000000 3 47.00000 51.00000 48.00000 49.00000  
## WT/BLK:MornHigh 52.57491 0.7197018 3 51.74730 53.05405 52.33534 52.92338  
## WT/BLK:MornLow 50.33333 1.1547005 3 49.00000 51.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.07811 0.5515661 3 52.56869 53.66387 52.78523 53.00178  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.45914  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.02921  
## BLK:MornLow 52.50000  
## BRN:MornHigh 54.11812  
## BRN:MornLow 52.50000  
## WHT:MornHigh 52.70377  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 52.98871  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.33282  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.86216 a  
## BLK:MornHigh 53.57555 a  
## BL/BR:MornHigh 53.37251 ab  
## WT/BR:MornHigh 53.07811 ab  
## WT/BLK:MornHigh 52.57491 ab  
## WHT:MornHigh 52.15947 ab  
## BRN:MornLow 52.00000 abc  
## BLK:MornLow 51.66667 abc  
## BL/BR:MornLow 51.33333 abc  
## WT/BR:MornLow 51.00000 abc  
## WT/BLK:MornLow 50.33333 bc  
## WHT:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM40 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.896 5.779 6.3323 0.0007001 \*\*\*  
## THIregime 1 43.396 43.396 47.5486 3.938e-07 \*\*\*  
## Colour:THIregime 5 2.282 0.456 0.5000 0.7731152   
## Residuals 24 21.904 0.913   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9126598   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.49502 1.3392003 6 50 53.02501  
## BLK 53.12850 1.8792010 6 51 55.38347  
## BRN 53.38737 0.9015854 6 52 54.36080  
## WHT 51.36101 1.6533659 6 49 53.22828  
## WT/BLK 52.20126 1.5181114 6 50 54.09945  
## WT/BR 51.01438 1.5297988 6 49 52.53135  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.70539   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 53.38737 a  
## BLK 53.12850 ab  
## WT/BLK 52.20126 abc  
## BL/BR 51.49502 bc  
## WHT 51.36101 c  
## WT/BR 51.01438 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9126598   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.19585 0.8772258 18 52.06092 55.38347  
## MornLow 51.00000 1.5339300 18 49.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6572363   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.19585 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9126598 24 52.09792 1.833724 2.812483  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.65670 0.3190326 3 52.46601 53.02501 52.47255 52.47908  
## BL/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.92368 1.2642258 3 53.19095 55.38347 53.19378 53.19660  
## BLK:MornLow 52.33333 2.3094011 3 51.00000 55.00000 51.00000 51.00000  
## BRN:MornHigh 54.10807 0.3749444 3 53.67727 54.36080 53.98170 54.28613  
## BRN:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WHT:MornHigh 52.72202 0.5262925 3 52.17776 53.22828 52.46890 52.76003  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.40252 0.6577164 3 52.79270 54.09945 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.36209 0.2614922 3 52.06092 52.53135 52.27747 52.49401  
## WT/BR:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 52.75205  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.29004  
## BLK:MornLow 53.00000  
## BRN:MornHigh 54.32346  
## BRN:MornLow 53.00000  
## WHT:MornHigh 52.99416  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 52.51268  
## WT/BR:MornLow 50.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 54.10807 a  
## BLK:MornHigh 53.92368 a  
## WT/BLK:MornHigh 53.40252 ab  
## WHT:MornHigh 52.72202 abc  
## BRN:MornLow 52.66667 abc  
## BL/BR:MornHigh 52.65670 abc  
## WT/BR:MornHigh 52.36209 abcd  
## BLK:MornLow 52.33333 abcd  
## WT/BLK:MornLow 51.00000 bcd  
## BL/BR:MornLow 50.33333 cd  
## WHT:MornLow 50.00000 cd  
## WT/BR:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM41 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.320 3.064 4.6617 0.004093 \*\*   
## THIregime 1 47.296 47.296 71.9596 1.101e-08 \*\*\*  
## Colour:THIregime 5 1.470 0.294 0.4474 0.810892   
## Residuals 24 15.774 0.657   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6572611   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.88553 1.399058 6 50 53.31540  
## BLK 53.14436 1.418248 6 51 54.88350  
## BRN 52.64564 1.152860 6 51 53.83810  
## WHT 51.10783 1.925160 6 48 53.31540  
## WT/BLK 52.50586 1.355173 6 51 54.09945  
## WT/BR 51.92134 1.437898 6 50 53.41994  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.447232   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.14436 a  
## BRN 52.64564 a  
## WT/BLK 52.50586 ab  
## WT/BR 51.92134 ab  
## BL/BR 51.88553 ab  
## WHT 51.10783 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6572611   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.34796 0.6695047 18 51.65506 54.8835  
## MornLow 51.05556 1.2113300 18 48.00000 54.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5577454   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.34796 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6572611 24 52.20176 1.553044 2.386736  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.10438 0.3212879 3 52.73462 53.31540 52.99888 53.26313  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.95539 0.8496714 3 53.21584 54.88350 53.49133 53.76682  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.62462 0.3379469 3 53.23498 53.83810 53.51787 53.80076  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.54900 0.8374865 3 51.65506 53.31540 52.16580 52.67654  
## WHT:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## WT/BLK:MornHigh 53.67839 0.3653018 3 53.44608 54.09945 53.46785 53.48963  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.17601 0.3360491 3 52.79270 53.41994 53.05405 53.31540  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.28927  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.32516  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.99597  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.36767  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.95539 a  
## WT/BLK:MornHigh 53.67839 ab  
## BRN:MornHigh 53.62462 ab  
## WT/BR:MornHigh 53.17601 ab  
## BL/BR:MornHigh 53.10438 ab  
## WHT:MornHigh 52.54900 abc  
## BLK:MornLow 52.33333 abc  
## BRN:MornLow 51.66667 abcd  
## WT/BLK:MornLow 51.33333 bcd  
## BL/BR:MornLow 50.66667 cd  
## WT/BR:MornLow 50.66667 cd  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM42 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.995 3.199 4.3023 0.006179 \*\*   
## THIregime 1 37.813 37.813 50.8535 2.268e-07 \*\*\*  
## Colour:THIregime 5 0.577 0.115 0.1553 0.976339   
## Residuals 24 17.845 0.744   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.743558   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.96362 1.275451 6 50 53.44608  
## BLK 52.05478 1.359216 6 50 53.63898  
## BRN 51.74826 1.254631 6 50 53.01671  
## WHT 52.28821 1.122898 6 51 53.57675  
## WT/BLK 50.25023 1.573631 6 48 52.27000  
## WT/BR 51.84408 1.568920 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.539312   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.28821 a  
## BLK 52.05478 a  
## BL/BR 51.96362 a  
## WT/BR 51.84408 a  
## BRN 51.74826 ab  
## WT/BLK 50.25023 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.743558   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.71640 0.7828243 18 50.87613 53.8381  
## MornLow 50.66667 1.1881771 18 48.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5932319   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.71640 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.743558 24 51.69153 1.668161 2.538592  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.92725 0.5303103 3 52.38616 53.44608 52.66783 52.94951  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.10957 0.5300552 3 52.57887 53.63898 52.84487 53.11087  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 52.82984 0.3039879 3 52.47908 53.01671 52.73641 52.99374  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.24309 0.2890410 3 53.06942 53.57675 53.07626 53.08309  
## WHT:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BLK:MornHigh 51.50047 0.7081858 3 50.87613 52.27000 51.11570 51.35528  
## WT/BLK:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## WT/BR:MornHigh 52.68816 1.0081473 3 51.95638 53.83810 52.11319 52.27000  
## WT/BR:MornLow 51.00000 1.7320508 3 50.00000 53.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.19779  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.37492  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.00523  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.32992  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 51.81264  
## WT/BLK:MornLow 49.50000  
## WT/BR:MornHigh 53.05405  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.24309 a  
## BLK:MornHigh 53.10957 ab  
## BL/BR:MornHigh 52.92725 ab  
## BRN:MornHigh 52.82984 ab  
## WT/BR:MornHigh 52.68816 ab  
## WT/BLK:MornHigh 51.50047 abc  
## WHT:MornLow 51.33333 abc  
## BL/BR:MornLow 51.00000 abc  
## BLK:MornLow 51.00000 abc  
## WT/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.66667 bc  
## WT/BLK:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM43 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.339 1.468 1.4439 0.2449   
## THIregime 1 50.558 50.558 49.7340 2.726e-07 \*\*\*  
## Colour:THIregime 5 0.719 0.144 0.1414 0.9807   
## Residuals 24 24.398 1.017   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.016567   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.22594 1.525737 6 50 54.01233  
## BLK 52.93041 1.611145 6 51 54.95168  
## BRN 51.94138 1.455506 6 50 53.39007  
## WHT 51.93022 1.767329 6 49 53.93611  
## WT/BLK 51.67917 1.851117 6 49 54.01233  
## WT/BR 52.73662 1.242027 6 51 54.01233  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.799853   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.93041 a  
## WT/BR 52.73662 a  
## BL/BR 52.22594 a  
## BRN 51.94138 a  
## WHT 51.93022 a  
## WT/BLK 51.67917 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.016567   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.42569 0.6646994 18 52.27 54.95168  
## MornLow 51.05556 1.2113300 18 49.00 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6936414   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.42569 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.016567 24 52.24062 1.93001 2.96827  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.45188 0.5575694 3 52.89724 54.01233 53.17166 53.44608  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.86083 0.9447057 3 53.31540 54.95168 53.31540 53.31540  
## BLK:MornLow 52.00000 1.7320508 3 51.00000 54.00000 51.00000 51.00000  
## BRN:MornHigh 53.21609 0.2970381 3 52.87312 53.39007 53.12910 53.38509  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.19376 0.8280260 3 52.30075 53.93611 52.82259 53.34444  
## WHT:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## WT/BLK:MornHigh 53.02501 0.8940960 3 52.27000 54.01233 52.53135 52.79270  
## WT/BLK:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.80657 0.2980767 3 53.46474 54.01233 53.70369 53.94264  
## WT/BR:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.72920  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.13354  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.38758  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.64027  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.40252  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.97749  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.86083 a  
## WT/BR:MornHigh 53.80657 a  
## BL/BR:MornHigh 53.45188 ab  
## BRN:MornHigh 53.21609 abc  
## WHT:MornHigh 53.19376 abc  
## WT/BLK:MornHigh 53.02501 abc  
## BLK:MornLow 52.00000 abc  
## WT/BR:MornLow 51.66667 abc  
## BL/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.66667 bc  
## WHT:MornLow 50.66667 bc  
## WT/BLK:MornLow 50.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM44 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.391 1.478 5.8400 0.00115 \*\*   
## THIregime 1 50.919 50.919 201.1545 3.652e-13 \*\*\*  
## Colour:THIregime 5 0.546 0.109 0.4311 0.82239   
## Residuals 24 6.075 0.253   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2531331   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.69998 1.554084 6 50 53.43156  
## BLK 52.17753 1.475736 6 50 53.88355  
## BRN 52.97435 1.067512 6 52 53.97749  
## WHT 51.96071 1.478168 6 50 53.44608  
## WT/BLK 52.81046 1.321652 6 51 54.18657  
## WT/BR 52.51270 1.357805 6 51 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.8981392   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.97435 a  
## WT/BLK 52.81046 ab  
## WT/BR 52.51270 abc  
## BLK 52.17753 abc  
## WHT 51.96071 bc  
## BL/BR 51.69998 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2531331   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.54525 0.4545371 18 52.81646 54.18657  
## MornLow 51.16667 0.7859052 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3461318   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.54525 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2531331 24 52.35596 0.9609668 1.481187  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.06663 0.3184539 3 52.84497 53.43156 52.88417 52.92338  
## BL/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.35506 0.5336185 3 52.81646 53.88355 53.09082 53.36518  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.94870 0.0295107 3 53.91852 53.97749 53.93431 53.95011  
## BRN:MornLow 52.00000 0.0000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.25476 0.3247332 3 52.87982 53.44608 53.15910 53.43839  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.95426 0.3298184 3 53.57675 54.18657 53.83810 54.09945  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.69208 0.3209360 3 53.48963 54.06211 53.50706 53.52448  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.17747  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.62437  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.96380  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.44223  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.79330  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.95426 a  
## BRN:MornHigh 53.94870 a  
## WT/BR:MornHigh 53.69208 a  
## BLK:MornHigh 53.35506 ab  
## WHT:MornHigh 53.25476 ab  
## BL/BR:MornHigh 53.06663 abc  
## BRN:MornLow 52.00000 bcd  
## WT/BLK:MornLow 51.66667 cde  
## WT/BR:MornLow 51.33333 de  
## BLK:MornLow 51.00000 de  
## WHT:MornLow 50.66667 de  
## BL/BR:MornLow 50.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM45 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.076 2.215 3.8183 0.01097 \*   
## THIregime 1 43.264 43.264 74.5717 7.947e-09 \*\*\*  
## Colour:THIregime 5 0.817 0.163 0.2816 0.91861   
## Residuals 24 13.924 0.580   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5801672   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.05026 1.356830 6 50 53.66387  
## BLK 52.82335 1.541684 6 51 54.74714  
## BRN 51.77950 1.287825 6 50 53.07415  
## WHT 50.99453 1.512736 6 49 52.53135  
## WT/BLK 51.75872 1.270441 6 50 53.05405  
## WT/BR 51.50452 1.349934 6 50 53.05405  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.359708   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.82335 a  
## BL/BR 52.05026 ab  
## BRN 51.77950 ab  
## WT/BLK 51.75872 ab  
## WT/BR 51.50452 ab  
## WHT 50.99453 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5801672   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.91474 0.6042015 18 51.96253 54.74714  
## MornLow 50.72222 1.0740553 18 49.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5240149   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.91474 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5801672 24 51.81848 1.469914 2.242395  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.10051 0.5416200 3 52.58362 53.66387 52.81884 53.05405  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.64670 0.9530264 3 53.09139 54.74714 53.09648 53.10157  
## BLK:MornLow 52.00000 1.7320508 3 51.00000 54.00000 51.00000 51.00000  
## BRN:MornHigh 52.89233 0.3126170 3 52.53135 53.07415 52.80141 53.07147  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 52.32238 0.3129931 3 51.96253 52.53135 52.21790 52.47327  
## WHT:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## WT/BLK:MornHigh 52.85078 0.3520778 3 52.44423 53.05405 52.74914 53.05405  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.67571 0.3277330 3 52.47908 53.05405 52.48655 52.49401  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.35896  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.92436  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.07281  
## BRN:MornLow 51.00000  
## WHT:MornHigh 52.50231  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.77403  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.64670 a  
## BL/BR:MornHigh 53.10051 ab  
## BRN:MornHigh 52.89233 abc  
## WT/BLK:MornHigh 52.85078 abc  
## WT/BR:MornHigh 52.67571 abc  
## WHT:MornHigh 52.32238 abcd  
## BLK:MornLow 52.00000 abcd  
## BL/BR:MornLow 51.00000 bcde  
## BRN:MornLow 50.66667 cde  
## WT/BLK:MornLow 50.66667 cde  
## WT/BR:MornLow 50.33333 de  
## WHT:MornLow 49.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM46 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.484 0.897 2.4432 0.06329 .   
