Analysis of Variance for Buck Morning

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Table of Contents

## Working with Buck 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 3.906 0.781 0.5101 0.7658   
## THIregime 1 51.100 51.100 33.3649 5.922e-06 \*\*\*  
## Colour:THIregime 5 0.314 0.063 0.0410 0.9989   
## Residuals 24 36.757 1.532   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.531545   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.95266 1.793080 6 52 56.97430  
## BLK 55.30092 2.347955 6 52 58.10682  
## BRN 55.43906 1.282650 6 54 56.93074  
## WHT 55.24986 1.985862 6 52 57.57167  
## WT/BLK 54.48592 1.338749 6 53 56.10313  
## WT/BR 55.38666 1.234907