## THIregime 1 50.961 50.961 138.8451 1.821e-11 \*\*\*  
## Colour:THIregime 5 0.503 0.101 0.2741 0.92282   
## Residuals 24 8.809 0.367   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3670365   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.87464 1.386443 6 50 53.26313  
## BLK 51.38085 1.672758 6 49 53.26995  
## BRN 52.46098 1.303261 6 51 53.95011  
## WHT 51.94018 1.455495 6 50 53.41341  
## WT/BLK 52.33889 1.191875 6 51 53.83810  
## WT/BR 52.14318 1.448015 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.081493   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.46098 a  
## WT/BLK 52.33889 a  
## WT/BR 52.14318 a  
## WHT 51.94018 a  
## BL/BR 51.87464 a  
## BLK 51.38085 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3670365   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.21290 0.4402843 18 52.22248 53.95011  
## MornLow 50.83333 0.7859052 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4167942   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.21290 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3670365 24 52.02312 1.16455 1.78357  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.08260 0.3076627 3 52.72736 53.26313 52.99234 53.25732  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 52.76171 0.5244202 3 52.22248 53.26995 52.50759 52.79270  
## BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BRN:MornHigh 53.58862 0.3132886 3 53.39582 53.95011 53.40788 53.41994  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.21369 0.3119744 3 52.85419 53.41341 53.11384 53.37348  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.34444 0.4297363 3 53.05405 53.83810 53.09761 53.14117  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.28636 0.5668165 3 52.70558 53.83810 53.01049 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.26023  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.03132  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.68502  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.39344  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.48963  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.58862 a  
## WT/BLK:MornHigh 53.34444 a  
## WT/BR:MornHigh 53.28636 a  
## WHT:MornHigh 53.21369 a  
## BL/BR:MornHigh 53.08260 ab  
## BLK:MornHigh 52.76171 abc  
## BRN:MornLow 51.33333 bcd  
## WT/BLK:MornLow 51.33333 bcd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 50.66667 d  
## WHT:MornLow 50.66667 d  
## BLK:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM47 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.620 0.524 0.9104 0.4908   
## THIregime 1 45.861 45.861 79.6787 4.304e-09 \*\*\*  
## Colour:THIregime 5 0.091 0.018 0.0317 0.9994   
## Residuals 24 13.814 0.576   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5755711   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.73912 1.246604 6 50 53.00178  
## BLK 51.77325 1.634090 6 49 53.58811  
## BRN 52.07026 1.374524 6 50 53.68876  
## WHT 51.81146 1.320908 6 50 53.14117  
## WT/BLK 51.50494 1.350569 6 50 53.05405  
## WT/BR 51.20635 1.506884 6 49 52.96693  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.354312   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.07026 a  
## WHT 51.81146 a  
## BLK 51.77325 a  
## BL/BR 51.73912 a  
## WT/BLK 51.50494 a  
## WT/BR 51.20635 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5755711   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.81291 0.4899223 18 51.85184 53.68876  
## MornLow 50.55556 0.8555853 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5219351   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.81291 a  
## MornLow 50.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5755711 24 51.68423 1.467883 2.233495  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81158 0.3181945 3 52.44423 53.00178 52.71647 52.98871  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 52.87983 0.8177484 3 51.98489 53.58811 52.52569 53.06650  
## BLK:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BRN:MornHigh 53.14053 0.5356248 3 52.61847 53.68876 52.86641 53.11436  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.95626 0.3114387 3 52.59669 53.14117 52.86380 53.13092  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.67654 0.3298184 3 52.44423 53.05405 52.48779 52.53135  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.41271 0.5575763 3 51.85184 52.96693 52.13559 52.41934  
## WT/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 52.99525  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.32730  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.40156  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.13604  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.79270  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.69314  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.14053 a  
## WHT:MornHigh 52.95626 a  
## BLK:MornHigh 52.87983 ab  
## BL/BR:MornHigh 52.81158 ab  
## WT/BLK:MornHigh 52.67654 ab  
## WT/BR:MornHigh 52.41271 abc  
## BRN:MornLow 51.00000 abcd  
## BL/BR:MornLow 50.66667 bcd  
## BLK:MornLow 50.66667 bcd  
## WHT:MornLow 50.66667 bcd  
## WT/BLK:MornLow 50.33333 cd  
## WT/BR:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM48 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.322 0.864 1.1803 0.3479   
## THIregime 1 47.447 47.447 64.7866 2.832e-08 \*\*\*  
## Colour:THIregime 5 0.421 0.084 0.1150 0.9879   
## Residuals 24 17.577 0.732   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7323555   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.15891 1.782980 6 49 53.90344  
## BLK 52.91473 1.234251 6 51 54.38353  
## BRN 51.89189 1.405029 6 50 53.31540  
## WHT 51.86797 1.554580 6 50 53.78002  
## WT/BLK 52.23030 1.545112 6 50 54.09945  
## WT/BR 52.15770 1.268197 6 51 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.527672   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.91473 a  
## WT/BLK 52.23030 a  
## BL/BR 52.15891 a  
## WT/BR 52.15770 a  
## BRN 51.89189 a  
## WHT 51.86797 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7323555   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.35161 0.5623121 18 52.21192 54.38353  
## MornLow 51.05556 0.9983647 18 49.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5887461   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.35161 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7323555 24 52.20358 1.639308 2.519396  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.31782 0.9582925 3 52.21192 53.90344 53.02501 53.83810  
## BL/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## BLK:MornHigh 53.82946 0.5461239 3 53.29164 54.38353 53.55243 53.81321  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 53.11711 0.3137615 3 52.75536 53.31540 53.01796 53.28055  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.06928 0.6156668 3 52.70046 53.78002 52.71391 52.72736  
## WHT:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## WT/BLK:MornHigh 53.46059 0.6538588 3 52.79270 54.09945 53.14117 53.48963  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.31540 0.0000000 3 53.31540 53.31540 53.31540 53.31540  
## WT/BR:MornLow 51.00000 0.0000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.87077  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 54.09837  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.29798  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.25369  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.31540  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.82946 a  
## WT/BLK:MornHigh 53.46059 ab  
## BL/BR:MornHigh 53.31782 ab  
## WT/BR:MornHigh 53.31540 ab  
## BRN:MornHigh 53.11711 abc  
## WHT:MornHigh 53.06928 abc  
## BLK:MornLow 52.00000 abc  
## BL/BR:MornLow 51.00000 bc  
## WT/BLK:MornLow 51.00000 bc  
## WT/BR:MornLow 51.00000 bc  
## BRN:MornLow 50.66667 c  
## WHT:MornLow 50.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM49 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.038 0.408 0.4161 0.8329   
## THIregime 1 48.304 48.304 49.3153 2.923e-07 \*\*\*  
## Colour:THIregime 5 0.136 0.027 0.0278 0.9996   
## Residuals 24 23.508 0.979   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9794908   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.57439 2.026710 6 48 53.68129  
## BLK 51.82858 1.518281 6 50 53.70174  
## BRN 51.83521 1.525945 6 50 53.72609  
## WHT 51.83232 1.342574 6 50 53.18473  
## WT/BLK 52.36792 1.217185 6 51 53.83810  
## WT/BR 51.84501 1.537635 6 50 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.766727   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.36792 a  
## WT/BR 51.84501 a  
## BRN 51.83521 a  
## WHT 51.83232 a  
## BLK 51.82858 a  
## BL/BR 51.57439 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9794908   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.03892 0.5975789 18 51.51499 53.8381  
## MornLow 50.72222 1.0740553 18 48.00000 52.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6808748   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.03892 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9794908 24 51.88057 1.907636 2.913638  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81545 1.1466835 3 51.51499 53.68129 52.38253 53.25006  
## BL/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 52.99050 0.6160171 3 52.62639 53.70174 52.63487 52.64336  
## BLK:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## BRN:MornHigh 53.00376 0.6256518 3 52.63187 53.72609 52.64259 52.65331  
## BRN:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## WHT:MornHigh 52.99797 0.3109882 3 52.63896 53.18473 52.90459 53.17021  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.40252 0.3992187 3 53.05405 53.83810 53.18473 53.31540  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.02335 0.6418719 3 52.61847 53.76343 52.65331 52.68816  
## WT/BR:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.46568  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.17255  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.18970  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.17747  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.22579  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.40252 a  
## WT/BR:MornHigh 53.02335 ab  
## BRN:MornHigh 53.00376 ab  
## WHT:MornHigh 52.99797 ab  
## BLK:MornHigh 52.99050 ab  
## BL/BR:MornHigh 52.81545 ab  
## WT/BLK:MornLow 51.33333 ab  
## BLK:MornLow 50.66667 ab  
## BRN:MornLow 50.66667 ab  
## WHT:MornLow 50.66667 ab  
## WT/BR:MornLow 50.66667 ab  
## BL/BR:MornLow 50.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM50 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.766 1.353 4.0008 0.008811 \*\*   
## THIregime 1 50.802 50.802 150.1927 8.073e-12 \*\*\*  
## Colour:THIregime 5 0.775 0.155 0.4582 0.803196   
## Residuals 24 8.118 0.338   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3382469   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.97995 1.498508 6 49 52.53135  
## BLK 51.28965 1.412766 6 50 52.59358  
## BRN 51.99492 1.309667 6 50 53.55933  
## WHT 51.77580 1.283389 6 50 53.06942  
## WT/BLK 51.04819 1.586828 6 49 52.79270  
## WT/BR 52.03906 1.348055 6 50 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.038212   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.03906 a  
## BRN 51.99492 ab  
## WHT 51.77580 ab  
## BLK 51.28965 ab  
## WT/BLK 51.04819 ab  
## BL/BR 50.97995 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3382469   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.70919 0.4639476 18 51.87798 53.66387  
## MornLow 50.33333 0.8401681 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4001142   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.70919 a  
## MornLow 50.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3382469 24 51.52126 1.128835 1.712192  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.29323 0.32611590 3 51.92153 52.53135 52.17417 52.42681  
## BL/BR:MornLow 49.66667 0.57735027 3 49.00000 50.00000 49.50000 50.00000  
## BLK:MornHigh 52.57929 0.01407337 3 52.56544 52.59358 52.57215 52.57887  
## BLK:MornLow 50.00000 0.00000000 3 50.00000 50.00000 50.00000 50.00000  
## BRN:MornHigh 52.98985 0.56432075 3 52.43083 53.55933 52.70510 52.97938  
## BRN:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.88494 0.30631540 3 52.53135 53.06942 52.79270 53.05405  
## WHT:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.42971 0.48569658 3 51.87798 52.79270 52.24822 52.61847  
## WT/BLK:MornLow 49.66667 0.57735027 3 49.00000 50.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.07811 0.55156606 3 52.56869 53.66387 52.78523 53.00178  
## WT/BR:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.47908  
## BL/BR:MornLow 50.00000  
## BLK:MornHigh 52.58622  
## BLK:MornLow 50.00000  
## BRN:MornHigh 53.26935  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.06174  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.70558  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 53.33282  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.07811 a  
## BRN:MornHigh 52.98985 a  
## WHT:MornHigh 52.88494 a  
## BLK:MornHigh 52.57929 ab  
## WT/BLK:MornHigh 52.42971 ab  
## BL/BR:MornHigh 52.29323 abc  
## BRN:MornLow 51.00000 bcd  
## WT/BR:MornLow 51.00000 bcd  
## WHT:MornLow 50.66667 cd  
## BLK:MornLow 50.00000 d  
## BL/BR:MornLow 49.66667 d  
## WT/BLK:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM51 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.529 1.306 2.7393 0.04277 \*   
## THIregime 1 49.551 49.551 103.9422 3.365e-10 \*\*\*  
## Colour:THIregime 5 0.523 0.105 0.2193 0.95072   
## Residuals 24 11.441 0.477   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4767124   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.98305 1.503775 6 50 53.51141  
## BLK 53.27143 1.110122 6 52 54.58806  
## BRN 52.49844 1.342187 6 51 54.02478  
## WHT 52.22418 1.520099 6 50 53.98329  
## WT/BLK 52.80320 1.510788 6 51 54.75283  
## WT/BR 52.25892 1.553875 6 50 54.06211  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.23253   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.27143 a  
## WT/BLK 52.80320 ab  
## BRN 52.49844 ab  
## WT/BR 52.25892 ab  
## WHT 52.22418 ab  
## BL/BR 51.98305 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4767124   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.67974 0.5141059 18 52.89724 54.75283  
## MornLow 51.33333 0.9074852 18 50.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4750018   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.67974 a  
## MornLow 51.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4767124 24 52.50654 1.314967 2.032655  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.29943 0.3484757 3 52.89724 53.51141 53.19344 53.48963  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 54.20952 0.3279197 3 54.01233 54.58806 54.02025 54.02817  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 53.66355 0.3129070 3 53.47623 54.02478 53.48293 53.48963  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.44835 0.5300300 3 52.92338 53.98329 53.18088 53.43839  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.93974 0.7055016 3 53.48963 54.75283 53.53319 53.57675  
## WT/BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.51784 0.5307297 3 53.00178 54.06211 53.24571 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.50052  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.30812  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.75721  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.71084  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.16479  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.77587  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.20952 a  
## WT/BLK:MornHigh 53.93974 a  
## BRN:MornHigh 53.66355 ab  
## WT/BR:MornHigh 53.51784 ab  
## WHT:MornHigh 53.44835 ab  
## BL/BR:MornHigh 53.29943 abc  
## BLK:MornLow 52.33333 abcd  
## WT/BLK:MornLow 51.66667 bcd  
## BRN:MornLow 51.33333 cd  
## WHT:MornLow 51.00000 d  
## WT/BR:MornLow 51.00000 d  
## BL/BR:MornLow 50.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM52 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 1.784 0.357 1.0707 0.4011   
## THIregime 1 48.925 48.925 146.8049 1.023e-11 \*\*\*  
## Colour:THIregime 5 0.252 0.050 0.1514 0.9776   
## Residuals 24 7.998 0.333   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3332678   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.59375 1.444610 6 50 53.25006  
## BLK 51.59876 1.446714 6 50 53.22036  
## BRN 51.86645 1.377791 6 50 53.24571  
## WHT 52.12144 1.423468 6 50 53.77661  
## WT/BLK 52.03428 1.357690 6 50 53.70743  
## WT/BR 52.11331 1.219609 6 51 53.24073  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.030542   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.12144 a  
## WT/BR 52.11331 a  
## WT/BLK 52.03428 a  
## BRN 51.86645 a  
## BLK 51.59876 a  
## BL/BR 51.59375 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3332678   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.05378 0.3775941 18 52.44423 53.77661  
## MornLow 50.72222 0.6691132 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3971584   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.05378 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3332678 24 51.888 1.112576 1.699543  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.85417 0.34345878 3 52.63589 53.25006 52.65622 52.67654  
## BL/BR:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 52.86419 0.30853524 3 52.67907 53.22036 52.68610 52.69314  
## BLK:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## BRN:MornHigh 53.06624 0.30654442 3 52.71228 53.24571 52.97651 53.24073  
## BRN:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.24287 0.54110076 3 52.69469 53.77661 52.97601 53.25732  
## WHT:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.06857 0.63172099 3 52.44423 53.70743 52.74914 53.05405  
## WT/BLK:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.22662 0.01500327 3 53.21086 53.24073 53.21957 53.22828  
## WT/BR:MornLow 51.00000 0.00000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.96330  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 52.95675  
## BLK:MornLow 50.50000  
## BRN:MornHigh 53.24322  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.51696  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.38074  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.23451  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.24287 a  
## WT/BR:MornHigh 53.22662 a  
## WT/BLK:MornHigh 53.06857 a  
## BRN:MornHigh 53.06624 a  
## BLK:MornHigh 52.86419 a  
## BL/BR:MornHigh 52.85417 a  
## WHT:MornLow 51.00000 b  
## WT/BLK:MornLow 51.00000 b  
## WT/BR:MornLow 51.00000 b  
## BRN:MornLow 50.66667 b  
## BL/BR:MornLow 50.33333 b  
## BLK:MornLow 50.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM53 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.677 0.735 2.5092 0.05796 .   
## THIregime 1 54.535 54.535 186.0745 8.425e-13 \*\*\*  
## Colour:THIregime 5 0.234 0.047 0.1599 0.97478   
## Residuals 24 7.034 0.293   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2930798   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.97337 1.491466 6 50 53.51141  
## BLK 52.44302 1.284221 6 51 53.90938  
## BRN 51.68849 1.543833 6 50 53.43602  
## WHT 52.17855 1.477658 6 50 53.90344  
## WT/BLK 52.55668 1.406699 6 51 54.18657  
## WT/BR 52.54465 1.393269 6 51 54.15172  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9664115   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.55668 a  
## WT/BR 52.54465 a  
## BLK 52.44302 a  
## WHT 52.17855 a  
## BL/BR 51.97337 a  
## BRN 51.68849 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2930798   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.46159 0.4162352 18 52.82345 54.18657  
## MornLow 51.00000 0.6859943 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3724431   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.46159 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2930798 24 52.23079 1.036493 1.59378  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.28007 0.3247177 3 52.90886 53.51141 53.16440 53.41994  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.55271 0.3090180 3 53.36518 53.90938 53.37438 53.38358  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.04365 0.3403905 3 52.82755 53.43602 52.84746 52.86737  
## BRN:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WHT:MornHigh 53.35711 0.5401067 3 52.82345 53.90344 53.08394 53.34444  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.78002 0.3520778 3 53.57675 54.18657 53.57675 53.57675  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.75596 0.3432450 3 53.53941 54.15172 53.55808 53.57675  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.46568  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.64648  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.15170  
## BRN:MornLow 50.50000  
## WHT:MornHigh 53.62394  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.88166  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.86424  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.78002 a  
## WT/BR:MornHigh 53.75596 a  
## BLK:MornHigh 53.55271 a  
## WHT:MornHigh 53.35711 a  
## BL/BR:MornHigh 53.28007 a  
## BRN:MornHigh 53.04365 a  
## BLK:MornLow 51.33333 b  
## WT/BLK:MornLow 51.33333 b  
## WT/BR:MornLow 51.33333 b  
## WHT:MornLow 51.00000 b  
## BL/BR:MornLow 50.66667 b  
## BRN:MornLow 50.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM54 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 23.039 4.608 14.9381 1.060e-06 \*\*\*  
## THIregime 1 47.717 47.717 154.6909 5.934e-12 \*\*\*  
## Colour:THIregime 5 1.792 0.358 1.1622 0.3562   
## Residuals 24 7.403 0.308   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3084651   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.56240 1.866044 6 48 52.79270  
## BLK 52.43113 1.271899 6 51 53.88562  
## BRN 52.36110 1.201713 6 51 53.76841  
## WHT 52.38550 1.226047 6 51 53.80906  
## WT/BLK 53.20187 1.063320 6 52 54.53503  
## WT/BR 51.96573 1.484814 6 50 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9914531   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 53.20187 a  
## BLK 52.43113 ab  
## WHT 52.38550 ab  
## BRN 52.36110 ab  
## WT/BR 51.96573 b  
## BL/BR 50.56240 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3084651   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.30258 0.6959986 18 51.57307 54.53503  
## MornLow 51.00000 1.1881771 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3820939   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.30258 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3084651 24 52.15129 1.064971 1.635078  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.12481 0.6180578 3 51.57307 52.79270 51.79086 52.00865  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 53.52892 0.3090805 3 53.34029 53.88562 53.35057 53.36085  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.38886 0.3287263 3 53.19478 53.76841 53.19908 53.20339  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.43768 0.3216343 3 53.25006 53.80906 53.25198 53.25391  
## WHT:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BLK:MornHigh 54.07041 0.4798012 3 53.57675 54.53503 53.83810 54.09945  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 53.26479 0.3401020 3 52.87982 53.52448 53.13494 53.39007  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.40068  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 53.62324  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.48590  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.53148  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.31724  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 53.45728  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 54.07041 a  
## BLK:MornHigh 53.52892 ab  
## WHT:MornHigh 53.43768 ab  
## BRN:MornHigh 53.38886 ab  
## WT/BR:MornHigh 53.26479 ab  
## WT/BLK:MornLow 52.33333 bc  
## BL/BR:MornHigh 52.12481 bcd  
## BLK:MornLow 51.33333 cd  
## BRN:MornLow 51.33333 cd  
## WHT:MornLow 51.33333 cd  
## WT/BR:MornLow 50.66667 d  
## BL/BR:MornLow 49.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM55 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.332 2.266 1.9773 0.1186   
## THIregime 1 47.866 47.866 41.7578 1.106e-06 \*\*\*  
## Colour:THIregime 5 0.856 0.171 0.1493 0.9783   
## Residuals 24 27.511 1.146   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.146275   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.19259 1.806031 6 49 53.47221  
## BLK 51.81307 1.666342 6 49 53.66387  
## BRN 52.54618 1.045229 6 51 53.61409  
## WHT 50.74106 2.146657 6 47 52.99597  
## WT/BLK 51.78776 1.298102 6 50 53.14117  
## WT/BR 51.50452 1.349934 6 50 53.05405  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.911233   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.54618 a  
## BLK 51.81307 a  
## WT/BLK 51.78776 a  
## WT/BR 51.50452 a  
## BL/BR 51.19259 a  
## WHT 50.74106 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.146275   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.75062 0.7378194 18 50.88638 53.66387  
## MornLow 50.44444 1.3382263 18 47.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7365656   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.75062 a  
## MornLow 50.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.146275 24 51.59753 2.074987 3.151953  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.38519 0.9420886 3 51.80538 53.47221 51.84168 51.87798  
## BL/BR:MornLow 50.00000 1.7320508 3 49.00000 52.00000 49.00000 49.00000  
## BLK:MornHigh 52.95947 0.8158963 3 52.06547 53.66387 52.60728 53.14909  
## BLK:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BRN:MornHigh 53.42568 0.2780644 3 53.10632 53.61409 53.33148 53.55665  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.14879 1.1144069 3 50.88638 52.99597 51.72520 52.56402  
## WHT:MornLow 49.33333 2.0816660 3 47.00000 51.00000 48.50000 50.00000  
## WT/BLK:MornHigh 52.90886 0.3298184 3 52.53135 53.14117 52.79270 53.05405  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.67571 0.3277330 3 52.47908 53.05405 52.48655 52.49401  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 52.67509  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.40648  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.58537  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.78000  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.09761  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.77403  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.42568 a  
## BLK:MornHigh 52.95947 ab  
## WT/BLK:MornHigh 52.90886 ab  
## WT/BR:MornHigh 52.67571 ab  
## BL/BR:MornHigh 52.38519 abc  
## WHT:MornHigh 52.14879 abc  
## BRN:MornLow 51.66667 abc  
## BLK:MornLow 50.66667 abc  
## WT/BLK:MornLow 50.66667 abc  
## WT/BR:MornLow 50.33333 abc  
## BL/BR:MornLow 50.00000 bc  
## WHT:MornLow 49.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM56 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.200 0.840 0.6604 0.6568   
## THIregime 1 53.382 53.382 41.9625 1.065e-06 \*\*\*  
## Colour:THIregime 5 0.313 0.063 0.0492 0.9983   
## Residuals 24 30.531 1.272   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.272144   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.40942 1.709944 6 49 53.44608  
## BLK 52.13787 1.437912 6 50 53.81434  
## BRN 52.14567 1.446491 6 50 53.83810  
## WHT 51.86829 2.235397 6 48 54.30272  
## WT/BLK 52.49860 1.702855 6 50 54.62215  
## WT/BR 52.24648 1.365578 6 51 53.52448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.013434   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.49860 a  
## WT/BR 52.24648 a  
## BRN 52.14567 a  
## BLK 52.13787 a  
## WHT 51.86829 a  
## BL/BR 51.40942 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.272144   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.26878 0.7089688 18 51.62431 54.62215  
## MornLow 50.83333 1.2485285 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7759527   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.26878 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.272144 24 52.05105 2.166899 3.320501  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81884 0.59194477 3 52.27000 53.44608 52.50522 52.74043  
## BL/BR:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.27574 0.53361847 3 52.74725 53.81434 53.00643 53.26562  
## BLK:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.29134 0.54144844 3 52.75536 53.83810 53.01796 53.28055  
## BRN:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 53.06992 1.35182712 3 51.62431 54.30272 52.45352 53.28273  
## WHT:MornLow 50.66667 2.51661148 3 48.00000 53.00000 49.50000 51.00000  
## WT/BLK:MornHigh 53.66387 0.91783104 3 52.79270 54.62215 53.18473 53.57675  
## WT/BLK:MornLow 51.33333 1.52752523 3 50.00000 53.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.49295 0.03000653 3 53.46474 53.52448 53.47719 53.48963  
## WT/BR:MornLow 51.00000 0.00000000 3 51.00000 51.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.09325  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.53998  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.55933  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.79273  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 54.09945  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.50706  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.66387 a  
## WT/BR:MornHigh 53.49295 a  
## BRN:MornHigh 53.29134 ab  
## BLK:MornHigh 53.27574 ab  
## WHT:MornHigh 53.06992 ab  
## BL/BR:MornHigh 52.81884 ab  
## WT/BLK:MornLow 51.33333 ab  
## BLK:MornLow 51.00000 ab  
## BRN:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## WHT:MornLow 50.66667 ab  
## BL/BR:MornLow 50.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM57 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.816 1.563 1.8052 0.1499   
## THIregime 1 49.374 49.374 57.0202 8.634e-08 \*\*\*  
## Colour:THIregime 5 0.541 0.108 0.1249 0.9854   
## Residuals 24 20.782 0.866   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8659106   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.06682 2.139110 6 48 53.68129  
## BLK 52.09822 1.203045 6 51 53.20177  
## BRN 52.34907 1.388365 6 50 53.73356  
## WHT 52.10603 1.409080 6 50 53.74586  
## WT/BLK 52.50586 1.355173 6 51 54.09945  
## WT/BR 52.23403 1.538419 6 50 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.661138   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.50586 a  
## BRN 52.34907 a  
## WT/BR 52.23403 a  
## WHT 52.10603 a  
## BLK 52.09822 a  
## BL/BR 51.06682 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8659106   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.23112 0.658003 18 51.51499 54.09945  
## MornLow 50.88889 1.131833 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6401822   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.23112 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8659106 24 52.06 1.787444 2.739504  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46698 1.106717291 3 51.51499 53.68129 51.85983 52.20466  
## BL/BR:MornLow 49.66667 2.081665999 3 48.00000 52.00000 48.50000 49.00000  
## BLK:MornHigh 53.19644 0.005412836 3 53.19095 53.20177 53.19378 53.19660  
## BLK:MornLow 51.00000 0.000000000 3 51.00000 51.00000 51.00000 51.00000  
## BRN:MornHigh 53.36480 0.624837877 3 52.64336 53.73356 53.18042 53.71748  
## BRN:MornLow 51.33333 1.154700538 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.21206 0.542099106 3 52.66203 53.74586 52.94515 53.22828  
## WHT:MornLow 51.00000 1.000000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.67839 0.365301835 3 53.44608 54.09945 53.46785 53.48963  
## WT/BLK:MornLow 51.33333 0.577350269 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.46806 0.590200027 3 52.86737 54.04718 53.17850 53.48963  
## WT/BR:MornLow 51.00000 1.000000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.94298  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.19919  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.72552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.48707  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.67839 a  
## WT/BR:MornHigh 53.46806 a  
## BRN:MornHigh 53.36480 a  
## WHT:MornHigh 53.21206 a  
## BLK:MornHigh 53.19644 a  
## BL/BR:MornHigh 52.46698 a  
## BRN:MornLow 51.33333 ab  
## WT/BLK:MornLow 51.33333 ab  
## BLK:MornLow 51.00000 ab  
## WHT:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## BL/BR:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM58 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.437 1.287 1.6188 0.1932   
## THIregime 1 53.087 53.087 66.7576 2.168e-08 \*\*\*  
## Colour:THIregime 5 0.599 0.120 0.1506 0.9779   
## Residuals 24 19.085 0.795   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7952268   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.07857 1.387551 6 50 53.73356  
## BLK 52.12995 1.430700 6 50 53.79265  
## BRN 52.41729 1.258864 6 51 53.87295  
## WHT 51.10210 2.164537 6 48 53.75098  
## WT/BLK 51.94748 1.471614 6 50 53.57675  
## WT/BR 51.61072 1.465115 6 50 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.591896   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.41729 a  
## BLK 52.12995 a  
## BL/BR 52.07857 a  
## WT/BLK 51.94748 a  
## WT/BR 51.61072 a  
## WHT 51.10210 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7952268   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.09537 0.600050 18 51.62431 53.87295  
## MornLow 50.66667 1.084652 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6134972   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.09537 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7952268 24 51.88102 1.718846 2.625312  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.15714 0.5686045 3 52.59669 53.73356 52.86893 53.14117  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.25990 0.5356355 3 52.72142 53.79265 52.99352 53.26562  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.50125 0.3218997 3 53.31540 53.87295 53.31540 53.31540  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.53754 1.0946588 3 51.62431 53.75098 51.93082 52.23733  
## WHT:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## WT/BLK:MornHigh 53.22828 0.3992187 3 52.79270 53.57675 53.05405 53.31540  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.88811 0.3713467 3 52.64336 53.31540 52.67447 52.70558  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 53.43736  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.52913  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.59417  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.99416  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.44608  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.01049  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.50125 a  
## BLK:MornHigh 53.25990 ab  
## WT/BLK:MornHigh 53.22828 ab  
## BL/BR:MornHigh 53.15714 ab  
## WT/BR:MornHigh 52.88811 abc  
## WHT:MornHigh 52.53754 abc  
## BRN:MornLow 51.33333 abcd  
## BL/BR:MornLow 51.00000 abcd  
## BLK:MornLow 51.00000 abcd  
## WT/BLK:MornLow 50.66667 bcd  
## WT/BR:MornLow 50.33333 cd  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM59 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.826 2.965 8.1489 0.0001303 \*\*\*  
## THIregime 1 50.601 50.601 139.0605 1.792e-11 \*\*\*  
## Colour:THIregime 5 1.306 0.261 0.7177 0.6164512   
## Residuals 24 8.733 0.364   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3638752   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.60246 1.4494639 6 50 53.21086  
## BLK 52.89490 0.9804487 6 52 53.81537  
## BRN 52.39186 1.4288034 6 50 53.83810  
## WHT 50.84377 1.7090090 6 49 52.76003  
## WT/BLK 51.90392 1.4165829 6 50 53.31540  
## WT/BR 52.14318 1.4480147 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.076826   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.89490 a  
## BRN 52.39186 ab  
## WT/BR 52.14318 ab  
## WT/BLK 51.90392 abc  
## BL/BR 51.60246 bc  
## WHT 50.84377 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3638752   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.14892 0.5817556 18 52.12481 53.8381  
## MornLow 50.77778 1.0602750 18 49.00000 52.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4149954   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.14892 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3638752 24 51.96335 1.160858 1.775872  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.87159 0.29491395 3 52.67654 53.21086 52.70195 52.72736  
## BL/BR:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.78979 0.02598161 3 53.76343 53.81537 53.77701 53.79058  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.45038 0.63948446 3 52.71228 53.83810 53.25652 53.80076  
## BRN:MornLow 51.33333 1.15470054 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 52.35420 0.35245730 3 52.12481 52.76003 52.15128 52.17776  
## WHT:MornLow 49.33333 0.57735027 3 49.00000 50.00000 49.00000 49.00000  
## WT/BLK:MornHigh 53.14117 0.30178099 3 52.79270 53.31540 53.05405 53.31540  
## WT/BLK:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.28636 0.56681650 3 52.70558 53.83810 53.01049 53.31540  
## WT/BR:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.96911  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.80298  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.46890  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 53.31540  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.78979 a  
## BRN:MornHigh 53.45038 ab  
## WT/BR:MornHigh 53.28636 ab  
## WT/BLK:MornHigh 53.14117 ab  
## BL/BR:MornHigh 52.87159 abc  
## WHT:MornHigh 52.35420 abcd  
## BLK:MornLow 52.00000 bcde  
## BRN:MornLow 51.33333 cde  
## WT/BR:MornLow 51.00000 def  
## WT/BLK:MornLow 50.66667 def  
## BL/BR:MornLow 50.33333 ef  
## WHT:MornLow 49.33333 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM60 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 26.286 5.257 6.4368 0.0006316 \*\*\*  
## THIregime 1 43.847 43.847 53.6848 1.442e-07 \*\*\*  
## Colour:THIregime 5 1.924 0.385 0.4711 0.7939874   
## Residuals 24 19.602 0.817   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8167543   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.23046 1.770211 6 48 52.07399  
## BLK 52.62526 1.340351 6 51 54.31535  
## BRN 52.29287 1.339503 6 50 53.62902  
## WHT 52.85168 1.180823 6 51 54.27368  
## WT/BLK 51.82406 1.700941 6 49 53.70743  
## WT/BR 52.13074 1.436198 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.613299   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.85168 a  
## BLK 52.62526 a  
## BRN 52.29287 a  
## WT/BR 52.13074 a  
## WT/BLK 51.82406 ab  
## BL/BR 50.23046 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8167543   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.09613 0.8413819 18 51.32914 54.31535  
## MornLow 50.88889 1.4507154 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6217457   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.09613 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8167543 24 51.99251 1.738221 2.66061  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.79425 0.4055485 3 51.32914 52.07399 51.65438 51.97961  
## BL/BR:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## BLK:MornHigh 53.58385 0.6334999 3 53.21584 54.31535 53.21810 53.22036  
## BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## BRN:MornHigh 53.25241 0.6246616 3 52.53135 53.62902 53.06410 53.59685  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.70337 0.5565612 3 53.16166 54.27368 53.41821 53.67476  
## WHT:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BLK:MornHigh 52.98145 0.9386122 3 51.92153 53.70743 52.61847 53.31540  
## WT/BLK:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.26147 0.5665432 3 52.70558 53.83810 52.97316 53.24073  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.02680  
## BL/BR:MornLow 49.00000  
## BLK:MornHigh 53.76786  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.61294  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.97422  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 53.51141  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.53941  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.70337 a  
## BLK:MornHigh 53.58385 ab  
## WT/BR:MornHigh 53.26147 abc  
## BRN:MornHigh 53.25241 abc  
## WT/BLK:MornHigh 52.98145 abc  
## WHT:MornLow 52.00000 abc  
## BL/BR:MornHigh 51.79425 abc  
## BLK:MornLow 51.66667 abc  
## BRN:MornLow 51.33333 abc  
## WT/BR:MornLow 51.00000 bcd  
## WT/BLK:MornLow 50.66667 cd  
## BL/BR:MornLow 48.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM61 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.681 3.736 10.3013 2.292e-05 \*\*\*  
## THIregime 1 38.210 38.210 105.3525 2.947e-10 \*\*\*  
## Colour:THIregime 5 0.696 0.139 0.3835 0.8551   
## Residuals 24 8.704 0.363   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3626858   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.72823 1.2374098 6 50 53.00178  
## BLK 53.17230 1.4345101 6 51 54.92895  
## BRN 52.86196 0.9446719 6 52 53.76841  
## WHT 52.39607 1.2347786 6 51 53.80543  
## WT/BLK 51.22938 1.3473717 6 50 52.53135  
## WT/BR 51.46014 1.3040222 6 50 52.96693  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.075064   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.17230 a  
## BRN 52.86196 a  
## WHT 52.39607 ab  
## BL/BR 51.72823 bc  
## WT/BR 51.46014 bc  
## WT/BLK 51.22938 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3626858   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.17158 0.6988578 18 52.37454 54.92895  
## MornLow 51.11111 1.0786096 18 50.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4143166   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.17158 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3626858 24 52.14135 1.155003 1.772967  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.78980 0.33743889 3 52.40068 53.00178 52.68380 52.96693  
## BL/BR:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 54.01127 0.83643127 3 53.29164 54.92895 53.55243 53.81321  
## BLK:MornLow 52.33333 1.52752523 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.72392 0.04560745 3 53.67727 53.76841 53.70168 53.72609  
## BRN:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.45882 0.30017961 3 53.28465 53.80543 53.28551 53.28636  
## WHT:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## WT/BLK:MornHigh 52.45875 0.06653645 3 52.40068 52.53135 52.42245 52.44423  
## WT/BLK:MornLow 50.00000 0.00000000 3 50.00000 50.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.58694 0.32984655 3 52.37454 52.96693 52.39694 52.41934  
## WT/BR:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 52.98436  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.37108  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.74725  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.54590  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 52.48779  
## WT/BLK:MornLow 50.00000  
## WT/BR:MornHigh 52.69314  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.01127 a  
## BRN:MornHigh 53.72392 ab  
## WHT:MornHigh 53.45882 ab  
## BL/BR:MornHigh 52.78980 abc  
## WT/BR:MornHigh 52.58694 abc  
## WT/BLK:MornHigh 52.45875 abc  
## BLK:MornLow 52.33333 abcd  
## BRN:MornLow 52.00000 bcde  
## WHT:MornLow 51.33333 cdef  
## BL/BR:MornLow 50.66667 def  
## WT/BR:MornLow 50.33333 ef  
## WT/BLK:MornLow 50.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM62 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.609 6.522 15.1956 9.122e-07 \*\*\*  
## THIregime 1 56.303 56.303 131.1841 3.260e-11 \*\*\*  
## Colour:THIregime 5 2.044 0.409 0.9525 0.4659   
## Residuals 24 10.301 0.429   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.429194   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.78473 1.639624 6 49 52.53135  
## BLK 51.74152 1.248118 6 50 52.99723  
## BRN 52.03861 1.347713 6 50 53.61409  
## WHT 49.68543 1.978071 6 47 51.83442  
## WT/BLK 52.41148 1.250860 6 51 53.83810  
## WT/BR 52.17512 1.479763 6 50 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.169489   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.41148 a  
## WT/BR 52.17512 a  
## BRN 52.03861 a  
## BLK 51.74152 ab  
## BL/BR 50.78473 bc  
## WHT 49.68543 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.429194   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.72341 0.8346433 18 50.82489 53.94264  
## MornLow 50.22222 1.3956047 18 47.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4507066   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.72341 a  
## MornLow 50.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.429194 24 51.47282 1.272767 1.928689  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.23612 0.2606769 3 52.03769 52.53135 52.08851 52.13933  
## BL/BR:MornLow 49.33333 0.5773503 3 49.00000 50.00000 49.00000 49.00000  
## BLK:MornHigh 52.81638 0.3085805 3 52.46007 52.99723 52.72595 52.99182  
## BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BRN:MornHigh 53.07722 0.5519955 3 52.51125 53.61409 52.80878 53.10632  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 51.37086 0.5097858 3 50.82489 51.83442 51.13908 51.45328  
## WHT:MornLow 48.00000 1.0000000 3 47.00000 49.00000 47.50000 48.00000  
## WT/BLK:MornHigh 53.48963 0.3017810 3 53.31540 53.83810 53.31540 53.31540  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.35025 0.5757614 3 52.79270 53.94264 53.05405 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.33534  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 52.99453  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.36020  
## BRN:MornLow 51.50000  
## WHT:MornHigh 51.64385  
## WHT:MornLow 48.50000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.62902  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.48963 a  
## WT/BR:MornHigh 53.35025 a  
## BRN:MornHigh 53.07722 ab  
## BLK:MornHigh 52.81638 abc  
## BL/BR:MornHigh 52.23612 abcd  
## WHT:MornHigh 51.37086 bcd  
## WT/BLK:MornLow 51.33333 bcd  
## BRN:MornLow 51.00000 cde  
## WT/BR:MornLow 51.00000 cde  
## BLK:MornLow 50.66667 de  
## BL/BR:MornLow 49.33333 ef  
## WHT:MornLow 48.00000 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM63 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.589 1.318 2.0341 0.1098   
## THIregime 1 43.499 43.499 67.1436 2.059e-08 \*\*\*  
## Colour:THIregime 5 0.195 0.039 0.0602 0.9973   
## Residuals 24 15.548 0.648   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6478439   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.15460 1.456165 6 49 52.84497  
## BLK 52.04668 1.353125 6 50 53.63357  
## BRN 52.29329 1.514509 6 50 54.11955  
## WHT 51.78609 1.294480 6 50 53.08672  
## WT/BLK 51.48316 1.331628 6 50 53.05405  
## WT/BR 51.16487 1.467774 6 49 52.86737  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.436827   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.29329 a  
## BLK 52.04668 a  
## WHT 51.78609 a  
## WT/BLK 51.48316 a  
## WT/BR 51.16487 a  
## BL/BR 51.15460 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6478439   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.75400 0.5885067 18 51.7473 54.11955  
## MornLow 50.55556 0.9835244 18 49.0000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5537354   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.75400 a  
## MornLow 50.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6478439 24 51.65478 1.558205 2.369576  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.30920 0.5493015 3 51.74730 52.84497 52.04132 52.33534  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.09335 0.5392308 3 52.55511 53.63357 52.82325 53.09139  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 53.25324 0.7978000 3 52.54877 54.11955 52.82008 53.09139  
## BRN:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WHT:MornHigh 52.90551 0.3107238 3 52.54672 53.08672 52.81491 53.08309  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.63299 0.3653018 3 52.40068 53.05405 52.42245 52.44423  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 52.32974 0.5613782 3 51.74730 52.86737 52.06092 52.37454  
## WT/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 52.59015  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.36248  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.60547  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.08490  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.74914  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.62096  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.25324 a  
## BLK:MornHigh 53.09335 a  
## WHT:MornHigh 52.90551 ab  
## WT/BLK:MornHigh 52.63299 abc  
## WT/BR:MornHigh 52.32974 abcd  
## BL/BR:MornHigh 52.30920 abcd  
## BRN:MornLow 51.33333 abcd  
## BLK:MornLow 51.00000 abcd  
## WHT:MornLow 50.66667 bcd  
## WT/BLK:MornLow 50.33333 cd  
## BL/BR:MornLow 50.00000 d  
## WT/BR:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM64 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.984 0.997 1.1855 0.3455   
## THIregime 1 48.799 48.799 58.0331 7.421e-08 \*\*\*  
## Colour:THIregime 5 0.330 0.066 0.0786 0.9949   
## Residuals 24 20.181 0.841   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8408893   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.81728 1.675197 6 49 53.68129  
## BLK 51.61463 1.778995 6 49 53.76992  
## BRN 52.67107 1.175991 6 51 53.87295  
## WHT 51.91449 1.429258 6 50 53.34807  
## WT/BLK 51.54850 1.588983 6 49 53.31540  
## WT/BR 52.08635 1.393032 6 50 53.73356  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.636962   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.67107 a  
## WT/BR 52.08635 a  
## WHT 51.91449 a  
## BL/BR 51.81728 a  
## BLK 51.61463 a  
## WT/BLK 51.54850 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8408893   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10633 0.6128515 18 51.92153 53.87295  
## MornLow 50.77778 1.0602750 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6308651   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10633 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8408893 24 51.94205 1.765429 2.699634  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.96790 0.8429802 3 52.03769 53.68129 52.61121 53.18473  
## BL/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BLK:MornHigh 52.89593 0.8084140 3 52.17496 53.76992 52.45894 52.74292  
## BLK:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## BRN:MornHigh 53.67548 0.3123267 3 53.31540 53.87295 53.57675 53.83810  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.16231 0.3200890 3 52.79270 53.34807 53.06942 53.34615  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.76366 0.7409186 3 51.92153 53.31540 52.48779 53.05405  
## WT/BLK:MornLow 50.33333 1.1547005 3 49.00000 51.00000 50.00000 51.00000  
## WT/BR:MornHigh 53.17269 0.5575763 3 52.61847 53.73356 52.89226 53.16606  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.43301  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.25642  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.34711  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.18473  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.44981  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.67548 a  
## WT/BR:MornHigh 53.17269 ab  
## WHT:MornHigh 53.16231 ab  
## BL/BR:MornHigh 52.96790 abc  
## BLK:MornHigh 52.89593 abc  
## WT/BLK:MornHigh 52.76366 abc  
## BRN:MornLow 51.66667 abc  
## WT/BR:MornLow 51.00000 abc  
## BL/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.66667 bc  
## BLK:MornLow 50.33333 c  
## WT/BLK:MornLow 50.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM65 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 8.949 1.790 7.7121 0.0001914 \*\*\*  
## THIregime 1 45.608 45.608 196.5158 4.694e-13 \*\*\*  
## Colour:THIregime 5 1.034 0.207 0.8912 0.5025001   
## Residuals 24 5.570 0.232   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2320824   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.06779 1.591525 6 49 52.72736  
## BLK 51.88427 1.396648 6 50 53.29051  
## BRN 52.62691 1.134090 6 51 53.80325  
## WHT 51.88367 1.396725 6 50 53.28465  
## WT/BLK 52.24451 1.106338 6 51 53.70743  
## WT/BR 52.37954 1.223860 6 51 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.8599838   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.62691 a  
## WT/BR 52.37954 a  
## WT/BLK 52.24451 a  
## BLK 51.88427 ab  
## WHT 51.88367 ab  
## BL/BR 51.06779 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2320824   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.14001 0.4712666 18 52.09577 53.8381  
## MornLow 50.88889 0.8323524 18 49.00000 52.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3314272   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.14001 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2320824 24 52.01445 0.9261836 1.418262  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46892 0.3310529 3 52.09577 52.72736 52.33969 52.58362  
## BL/BR:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## BLK:MornHigh 53.10188 0.3090805 3 52.74518 53.29051 53.00756 53.26995  
## BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BRN:MornHigh 53.58715 0.3403905 3 53.19478 53.80325 53.47910 53.76343  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.10067 0.3170071 3 52.73462 53.28465 53.00868 53.28273  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.15569 0.4856966 3 52.79270 53.70743 52.87982 52.96693  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.42575 0.3572137 3 53.21086 53.83810 53.21957 53.22828  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.65549  
## BL/BR:MornLow 50.00000  
## BLK:MornHigh 53.28023  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.78334  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.28369  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.33718  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.53319  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.58715 a  
## WT/BR:MornHigh 53.42575 a  
## WT/BLK:MornHigh 53.15569 a  
## BLK:MornHigh 53.10188 a  
## WHT:MornHigh 53.10067 a  
## BL/BR:MornHigh 52.46892 ab  
## BRN:MornLow 51.66667 bc  
## WT/BLK:MornLow 51.33333 bc  
## WT/BR:MornLow 51.33333 bc  
## BLK:MornLow 50.66667 cd  
## WHT:MornLow 50.66667 cd  
## BL/BR:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM66 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 9.483 1.897 1.9983 0.1153   
## THIregime 1 52.159 52.159 54.9538 1.183e-07 \*\*\*  
## Colour:THIregime 5 0.766 0.153 0.1614 0.9743   
## Residuals 24 22.779 0.949   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9491366   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.71208 2.136292 6 48 54.09945  
## BLK 52.39923 1.432905 6 50 53.83810  
## BRN 52.71476 1.219390 6 51 53.95011  
## WHT 51.41781 1.713643 6 49 53.41341  
## WT/BLK 52.78142 1.293883 6 51 54.09945  
## WT/BR 52.53013 1.557624 6 50 54.15172  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.739136   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 52.78142 a  
## BRN 52.71476 a  
## WT/BR 52.53013 a  
## BLK 52.39923 a  
## BL/BR 51.71208 a  
## WHT 51.41781 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9491366   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.46292 0.6895839 18 51.80538 54.15172  
## MornLow 51.05556 1.2113300 18 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6702417   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.46292 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9491366 24 52.25924 1.864238 2.868136  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.09083 1.1718238 3 51.80538 54.09945 52.58652 53.36767  
## BL/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 53.46512 0.6255572 3 52.74292 53.83810 53.27863 53.81434  
## BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BRN:MornHigh 53.76285 0.2973922 3 53.41994 53.95011 53.66923 53.91852  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.83562 0.5575698 3 52.30075 53.41341 52.54672 52.79270  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.89618 0.3520778 3 53.48963 54.09945 53.79454 54.09945  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 53.72692 0.6596931 3 52.96693 54.15172 53.51452 54.06211  
## WT/BR:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.73356  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.82622  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.93431  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.10305  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 54.09945  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 54.10692  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 53.89618 a  
## BRN:MornHigh 53.76285 a  
## WT/BR:MornHigh 53.72692 a  
## BLK:MornHigh 53.46512 a  
## BL/BR:MornHigh 53.09083 ab  
## WHT:MornHigh 52.83562 abc  
## BRN:MornLow 51.66667 abc  
## WT/BLK:MornLow 51.66667 abc  
## BLK:MornLow 51.33333 abc  
## WT/BR:MornLow 51.33333 abc  
## BL/BR:MornLow 50.33333 bc  
## WHT:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM67 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.707 3.941 3.6190 0.01399 \*   
## THIregime 1 45.686 45.686 41.9500 1.068e-06 \*\*\*  
## Colour:THIregime 5 1.382 0.276 0.2537 0.93374   
## Residuals 24 26.137 1.089   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.089052   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.48424 1.790046 6 48 52.59669  
## BLK 52.10634 2.251687 6 48 54.26990  
## BRN 52.85574 1.185610 6 51 54.29111  
## WHT 51.85769 1.368640 6 50 53.22828  
## WT/BLK 51.48316 1.331628 6 50 53.05405  
## WT/BR 52.30528 1.146518 6 51 53.66387  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.862917   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.85574 a  
## WT/BR 52.30528 ab  
## BLK 52.10634 ab  
## WHT 51.85769 ab  
## WT/BLK 51.48316 ab  
## BL/BR 50.48424 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.089052   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.97526 0.8265606 18 51.32914 54.29111  
## MornLow 50.72222 1.4473325 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7179453   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.97526 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.089052 24 51.84874 2.012733 3.072273  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 51.96848 0.6338471 3 51.32914 52.59669 51.65438 51.97961  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 53.21269 1.4153590 3 51.60475 54.26990 52.68409 53.76343  
## BLK:MornLow 51.00000 2.6457513 3 48.00000 53.00000 50.00000 52.00000  
## BRN:MornHigh 53.71148 0.5633043 3 53.16606 54.29111 53.42166 53.67727  
## BRN:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WHT:MornHigh 53.04871 0.3065995 3 52.69469 53.22828 52.95893 53.22316  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.63299 0.3653018 3 52.40068 53.05405 52.42245 52.44423  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 53.27723 0.3447608 3 53.00178 53.66387 53.08392 53.16606  
## WT/BR:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 52.28815  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 54.01666  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.98419  
## BRN:MornLow 52.50000  
## WHT:MornHigh 53.22572  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.74914  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.41496  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.71148 a  
## WT/BR:MornHigh 53.27723 ab  
## BLK:MornHigh 53.21269 ab  
## WHT:MornHigh 53.04871 ab  
## WT/BLK:MornHigh 52.63299 ab  
## BRN:MornLow 52.00000 abc  
## BL/BR:MornHigh 51.96848 abc  
## WT/BR:MornLow 51.33333 abc  
## BLK:MornLow 51.00000 abc  
## WHT:MornLow 50.66667 abc  
## WT/BLK:MornLow 50.33333 bc  
## BL/BR:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM68 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.209 0.642 1.0283 0.4234   
## THIregime 1 52.664 52.664 84.3939 2.509e-09 \*\*\*  
## Colour:THIregime 5 0.285 0.057 0.0915 0.9928   
## Residuals 24 14.977 0.624   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6240278   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.94506 1.787748 6 49 53.96878  
## BLK 51.94375 1.459033 6 50 53.41496  
## BRN 52.74019 1.437580 6 51 54.52163  
## WHT 51.96071 1.478168 6 50 53.44608  
## WT/BLK 52.43326 1.281431 6 51 53.96878  
## WT/BR 52.23403 1.538419 6 50 54.04718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.410169   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.74019 a  
## WT/BLK 52.43326 a  
## WT/BR 52.23403 a  
## WHT 51.96071 a  
## BL/BR 51.94506 a  
## BLK 51.94375 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6240278   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.419 0.5128088 18 52.27 54.52163  
## MornLow 51.000 0.9074852 18 49.00 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5434618   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.419 a  
## MornLow 51.000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6240278 24 52.2095 1.513047 2.325613  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.22344 0.8682984 3 52.27000 53.96878 52.85078 53.43156  
## BL/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## BLK:MornHigh 53.22084 0.3094496 3 52.86398 53.41496 53.12378 53.38358  
## BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BRN:MornHigh 53.81372 0.6130888 3 53.45479 54.52163 53.45976 53.46474  
## BRN:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WHT:MornHigh 53.25476 0.3247332 3 52.87982 53.44608 53.15910 53.43839  
## WHT:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.53319 0.3772262 3 53.31540 53.96878 53.31540 53.31540  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.46806 0.5902000 3 52.86737 54.04718 53.17850 53.48963  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.70017  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.39927  
## BLK:MornLow 51.00000  
## BRN:MornHigh 53.99319  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.44223  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.64209  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.76841  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 53.81372 a  
## WT/BLK:MornHigh 53.53319 ab  
## WT/BR:MornHigh 53.46806 ab  
## WHT:MornHigh 53.25476 abc  
## BL/BR:MornHigh 53.22344 abc  
## BLK:MornHigh 53.22084 abc  
## BRN:MornLow 51.66667 abcd  
## WT/BLK:MornLow 51.33333 bcd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 50.66667 d  
## BLK:MornLow 50.66667 d  
## WHT:MornLow 50.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM69 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 25.642 5.128 5.2072 0.00224 \*\*   
## THIregime 1 43.290 43.290 43.9540 7.399e-07 \*\*\*  
## Colour:THIregime 5 2.310 0.462 0.4692 0.79536   
## Residuals 24 23.637 0.985   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9848851   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.55455 2.014537 6 48 53.72194  
## BLK 53.31487 1.100709 6 52 54.72442  
## BRN 52.05782 1.364815 6 50 53.66387  
## WHT 50.49240 1.783390 6 48 52.47327  
## WT/BLK 51.48316 1.331628 6 50 53.05405  
## WT/BR 52.01002 1.327070 6 50 53.61409  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.771585   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.31487 a  
## BRN 52.05782 ab  
## WT/BR 52.01002 ab  
## BL/BR 51.55455 ab  
## WT/BLK 51.48316 b  
## WHT 50.49240 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9848851   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.91538 0.8394338 18 51.43983 54.72442  
## MornLow 50.72222 1.5264552 18 48.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6827471   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.91538 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9848851 24 51.8188 1.915162 2.92165  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.77576 1.1569258 3 51.48595 53.72194 52.30267 53.11939  
## BL/BR:MornLow 50.33333 2.0816660 3 48.00000 52.00000 49.50000 51.00000  
## BLK:MornHigh 53.96308 0.6595885 3 53.56430 54.72442 53.58241 53.60051  
## BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BRN:MornHigh 53.11564 0.5475916 3 52.56869 53.66387 52.84152 53.11436  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 51.98481 0.5190339 3 51.43983 52.47327 51.74057 52.04132  
## WHT:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## WT/BLK:MornHigh 52.63299 0.3653018 3 52.40068 53.05405 52.42245 52.44423  
## WT/BLK:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BR:MornHigh 53.02003 0.5851398 3 52.44423 53.61409 52.72301 53.00178  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.42067  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.16246  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.38911  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.25730  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 52.74914  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.30793  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.96308 a  
## BRN:MornHigh 53.11564 ab  
## WT/BR:MornHigh 53.02003 ab  
## BL/BR:MornHigh 52.77576 ab  
## BLK:MornLow 52.66667 ab  
## WT/BLK:MornHigh 52.63299 ab  
## WHT:MornHigh 51.98481 ab  
## BRN:MornLow 51.00000 bc  
## WT/BR:MornLow 51.00000 bc  
## BL/BR:MornLow 50.33333 bc  
## WT/BLK:MornLow 50.33333 bc  
## WHT:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM70 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.583 2.717 7.386 0.000257 \*\*\*  
## THIregime 1 44.751 44.751 121.668 7.003e-11 \*\*\*  
## Colour:THIregime 5 1.114 0.223 0.606 0.695988   
## Residuals 24 8.827 0.368   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3678123   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.38982 1.692823 6 49 53.38074  
## BLK 53.19590 1.261746 6 51 54.45170  
## BRN 52.40478 1.245144 6 51 53.83810  
## WHT 51.62476 1.472979 6 50 53.25732  
## WT/BLK 52.06332 1.165573 6 51 53.18473  
## WT/BR 52.67771 1.184215 6 51 53.91277  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.082636   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.19590 a  
## WT/BR 52.67771 ab  
## BRN 52.40478 abc  
## WT/BLK 52.06332 bc  
## WHT 51.62476 bc  
## BL/BR 51.38982 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.3678123   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.34099 0.5814508 18 52.16546 54.4517  
## MornLow 51.11111 1.0226200 18 49.00000 53.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4172345   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.34099 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.3678123 24 52.22605 1.161251 1.785454  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.77963 0.60774412 3 52.16546 53.38074 52.47908 52.79270  
## BL/BR:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 54.05847 0.64388665 3 53.31540 54.45170 53.86186 54.40832  
## BLK:MornLow 52.33333 1.15470054 3 51.00000 53.00000 52.00000 53.00000  
## BRN:MornHigh 53.47623 0.31403212 3 53.27519 53.83810 53.29530 53.31540  
## BRN:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.91619 0.29578360 3 52.73121 53.25732 52.74562 52.76003  
## WHT:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 53.12665 0.06653645 3 53.05405 53.18473 53.09761 53.14117  
## WT/BLK:MornLow 51.00000 0.00000000 3 51.00000 51.00000 51.00000 51.00000  
## WT/BR:MornHigh 53.68876 0.32548521 3 53.31540 53.91277 53.57675 53.83810  
## WT/BR:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.08672  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.43001  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.57675  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.00868  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.16295  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.87544  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.05847 a  
## WT/BR:MornHigh 53.68876 a  
## BRN:MornHigh 53.47623 a  
## WT/BLK:MornHigh 53.12665 ab  
## WHT:MornHigh 52.91619 abc  
## BL/BR:MornHigh 52.77963 abcd  
## BLK:MornLow 52.33333 abcd  
## WT/BR:MornLow 51.66667 bcde  
## BRN:MornLow 51.33333 cde  
## WT/BLK:MornLow 51.00000 de  
## WHT:MornLow 50.33333 e  
## BL/BR:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM71 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)  
## Colour 5 72.74 14.5487 0.6418 0.6703  
## THIregime 1 9.80 9.7967 0.4322 0.5175  
## Colour:THIregime 5 100.91 20.1825 0.8903 0.5037  
## Residuals 23 521.40 22.6697   
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 22.66966   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.99931 1.834653 6 48.00000 53.08309  
## BLK 52.04117 1.348398 6 50.00000 53.61409  
## BRN 47.54443 11.851354 5 26.39635 53.68876  
## WHT 51.04023 1.864760 6 48.00000 53.17601  
## WT/BLK 51.27293 1.595320 6 49.00000 53.31540  
## WT/BR 52.02744 1.688823 6 49.00000 53.62902  
##   
## Alpha: 0.05 ; DF Error: 23   
## Critical Value of Studentized Range: 4.38831   
##   
## Groups according to probability of means differences and alpha level( 0.05 )  
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.04117 a  
## WT/BR 52.02744 a  
## WT/BLK 51.27293 a  
## WHT 51.04023 a  
## BL/BR 50.99931 a  
## BRN 47.54443 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 22.66966   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 51.33381 6.268995 18 26.39635 53.68876  
## MornLow 50.47059 1.374666 17 48.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 23   
## Critical Value of Studentized Range: 2.925523   
##   
## Groups according to probability of means differences and alpha level( 0.05 )  
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 51.33381 a  
## MornLow 50.47059 a  
## $statistics  
## MSerror Df Mean CV  
## 22.66966 23 50.91453 9.351489  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.120705 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.33195 0.8681867 3 51.38141 53.08309 51.95638 52.53135  
## BL/BR:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## BLK:MornHigh 53.08233 0.5416240 3 52.53135 53.61409 52.81646 53.10157  
## BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BRN:MornHigh 44.57406 15.7423766 3 26.39635 53.68876 40.01671 53.63706  
## BRN:MornLow 52.00000 0.0000000 2 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 52.41379 0.8366562 3 51.51862 53.17601 52.03267 52.54672  
## WHT:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## WT/BLK:MornHigh 52.54587 0.7081858 3 51.92153 53.31540 52.16110 52.40068  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.05488 0.9815351 3 51.92153 53.62902 52.76781 53.61409  
## WT/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## Q75  
## BL/BR:MornHigh 52.80722  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.35783  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.66291  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.86137  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.85804  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.62155  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.08233 a  
## WT/BR:MornHigh 53.05488 a  
## WT/BLK:MornHigh 52.54587 a  
## WHT:MornHigh 52.41379 a  
## BL/BR:MornHigh 52.33195 a  
## BRN:MornLow 52.00000 a  
## BLK:MornLow 51.00000 a  
## WT/BR:MornLow 51.00000 a  
## WT/BLK:MornLow 50.00000 a  
## BL/BR:MornLow 49.66667 a  
## WHT:MornLow 49.66667 a  
## BRN:MornHigh 44.57406 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM72 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.133 2.427 9.0875 5.926e-05 \*\*\*  
## THIregime 1 40.245 40.245 150.7191 7.784e-12 \*\*\*  
## Colour:THIregime 5 0.579 0.116 0.4333 0.8208   
## Residuals 24 6.408 0.267   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2670169   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.79768 1.3073190 6 50 53.11939  
## BLK 52.89490 0.9804487 6 52 53.81537  
## BRN 52.36110 1.2017126 6 51 53.76841  
## WHT 51.60451 1.4541349 6 50 53.25006  
## WT/BLK 51.09144 1.4151079 6 49 52.79270  
## WT/BR 52.26090 1.1021708 6 51 53.57675  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 0.9224409   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.89490 a  
## BRN 52.36110 ab  
## WT/BR 52.26090 ab  
## BL/BR 51.79768 bc  
## WHT 51.60451 bc  
## WT/BLK 51.09144 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.2670169   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.05906 0.6026952 18 51.48595 53.81537  
## MornLow 50.94444 0.8726041 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.3554974   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.05906 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.2670169 24 52.00175 0.993691 1.521265  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.92870 0.31903265 3 52.56039 53.11939 52.83335 53.10632  
## BL/BR:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.78979 0.02598161 3 53.76343 53.81537 53.77701 53.79058  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.38886 0.32872631 3 53.19478 53.76841 53.19908 53.20339  
## BRN:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.87569 0.32443773 3 52.67654 53.25006 52.68850 52.70046  
## WHT:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 52.18288 0.65771641 3 51.48595 52.79270 51.87798 52.27000  
## WT/BLK:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.18846 0.35000116 3 52.89724 53.57675 52.99431 53.09139  
## WT/BR:MornLow 51.33333 0.57735027 3 51.00000 52.00000 51.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.11285  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.80298  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.48590  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.97526  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.53135  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.33407  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.78979 a  
## BRN:MornHigh 53.38886 ab  
## WT/BR:MornHigh 53.18846 ab  
## BL/BR:MornHigh 52.92870 ab  
## WHT:MornHigh 52.87569 ab  
## WT/BLK:MornHigh 52.18288 bc  
## BLK:MornLow 52.00000 bc  
## BRN:MornLow 51.33333 cd  
## WT/BR:MornLow 51.33333 cd  
## BL/BR:MornLow 50.66667 cd  
## WHT:MornLow 50.33333 d  
## WT/BLK:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM73 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 9.539 1.908 2.8091 0.03904 \*   
## THIregime 1 44.386 44.386 65.3555 2.62e-08 \*\*\*  
## Colour:THIregime 5 0.789 0.158 0.2323 0.94457   
## Residuals 24 16.300 0.679   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6791487   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.56326 1.7424340 6 49 53.72194  
## BLK 52.89490 0.9804487 6 52 53.81537  
## BRN 52.11443 1.4158999 6 50 53.75768  
## WHT 51.84772 1.3586480 6 50 53.21739  
## WT/BLK 51.30197 1.6250676 6 49 53.31540  
## WT/BR 52.27334 1.3438772 6 50 53.68876  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.471132   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.89490 a  
## WT/BR 52.27334 ab  
## BRN 52.11443 ab  
## WHT 51.84772 ab  
## BL/BR 51.56326 ab  
## WT/BLK 51.30197 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6791487   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10965 0.6347546 18 51.87798 53.81537  
## MornLow 50.88889 1.0786096 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5669562   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10965 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6791487 24 51.99927 1.584839 2.426151  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.79318 0.84776689 3 52.06092 53.72194 52.32880 52.59669  
## BL/BR:MornLow 50.33333 1.52752523 3 49.00000 52.00000 49.50000 50.00000  
## BLK:MornHigh 53.78979 0.02598161 3 53.76343 53.81537 53.77701 53.79058  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.22886 0.53486112 3 52.68816 53.75768 52.96444 53.24073  
## BRN:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 53.02878 0.31109747 3 52.66971 53.21739 52.93448 53.19924  
## WHT:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BLK:MornHigh 52.60395 0.71882249 3 51.87798 53.31540 52.24822 52.61847  
## WT/BLK:MornLow 50.00000 1.00000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.21335 0.72858552 3 52.37454 53.68876 52.97565 53.57675  
## WT/BR:MornLow 51.33333 1.15470054 3 50.00000 52.00000 51.00000 52.00000  
## Q75  
## BL/BR:MornHigh 53.15932  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.80298  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.49921  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.20832  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 52.96693  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 53.63275  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.78979 a  
## BRN:MornHigh 53.22886 ab  
## WT/BR:MornHigh 53.21335 ab  
## WHT:MornHigh 53.02878 abc  
## BL/BR:MornHigh 52.79318 abc  
## WT/BLK:MornHigh 52.60395 abcd  
## BLK:MornLow 52.00000 abcde  
## WT/BR:MornLow 51.33333 bcde  
## BRN:MornLow 51.00000 bcde  
## WHT:MornLow 50.66667 cde  
## BL/BR:MornLow 50.33333 de  
## WT/BLK:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM74 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 25.855 5.171 8.0524 0.0001417 \*\*\*  
## THIregime 1 40.903 40.903 63.6949 3.292e-08 \*\*\*  
## Colour:THIregime 5 2.235 0.447 0.6961 0.6315364   
## Residuals 24 15.412 0.642   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6421686   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.69024 1.1938857 6 50 52.90886  
## BLK 53.00178 0.8420298 6 52 54.02817  
## BRN 51.48825 1.3313650 6 50 53.00178  
## WHT 50.17727 1.7091083 6 48 51.91064  
## WT/BLK 50.98255 1.8372498 6 48 53.18473  
## WT/BR 51.38878 1.2274085 6 50 52.79270  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.430519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.00178 a  
## BL/BR 51.69024 ab  
## BRN 51.48825 bc  
## WT/BR 51.38878 bc  
## WT/BLK 50.98255 bc  
## WHT 50.17727 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6421686   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.52073 0.8125592 18 50.7019 54.02817  
## MornLow 50.38889 1.3779306 18 48.0000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5513046   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.52073 a  
## MornLow 50.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6421686 24 51.45481 1.557394 2.359174  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.71381 0.2949139 3 52.37454 52.90886 52.61629 52.85804  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.67023 0.3142218 3 53.43985 54.02817 53.49126 53.54266  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 52.64317 0.3106521 3 52.45668 53.00178 52.46386 52.47104  
## BRN:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WHT:MornHigh 51.68787 0.3514863 3 51.28268 51.91064 51.57648 51.87029  
## WHT:MornLow 48.66667 0.5773503 3 48.00000 49.00000 48.50000 49.00000  
## WT/BLK:MornHigh 51.96509 1.2419855 3 50.70190 53.18473 51.35528 52.00865  
## WT/BLK:MornLow 50.00000 2.0000000 3 48.00000 52.00000 49.00000 50.00000  
## WT/BR:MornHigh 52.44423 0.3017810 3 52.27000 52.79270 52.27000 52.27000  
## WT/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## Q75  
## BL/BR:MornHigh 52.88345  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.78542  
## BLK:MornLow 52.50000  
## BRN:MornHigh 52.73641  
## BRN:MornLow 50.50000  
## WHT:MornHigh 51.89047  
## WHT:MornLow 49.00000  
## WT/BLK:MornHigh 52.59669  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 52.53135  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.67023 a  
## BL/BR:MornHigh 52.71381 ab  
## BRN:MornHigh 52.64317 abc  
## WT/BR:MornHigh 52.44423 abc  
## BLK:MornLow 52.33333 abcd  
## WT/BLK:MornHigh 51.96509 abcd  
## WHT:MornHigh 51.68787 abcd  
## BL/BR:MornLow 50.66667 bcde  
## BRN:MornLow 50.33333 cde  
## WT/BR:MornLow 50.33333 cde  
## WT/BLK:MornLow 50.00000 de  
## WHT:MornLow 48.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM75 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.205 0.641 1.4502 0.2428   
## THIregime 1 45.595 45.595 103.1419 3.631e-10 \*\*\*  
## Colour:THIregime 5 0.260 0.052 0.1176 0.9872   
## Residuals 24 10.610 0.442   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4420647   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.14899 1.450789 6 50 53.83810  
## BLK 52.70870 1.213248 6 51 53.93314  
## BRN 52.65234 1.156821 6 51 53.83810  
## WHT 52.15258 1.452569 6 50 53.83810  
## WT/BLK 52.23030 1.545112 6 50 54.09945  
## WT/BR 51.85953 1.371369 6 50 53.24073  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.186894   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.70870 a  
## BRN 52.65234 a  
## WT/BLK 52.23030 a  
## WHT 52.15258 a  
## BL/BR 52.14899 a  
## WT/BR 51.85953 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4420647   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.41748 0.4585649 18 52.68816 54.09945  
## MornLow 51.16667 0.7859052 18 50.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4574146   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.41748 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4420647 24 52.29207 1.271473 1.957394  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.29798 0.5490424 3 52.74043 53.83810 53.02792 53.31540  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.75074 0.2984615 3 53.40630 53.93314 53.65954 53.91277  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.63802 0.3123774 3 53.27806 53.83810 53.53798 53.79789  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.30515 0.5381467 3 52.76195 53.83810 53.03868 53.31540  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.46059 0.6538588 3 52.79270 54.09945 53.14117 53.48963  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.05239 0.3154944 3 52.68816 53.24073 52.95822 53.22828  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.57675  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.92295  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.81800  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.57675  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.23451  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.75074 a  
## BRN:MornHigh 53.63802 a  
## WT/BLK:MornHigh 53.46059 ab  
## WHT:MornHigh 53.30515 ab  
## BL/BR:MornHigh 53.29798 ab  
## WT/BR:MornHigh 53.05239 ab  
## BLK:MornLow 51.66667 bc  
## BRN:MornLow 51.66667 bc  
## BL/BR:MornLow 51.00000 c  
## WHT:MornLow 51.00000 c  
## WT/BLK:MornLow 51.00000 c  
## WT/BR:MornLow 50.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM76 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 15.380 3.076 3.3965 0.01843 \*   
## THIregime 1 41.405 41.405 45.7188 5.406e-07 \*\*\*  
## Colour:THIregime 5 0.832 0.166 0.1837 0.96602   
## Residuals 24 21.735 0.906   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9056362   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.73912 1.246604 6 50 53.00178  
## BLK 52.86300 1.191908 6 51 54.29262  
## BRN 52.34907 1.388365 6 50 53.73356  
## WHT 51.04047 2.117003 6 48 53.63483  
## WT/BLK 51.06240 1.387607 6 49 52.79270  
## WT/BR 51.71392 1.218589 6 50 52.96693  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.698815   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.86300 a  
## BRN 52.34907 ab  
## BL/BR 51.73912 ab  
## WT/BR 51.71392 ab  
## WT/BLK 51.06240 b  
## WHT 51.04047 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9056362   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 52.86710 0.7797395 18 51.48595 54.29262  
## MornLow 50.72222 1.2744344 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6547024   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 52.86710 a  
## MornLow 50.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9056362 24 51.79466 1.83735 2.80164  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.81158 0.3181945 3 52.44423 53.00178 52.71647 52.98871  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.72599 0.5633121 3 53.16606 54.29262 53.44268 53.71930  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 53.36480 0.6248379 3 52.64336 53.73356 53.18042 53.71748  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 52.41427 1.0995132 3 51.50132 53.63483 51.80399 52.10666  
## WHT:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## WT/BLK:MornHigh 52.12481 0.6538588 3 51.48595 52.79270 51.79086 52.09577  
## WT/BLK:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BR:MornHigh 52.76117 0.2980767 3 52.41934 52.96693 52.65829 52.89724  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.99525  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 54.00596  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.72552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.87074  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 52.44423  
## WT/BLK:MornLow 50.50000  
## WT/BR:MornHigh 52.93209  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.72599 a  
## BRN:MornHigh 53.36480 ab  
## BL/BR:MornHigh 52.81158 ab  
## WT/BR:MornHigh 52.76117 abc  
## WHT:MornHigh 52.41427 abcd  
## WT/BLK:MornHigh 52.12481 abcd  
## BLK:MornLow 52.00000 abcd  
## BRN:MornLow 51.33333 abcd  
## BL/BR:MornLow 50.66667 bcd  
## WT/BR:MornLow 50.66667 bcd  
## WT/BLK:MornLow 50.00000 cd  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM77 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.654 2.131 3.0470 0.02869 \*   
## THIregime 1 45.053 45.053 64.4270 2.975e-08 \*\*\*  
## Colour:THIregime 5 1.020 0.204 0.2916 0.91291   
## Residuals 24 16.783 0.699   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6992858   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.38002 1.422593 6 50 53.83810  
## BLK 53.16815 1.434218 6 51 54.92895  
## BRN 52.42351 1.264478 6 51 53.87544  
## WHT 51.38699 1.682826 6 49 53.34807  
## WT/BLK 52.12866 1.441670 6 50 53.83810  
## WT/BR 51.89147 1.407512 6 50 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.492782   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.16815 a  
## BRN 52.42351 ab  
## BL/BR 52.38002 ab  
## WT/BLK 52.12866 ab  
## WT/BR 51.89147 ab  
## WHT 51.38699 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6992858   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.34849 0.6267726 18 52.23925 54.92895  
## MornLow 51.11111 1.1318329 18 49.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5753   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.34849 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6992858 24 52.2298 1.601065 2.461857  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.42672 0.6628780 3 52.66203 53.83810 53.22102 53.78002  
## BL/BR:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## BLK:MornHigh 54.00297 0.8475584 3 53.26562 54.92895 53.53998 53.81434  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.51369 0.3137615 3 53.31540 53.87544 53.33282 53.35025  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.77398 0.5554547 3 52.23925 53.34807 52.48694 52.73462  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.25732 0.6118874 3 52.61847 53.83810 52.96693 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.11628 0.3448926 3 52.71803 53.31540 53.01671 53.31540  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.80906  
## BL/BR:MornLow 52.00000  
## BLK:MornHigh 54.37165  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.61284  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.04135  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.31540  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.00297 a  
## BRN:MornHigh 53.51369 ab  
## BL/BR:MornHigh 53.42672 abc  
## WT/BLK:MornHigh 53.25732 abc  
## WT/BR:MornHigh 53.11628 abcd  
## WHT:MornHigh 52.77398 abcd  
## BLK:MornLow 52.33333 abcde  
## BL/BR:MornLow 51.33333 bcde  
## BRN:MornLow 51.33333 bcde  
## WT/BLK:MornLow 51.00000 cde  
## WT/BR:MornLow 50.66667 de  
## WHT:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM78 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.567 0.713 0.4433 0.8138   
## THIregime 1 45.994 45.994 28.5795 1.735e-05 \*\*\*  
## Colour:THIregime 5 0.476 0.095 0.0591 0.9974   
## Residuals 24 38.624 1.609   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.609343   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.17827 1.479676 6 50 53.90344  
## BLK 52.91041 2.149432 6 50 55.45165  
## BRN 52.40478 1.245144 6 51 53.83810  
## WHT 51.88883 1.730451 6 49 53.80906  
## WT/BLK 52.25934 1.889875 6 49 54.18657  
## WT/BR 52.14028 1.446678 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.26461   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.91041 a  
## BRN 52.40478 a  
## WT/BLK 52.25934 a  
## BL/BR 52.17827 a  
## WT/BR 52.14028 a  
## WHT 51.88883 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.609343   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.42730 0.7733606 18 52.20851 55.45165  
## MornLow 51.16667 1.3826658 18 49.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8727529   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.42730 a  
## MornLow 51.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.609343 24 52.29698 2.425759 3.734734  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.35654 0.5555625 3 52.79270 53.90344 53.08309 53.37348  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.82082 1.4365279 3 52.74292 55.45165 53.00540 53.26788  
## BLK:MornLow 52.00000 2.6457513 3 50.00000 55.00000 50.50000 51.00000  
## BRN:MornHigh 53.47623 0.3140321 3 53.27519 53.83810 53.29530 53.31540  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 53.11099 0.8196232 3 52.20851 53.80906 52.76195 53.31540  
## WHT:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## WT/BLK:MornHigh 53.51867 1.0822588 3 52.27000 54.18657 53.18473 54.09945  
## WT/BLK:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## WT/BR:MornHigh 53.28055 0.5757614 3 52.68816 53.83810 53.00178 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.63846  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.35977  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.57675  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.56223  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.82082 a  
## WT/BLK:MornHigh 53.51867 a  
## BRN:MornHigh 53.47623 a  
## BL/BR:MornHigh 53.35654 a  
## WT/BR:MornHigh 53.28055 a  
## WHT:MornHigh 53.11099 a  
## BLK:MornLow 52.00000 a  
## BRN:MornLow 51.33333 a  
## BL/BR:MornLow 51.00000 a  
## WT/BLK:MornLow 51.00000 a  
## WT/BR:MornLow 51.00000 a  
## WHT:MornLow 50.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM79 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 17.047 3.409 3.5871 0.01455 \*   
## THIregime 1 48.017 48.017 50.5194 2.395e-07 \*\*\*  
## Colour:THIregime 5 1.280 0.256 0.2694 0.92536   
## Residuals 24 22.811 0.950   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.950466   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.81522 2.2111332 6 47 53.10632  
## BLK 52.74043 1.2469867 6 51 53.99718  
## BRN 52.89942 0.9855992 6 52 53.83810  
## WHT 52.42177 1.4523793 6 50 53.87077  
## WT/BLK 51.97651 1.5053380 6 50 53.57675  
## WT/BR 52.40941 1.6219711 6 50 54.43547  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.740354   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 52.89942 a  
## BLK 52.74043 a  
## WHT 52.42177 ab  
## WT/BR 52.40941 ab  
## WT/BLK 51.97651 ab  
## BL/BR 50.81522 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.950466   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.36537 0.7743846 18 50.99229 54.43547  
## MornLow 51.05556 1.3491706 18 47.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6707109   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.36537 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.950466 24 52.21046 1.867286 2.870144  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.29710 1.14083049 3 50.99229 53.10632 51.89249 52.79270  
## BL/BR:MornLow 49.33333 2.08166600 3 47.00000 51.00000 48.50000 50.00000  
## BLK:MornHigh 53.81419 0.30855028 3 53.45795 53.99718 53.72270 53.98744  
## BLK:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.79885 0.04024187 3 53.75768 53.83810 53.77922 53.80076  
## BRN:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## WHT:MornHigh 53.51020 0.62137808 3 52.79270 53.87077 53.32992 53.86714  
## WHT:MornLow 51.33333 1.15470054 3 50.00000 52.00000 51.00000 52.00000  
## WT/BLK:MornHigh 53.28636 0.42973631 3 52.79270 53.57675 53.14117 53.48963  
## WT/BLK:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.48548 0.87739664 3 52.70558 54.43547 53.01049 53.31540  
## WT/BR:MornLow 51.33333 1.52752523 3 50.00000 53.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.94951  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.99231  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.81943  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.86895  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 53.53319  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.87544  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.81419 a  
## BRN:MornHigh 53.79885 a  
## WHT:MornHigh 53.51020 ab  
## WT/BR:MornHigh 53.48548 ab  
## WT/BLK:MornHigh 53.28636 ab  
## BL/BR:MornHigh 52.29710 ab  
## BRN:MornLow 52.00000 abc  
## BLK:MornLow 51.66667 abc  
## WHT:MornLow 51.33333 abc  
## WT/BR:MornLow 51.33333 abc  
## WT/BLK:MornLow 50.66667 bc  
## BL/BR:MornLow 49.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM80 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 20.307 4.061 2.5473 0.0551 .   
## THIregime 1 44.607 44.607 27.9773 2.001e-05 \*\*\*  
## Colour:THIregime 5 1.517 0.303 0.1903 0.9634   
## Residuals 24 38.265 1.594   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.594388   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.02883 1.853927 6 48 53.05405  
## BLK 53.39833 1.979056 6 50 55.40620  
## BRN 52.07655 1.382082 6 50 53.69871  
## WHT 51.32019 1.911048 6 48 53.19241  
## WT/BLK 52.10688 1.420996 6 50 53.83810  
## WT/BR 52.08137 1.393760 6 50 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.254064   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.39833 a  
## WT/BLK 52.10688 ab  
## WT/BR 52.08137 ab  
## BRN 52.07655 ab  
## WHT 51.32019 ab  
## BL/BR 51.02883 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.594388   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.11516 0.9175226 18 51.45691 55.4062  
## MornLow 50.88889 1.6409785 18 48.00000 55.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8686885   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.11516 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.594388 24 52.00203 2.428157 3.717342  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.39100 0.8323497 3 51.45691 53.05405 52.05947 52.66203  
## BL/BR:MornLow 49.66667 1.5275252 3 48.00000 51.00000 49.00000 50.00000  
## BLK:MornHigh 54.13000 1.3610015 3 52.69766 55.40620 53.49190 54.28613  
## BLK:MornLow 52.66667 2.5166115 3 50.00000 55.00000 51.50000 53.00000  
## BRN:MornHigh 53.15310 0.5463474 3 52.60602 53.69871 52.88030 53.15457  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.64039 0.9494837 3 51.54403 53.19241 52.36438 53.18473  
## WHT:MornLow 50.00000 1.7320508 3 48.00000 51.00000 49.50000 51.00000  
## WT/BLK:MornHigh 53.21376 0.6103350 3 52.61847 53.83810 52.90160 53.18473  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.16274 0.5902000 3 52.58362 53.76343 52.86239 53.14117  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.85804  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.84616  
## BLK:MornLow 54.00000  
## BRN:MornHigh 53.42664  
## BRN:MornLow 51.50000  
## WHT:MornHigh 53.18857  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.51141  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.45230  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.13000 a  
## WT/BLK:MornHigh 53.21376 ab  
## WT/BR:MornHigh 53.16274 ab  
## BRN:MornHigh 53.15310 ab  
## BLK:MornLow 52.66667 ab  
## WHT:MornHigh 52.64039 ab  
## BL/BR:MornHigh 52.39100 ab  
## BRN:MornLow 51.00000 ab  
## WT/BLK:MornLow 51.00000 ab  
## WT/BR:MornLow 51.00000 ab  
## WHT:MornLow 50.00000 b  
## BL/BR:MornLow 49.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM81 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 21.008 4.202 8.7561 7.783e-05 \*\*\*  
## THIregime 1 49.358 49.358 102.8628 3.729e-10 \*\*\*  
## Colour:THIregime 5 1.639 0.328 0.6831 0.6407   
## Residuals 24 11.516 0.480   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4798471   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.06658 1.745491 6 49 53.19924  
## BLK 53.16436 1.003658 6 52 54.38353  
## BRN 52.65857 1.160953 6 51 53.83810  
## WHT 51.10751 1.634429 6 49 52.76003  
## WT/BLK 52.18674 1.496590 6 50 54.01233  
## WT/BR 52.17512 1.479763 6 50 53.94264  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.236575   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.16436 a  
## BRN 52.65857 a  
## WT/BLK 52.18674 ab  
## WT/BR 52.17512 ab  
## WHT 51.10751 b  
## BL/BR 51.06658 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4798471   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.23074 0.7023222 18 52.06092 54.38353  
## MornLow 50.88889 1.2313975 18 49.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.476561   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.23074 a  
## MornLow 50.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4798471 24 52.05981 1.330604 2.039327  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.46650 0.6357881 3 52.06092 53.19924 52.10012 52.13933  
## BL/BR:MornLow 49.66667 1.1547005 3 49.00000 51.00000 49.00000 49.00000  
## BLK:MornHigh 53.99540 0.3363828 3 53.78832 54.38353 53.80133 53.81434  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 53.65046 0.2908696 3 53.31540 53.83810 53.55665 53.79789  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.54836 0.3419648 3 52.15384 52.76003 52.44253 52.73121  
## WHT:MornLow 49.66667 0.5773503 3 49.00000 50.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.37348 0.6118874 3 52.79270 54.01233 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.35025 0.5757614 3 52.79270 53.94264 53.05405 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.66928  
## BL/BR:MornLow 50.00000  
## BLK:MornHigh 54.09893  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.81800  
## BRN:MornLow 52.00000  
## WHT:MornHigh 52.74562  
## WHT:MornLow 50.00000  
## WT/BLK:MornHigh 53.66387  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.62902  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.99540 a  
## BRN:MornHigh 53.65046 ab  
## WT/BLK:MornHigh 53.37348 ab  
## WT/BR:MornHigh 53.35025 ab  
## WHT:MornHigh 52.54836 abc  
## BL/BR:MornHigh 52.46650 abc  
## BLK:MornLow 52.33333 abc  
## BRN:MornLow 51.66667 bcd  
## WT/BLK:MornLow 51.00000 cd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 49.66667 d  
## WHT:MornLow 49.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM82 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.279 1.256 2.8429 0.03736 \*   
## THIregime 1 50.321 50.321 113.9143 1.357e-10 \*\*\*  
## Colour:THIregime 5 0.430 0.086 0.1948 0.96154   
## Residuals 24 10.602 0.442   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4417444   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.38885 1.681404 6 49 53.26313  
## BLK 52.41527 1.256068 6 51 53.86083  
## BRN 51.88518 1.397170 6 50 53.28055  
## WHT 52.14774 1.447961 6 50 53.83810  
## WT/BLK 52.20126 1.518111 6 50 54.09945  
## WT/BR 52.72210 1.229818 6 51 53.98744  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.186464   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 52.72210 a  
## BLK 52.41527 ab  
## WT/BLK 52.20126 ab  
## WHT 52.14774 ab  
## BRN 51.88518 ab  
## BL/BR 51.38885 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4417444   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.30902 0.5068228 18 52.21192 54.09945  
## MornLow 50.94444 0.8726041 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4572488   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.30902 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4417444 24 52.12673 1.275044 1.956685  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.77770 0.5301891 3 52.21192 53.26313 52.53498 52.85804  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 53.49721 0.3149019 3 53.31540 53.86083 53.31540 53.31540  
## BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## BRN:MornHigh 53.10370 0.3041602 3 52.75249 53.28055 53.01528 53.27806  
## BRN:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WHT:MornHigh 53.29547 0.5381314 3 52.76195 53.83810 53.02416 53.28636  
## WHT:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BLK:MornHigh 53.40252 0.6577164 3 52.79270 54.09945 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.77753 0.3255455 3 53.40252 53.98744 53.67258 53.94264  
## WT/BR:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 53.06058  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.58811  
## BLK:MornLow 51.50000  
## BRN:MornHigh 53.27931  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.56223  
## WHT:MornLow 51.50000  
## WT/BLK:MornHigh 53.70743  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.96504  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 53.77753 a  
## BLK:MornHigh 53.49721 ab  
## WT/BLK:MornHigh 53.40252 ab  
## WHT:MornHigh 53.29547 ab  
## BRN:MornHigh 53.10370 abc  
## BL/BR:MornHigh 52.77770 abcd  
## WT/BR:MornLow 51.66667 bcde  
## BLK:MornLow 51.33333 cde  
## WHT:MornLow 51.00000 de  
## WT/BLK:MornLow 51.00000 de  
## BRN:MornLow 50.66667 e  
## BL/BR:MornLow 50.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM83 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 3.924 0.785 0.8996 0.4974   
## THIregime 1 47.945 47.945 54.9540 1.183e-07 \*\*\*  
## Colour:THIregime 5 0.277 0.055 0.0636 0.9969   
## Residuals 24 20.939 0.872   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8724496   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.82696 1.337816 6 50 53.18473  
## BLK 52.37562 1.583693 6 50 54.31535  
## BRN 52.13316 1.434030 6 50 53.79789  
## WHT 51.33019 1.623186 6 49 53.17021  
## WT/BLK 52.10688 1.420996 6 50 53.83810  
## WT/BR 51.81804 1.680447 6 49 53.68876  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.667398   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.37562 a  
## BRN 52.13316 a  
## WT/BLK 52.10688 a  
## BL/BR 51.82696 a  
## WT/BR 51.81804 a  
## WHT 51.33019 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8724496   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.08584 0.5955355 18 52.00865 54.31535  
## MornLow 50.77778 1.0602750 18 49.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6425948   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.08584 a  
## MornLow 50.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8724496 24 51.93181 1.798609 2.749829  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.98726 0.3196521 3 52.61847 53.18473 52.88853 53.15859  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.41791 0.8232687 3 52.69766 54.31535 52.96920 53.24073  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.26632 0.5375390 3 52.72301 53.79789 53.00054 53.27806  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.66039 0.5278072 3 52.11626 53.17021 52.40548 52.69469  
## WHT:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.21376 0.6103350 3 52.61847 53.83810 52.90160 53.18473  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.96942 0.8656842 3 52.00865 53.68876 52.60976 53.21086  
## WT/BR:MornLow 50.66667 1.5275252 3 49.00000 52.00000 50.00000 51.00000  
## Q75  
## BL/BR:MornHigh 53.17166  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.77804  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.53798  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.93245  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.51141  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.44981  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.41791 a  
## BRN:MornHigh 53.26632 ab  
## WT/BLK:MornHigh 53.21376 ab  
## BL/BR:MornHigh 52.98726 ab  
## WT/BR:MornHigh 52.96942 ab  
## WHT:MornHigh 52.66039 abc  
## BLK:MornLow 51.33333 abc  
## BRN:MornLow 51.00000 abc  
## WT/BLK:MornLow 51.00000 abc  
## BL/BR:MornLow 50.66667 bc  
## WT/BR:MornLow 50.66667 bc  
## WHT:MornLow 50.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM84 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 5.714 1.143 1.8327 0.1444   
## THIregime 1 46.879 46.879 75.1843 7.371e-09 \*\*\*  
## Colour:THIregime 5 0.480 0.096 0.1540 0.9768   
## Residuals 24 14.964 0.624   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6235178   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.85624 1.368397 6 50 53.25006  
## BLK 52.67680 1.182895 6 51 53.88355  
## BRN 52.66437 1.171692 6 51 53.87295  
## WHT 52.42629 1.457815 6 50 53.89618  
## WT/BLK 52.28112 1.590326 6 50 54.18657  
## WT/BR 51.60865 1.779230 6 49 53.76343  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.409593   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.67680 a  
## BRN 52.66437 a  
## WHT 52.42629 a  
## WT/BLK 52.28112 a  
## BL/BR 51.85624 a  
## WT/BR 51.60865 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6235178   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.39338 0.5625664 18 52.09577 54.18657  
## MornLow 51.11111 0.9633818 18 49.00000 52.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5432397   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.39338 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6235178 24 52.25225 1.511191 2.324662  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.04582 0.3204041 3 52.67654 53.25006 52.94370 53.21086  
## BL/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## BLK:MornHigh 53.68694 0.3219433 3 53.31540 53.88355 53.58863 53.86186  
## BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## BRN:MornHigh 53.66208 0.3355070 3 53.27519 53.87295 53.55665 53.83810  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 53.51924 0.6293519 3 52.79270 53.89618 53.33077 53.86885  
## WHT:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WT/BLK:MornHigh 53.56223 0.6317210 3 52.92338 54.18657 53.25006 53.57675  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 52.88397 0.8375685 3 52.09577 53.76343 52.44423 52.79270  
## WT/BR:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## Q75  
## BL/BR:MornHigh 53.23046  
## BL/BR:MornLow 51.00000  
## BLK:MornHigh 53.87271  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.88251  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 53.88166  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.27806  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.68694 a  
## BRN:MornHigh 53.66208 a  
## WT/BLK:MornHigh 53.56223 ab  
## WHT:MornHigh 53.51924 ab  
## BL/BR:MornHigh 53.04582 abc  
## WT/BR:MornHigh 52.88397 abcd  
## BLK:MornLow 51.66667 abcde  
## BRN:MornLow 51.66667 abcde  
## WHT:MornLow 51.33333 bcde  
## WT/BLK:MornLow 51.00000 cde  
## BL/BR:MornLow 50.66667 de  
## WT/BR:MornLow 50.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM85 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 24.323 4.865 6.3771 0.0006698 \*\*\*  
## THIregime 1 43.748 43.748 57.3495 8.218e-08 \*\*\*  
## Colour:THIregime 5 1.530 0.306 0.4013 0.8430654   
## Residuals 24 18.308 0.763   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7628347   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 50.51255 1.803822 6 48 52.47908  
## BLK 53.20384 1.458722 6 51 54.99713  
## BRN 52.33033 1.371962 6 50 53.69871  
## WHT 52.62900 1.130596 6 51 53.77661  
## WT/BLK 52.12866 1.441670 6 50 53.83810  
## WT/BR 52.14318 1.448015 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.559137   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.20384 a  
## WHT 52.62900 a  
## BRN 52.33033 a  
## WT/BR 52.14318 a  
## WT/BLK 52.12866 a  
## BL/BR 50.51255 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7628347   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.26030 0.8123124 18 51.45691 54.99713  
## MornLow 51.05556 1.3920878 18 48.00000 54.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6008724   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.26030 a  
## MornLow 51.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7628347 24 52.15793 1.674538 2.571288  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.02511 0.5205688 3 51.45691 52.47908 51.79812 52.13933  
## BL/BR:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## BLK:MornHigh 54.07435 0.8443894 3 53.34029 54.99713 53.61295 53.88562  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 53.32733 0.6247676 3 52.60602 53.69871 53.14165 53.67727  
## BRN:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WHT:MornHigh 53.59134 0.2898439 3 53.25732 53.77661 53.49871 53.74009  
## WHT:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BLK:MornHigh 53.25732 0.6118874 3 52.61847 53.83810 52.96693 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.28636 0.5668165 3 52.70558 53.83810 53.01049 53.31540  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.30920  
## BL/BR:MornLow 49.50000  
## BLK:MornHigh 54.44137  
## BLK:MornLow 53.00000  
## BRN:MornHigh 53.68799  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.75835  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 53.57675  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.57675  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.07435 a  
## WHT:MornHigh 53.59134 ab  
## BRN:MornHigh 53.32733 abc  
## WT/BR:MornHigh 53.28636 abc  
## WT/BLK:MornHigh 53.25732 abc  
## BLK:MornLow 52.33333 abc  
## BL/BR:MornHigh 52.02511 abc  
## WHT:MornLow 51.66667 abc  
## BRN:MornLow 51.33333 bcd  
## WT/BLK:MornLow 51.00000 cd  
## WT/BR:MornLow 51.00000 cd  
## BL/BR:MornLow 49.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM86 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.280 3.656 3.5476 0.01527 \*   
## THIregime 1 41.537 41.537 40.3058 1.455e-06 \*\*\*  
## Colour:THIregime 5 1.175 0.235 0.2281 0.94660   
## Residuals 24 24.733 1.031   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.030535   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.27172 1.567493 6 49 53.05405  
## BLK 53.39400 1.364955 6 51 54.88350  
## BRN 52.32986 1.168236 6 51 53.68876  
## WHT 51.56825 1.414892 6 50 53.16166  
## WT/BLK 51.47590 1.684295 6 49 53.57675  
## WT/BR 52.07183 1.721990 6 49 53.73356  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.812177   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 53.39400 a  
## BRN 52.32986 ab  
## WT/BR 52.07183 ab  
## WHT 51.56825 b  
## WT/BLK 51.47590 b  
## BL/BR 51.27172 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.030535   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.09274 0.8132432 18 51.7473 54.8835  
## MornLow 50.94444 1.3920878 18 49.0000 54.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6983907   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.09274 a  
## MornLow 50.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.030535 24 52.01859 1.951519 2.988593  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.54345 0.5391943 3 51.97961 53.05405 52.28815 52.59669  
## BL/BR:MornLow 50.00000 1.0000000 3 49.00000 51.00000 49.50000 50.00000  
## BLK:MornHigh 54.12132 0.8587209 3 53.19095 54.88350 53.74024 54.28952  
## BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## BRN:MornHigh 53.32638 0.3153404 3 53.11436 53.68876 53.14519 53.17601  
## BRN:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WHT:MornHigh 52.80316 0.3105197 3 52.61847 53.16166 52.62391 52.62936  
## WHT:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 52.61847 0.9178310 3 51.74730 53.57675 52.13932 52.53135  
## WT/BLK:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BR:MornHigh 53.14366 0.9831990 3 52.00865 53.73356 52.84870 53.68876  
## WT/BR:MornLow 51.00000 1.7320508 3 49.00000 52.00000 50.50000 52.00000  
## Q75  
## BL/BR:MornHigh 52.82537  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 54.58651  
## BLK:MornLow 53.50000  
## BRN:MornHigh 53.43239  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.89551  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.05405  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.71116  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 54.12132 a  
## BRN:MornHigh 53.32638 ab  
## WT/BR:MornHigh 53.14366 abc  
## WHT:MornHigh 52.80316 abcd  
## BLK:MornLow 52.66667 abcd  
## WT/BLK:MornHigh 52.61847 abcd  
## BL/BR:MornHigh 52.54345 abcd  
## BRN:MornLow 51.33333 abcd  
## WT/BR:MornLow 51.00000 bcd  
## WHT:MornLow 50.33333 cd  
## WT/BLK:MornLow 50.33333 cd  
## BL/BR:MornLow 50.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM87 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.560 2.512 2.2455 0.08249 .   
## THIregime 1 47.521 47.521 42.4799 9.679e-07 \*\*\*  
## Colour:THIregime 5 0.873 0.175 0.1561 0.97606   
## Residuals 24 26.848 1.119   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.118668   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.08075 1.385714 6 50 53.70743  
## BLK 52.86715 1.192721 6 51 54.29262  
## BRN 51.85394 1.543175 6 50 53.76343  
## WHT 51.59967 1.771289 6 49 53.77276  
## WT/BLK 52.46230 1.310615 6 51 54.01233  
## WT/BR 51.02973 2.114025 6 48 53.61409  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.888077   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.86715 a  
## WT/BLK 52.46230 a  
## BL/BR 52.08075 a  
## BRN 51.85394 a  
## WHT 51.59967 a  
## WT/BR 51.02973 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.118668   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.13118 0.7585305 18 51.39883 54.29262  
## MornLow 50.83333 1.3394468 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7276418   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.13118 a  
## MornLow 50.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.118668 24 51.98226 2.034677 3.113766  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.16149 0.5444850 3 52.61847 53.70743 52.88853 53.15859  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.73429 0.5483001 3 53.19660 54.29262 53.45513 53.71365  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 53.04122 0.6255011 3 52.67208 53.76343 52.68012 52.68816  
## BRN:MornLow 50.66667 1.1547005 3 50.00000 52.00000 50.00000 50.00000  
## WHT:MornHigh 52.86601 0.8363586 3 52.12481 53.77276 52.41263 52.70046  
## WHT:MornLow 50.33333 1.5275252 3 49.00000 52.00000 49.50000 50.00000  
## WT/BLK:MornHigh 53.59127 0.3704593 3 53.31540 54.01233 53.38074 53.44608  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 52.39279 1.1249871 3 51.39883 53.61409 51.78215 52.16546  
## WT/BR:MornLow 49.66667 2.0816660 3 48.00000 52.00000 48.50000 49.00000  
## Q75  
## BL/BR:MornHigh 53.43301  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 54.00313  
## BLK:MornLow 52.50000  
## BRN:MornHigh 53.22579  
## BRN:MornLow 51.00000  
## WHT:MornHigh 53.23661  
## WHT:MornLow 51.00000  
## WT/BLK:MornHigh 53.72920  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 52.88977  
## WT/BR:MornLow 50.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.73429 a  
## WT/BLK:MornHigh 53.59127 a  
## BL/BR:MornHigh 53.16149 ab  
## BRN:MornHigh 53.04122 ab  
## WHT:MornHigh 52.86601 ab  
## WT/BR:MornHigh 52.39279 abc  
## BLK:MornLow 52.00000 abc  
## WT/BLK:MornLow 51.33333 abc  
## BL/BR:MornLow 51.00000 abc  
## BRN:MornLow 50.66667 abc  
## WHT:MornLow 50.33333 bc  
## WT/BR:MornLow 49.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM88 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.633 2.527 3.4582 0.01706 \*   
## THIregime 1 53.539 53.539 73.2827 9.324e-09 \*\*\*  
## Colour:THIregime 5 1.154 0.231 0.3158 0.89855   
## Residuals 24 17.534 0.731   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.730579   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.14899 1.450789 6 50 53.83810  
## BLK 52.37147 1.581303 6 50 54.31535  
## BRN 52.18313 1.482673 6 50 53.91852  
## WHT 50.60055 1.901549 6 48 52.79270  
## WT/BLK 51.88214 1.401105 6 50 53.31540  
## WT/BR 52.13074 1.436198 6 50 53.83810  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.525818   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.37147 a  
## BRN 52.18313 a  
## BL/BR 52.14899 a  
## WT/BR 52.13074 a  
## WT/BLK 51.88214 ab  
## WHT 50.60055 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.730579   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.10567 0.6561979 18 51.60211 54.31535  
## MornLow 50.66667 1.1881771 18 48.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5880316   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.10567 a  
## MornLow 50.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.730579 24 51.88617 1.647335 2.516338  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.29798 0.5490424 3 52.74043 53.83810 53.02792 53.31540  
## BL/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.40962 0.8274984 3 52.69314 54.31535 52.95675 53.22036  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.36627 0.5444166 3 52.83004 53.91852 53.09014 53.35025  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 52.20110 0.5953317 3 51.60211 52.79270 51.90531 52.20851  
## WHT:MornLow 49.00000 1.0000000 3 48.00000 50.00000 48.50000 49.00000  
## WT/BLK:MornHigh 53.09761 0.3772262 3 52.66203 53.31540 52.98871 53.31540  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.26147 0.5665432 3 52.70558 53.83810 52.97316 53.24073  
## WT/BR:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.57675  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.76786  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.63438  
## BRN:MornLow 51.50000  
## WHT:MornHigh 52.50060  
## WHT:MornLow 49.50000  
## WT/BLK:MornHigh 53.31540  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.53941  
## WT/BR:MornLow 51.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.40962 a  
## BRN:MornHigh 53.36627 a  
## BL/BR:MornHigh 53.29798 a  
## WT/BR:MornHigh 53.26147 a  
## WT/BLK:MornHigh 53.09761 ab  
## WHT:MornHigh 52.20110 ab  
## BLK:MornLow 51.33333 abc  
## BL/BR:MornLow 51.00000 abc  
## BRN:MornLow 51.00000 abc  
## WT/BR:MornLow 51.00000 abc  
## WT/BLK:MornLow 50.66667 bc  
## WHT:MornLow 49.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM89 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.544 1.509 4.3955 0.005547 \*\*   
## THIregime 1 43.381 43.381 126.3759 4.768e-11 \*\*\*  
## Colour:THIregime 5 0.543 0.109 0.3167 0.898039   
## Residuals 24 8.238 0.343   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.343267   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 52.11003 1.413785 6 50 53.77276  
## BLK 52.95438 1.045549 6 52 53.92900  
## BRN 52.67107 1.175991 6 51 53.87295  
## WHT 51.65074 1.503126 6 50 53.34807  
## WT/BLK 52.01977 1.359602 6 50 53.66387  
## WT/BR 51.84708 1.360035 6 50 53.22828  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.045888   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 52.95438 a  
## BRN 52.67107 ab  
## BL/BR 52.11003 ab  
## WT/BLK 52.01977 ab  
## WT/BR 51.84708 b  
## WHT 51.65074 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.343267   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.30658 0.5172436 18 52.27 53.929  
## MornLow 51.11111 0.8323524 18 50.00 52.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4030724   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.30658 a  
## MornLow 51.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.343267 24 52.20884 1.122204 1.72485  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 53.22006 0.54816688 3 52.67654 53.77276 52.94370 53.21086  
## BL/BR:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## BLK:MornHigh 53.90875 0.02056878 3 53.88788 53.92900 53.89863 53.90938  
## BLK:MornLow 52.00000 0.00000000 3 52.00000 52.00000 52.00000 52.00000  
## BRN:MornHigh 53.67548 0.31232672 3 53.31540 53.87295 53.57675 53.83810  
## BRN:MornLow 51.66667 0.57735027 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 52.96814 0.32934531 3 52.76366 53.34807 52.77818 52.79270  
## WHT:MornLow 50.33333 0.57735027 3 50.00000 51.00000 50.00000 50.00000  
## WT/BLK:MornHigh 53.03953 0.70818581 3 52.27000 53.66387 52.72736 53.18473  
## WT/BLK:MornLow 51.00000 1.00000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.02750 0.33279165 3 52.64336 53.22828 52.92711 53.21086  
## WT/BR:MornLow 50.66667 0.57735027 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 53.49181  
## BL/BR:MornLow 51.50000  
## BLK:MornHigh 53.91919  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.85552  
## BRN:MornLow 52.00000  
## WHT:MornHigh 53.07038  
## WHT:MornLow 50.50000  
## WT/BLK:MornHigh 53.42430  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 53.21957  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 53.90875 a  
## BRN:MornHigh 53.67548 ab  
## BL/BR:MornHigh 53.22006 abc  
## WT/BLK:MornHigh 53.03953 abc  
## WT/BR:MornHigh 53.02750 abc  
## WHT:MornHigh 52.96814 abc  
## BLK:MornLow 52.00000 bcd  
## BRN:MornLow 51.66667 cd  
## BL/BR:MornLow 51.00000 d  
## WT/BLK:MornLow 51.00000 d  
## WT/BR:MornLow 50.66667 d  
## WHT:MornLow 50.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM90 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.610 1.322 2.2751 0.07927 .   
## THIregime 1 47.364 47.364 81.5109 3.48e-09 \*\*\*  
## Colour:THIregime 5 0.537 0.107 0.1848 0.96558   
## Residuals 24 13.946 0.581   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.581079   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 51.58286 1.430859 6 50 53.19924  
## BLK 52.43510 1.630606 6 50 54.42898  
## BRN 52.12646 1.427916 6 50 53.80076  
## WHT 52.91332 1.234206 6 51 54.38984  
## WT/BLK 51.94748 1.471614 6 50 53.57675  
## WT/BR 51.87695 1.391164 6 50 53.31540  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.360776   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 52.91332 a  
## BLK 52.43510 a  
## BRN 52.12646 a  
## WT/BLK 51.94748 a  
## WT/BR 51.87695 a  
## BL/BR 51.58286 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.581079   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.29406 0.5473381 18 52.63589 54.42898  
## MornLow 51.00000 0.9701425 18 50.00000 53.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5244265   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.29406 a  
## MornLow 51.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.581079 24 52.14703 1.4618 2.244156  
##   
## $parameters  
## test name.t ntr StudentizedRange alpha  
## Tukey Colour:THIregime 12 5.09913 0.05  
##   
## $means  
## data1[[i]] std r Min Max Q25 Q50  
## BL/BR:MornHigh 52.83239 0.3179769 3 52.63589 53.19924 52.64896 52.66203  
## BL/BR:MornLow 50.33333 0.5773503 3 50.00000 51.00000 50.00000 50.00000  
## BLK:MornHigh 53.53687 0.8198555 3 52.81646 54.42898 53.09082 53.36518  
## BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## BRN:MornHigh 53.25292 0.5391026 3 52.72301 53.80076 52.97900 53.23498  
## BRN:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WHT:MornHigh 53.82664 0.5528982 3 53.28465 54.38984 53.54504 53.80543  
## WHT:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BLK:MornHigh 53.22828 0.3992187 3 52.79270 53.57675 53.05405 53.31540  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 53.08724 0.3326241 3 52.70558 53.31540 52.97316 53.24073  
## WT/BR:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## Q75  
## BL/BR:MornHigh 52.93063  
## BL/BR:MornLow 50.50000  
## BLK:MornHigh 53.89708  
## BLK:MornLow 52.00000  
## BRN:MornHigh 53.51787  
## BRN:MornLow 51.50000  
## WHT:MornHigh 54.09764  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 53.44608  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 53.27806  
## WT/BR:MornLow 51.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 53.82664 a  
## BLK:MornHigh 53.53687 ab  
## BRN:MornHigh 53.25292 ab  
## WT/BLK:MornHigh 53.22828 abc  
## WT/BR:MornHigh 53.08724 abc  
## BL/BR:MornHigh 52.83239 abcd  
## WHT:MornLow 52.00000 abcde  
## BLK:MornLow 51.33333 bcde  
## BRN:MornLow 51.00000 cde  
## WT/BLK:MornLow 50.66667 de  
## WT/BR:MornLow 50.66667 de  
## BL/BR:MornLow 50.33333 e  
##   
## attr(,"class")  
## [1] "group"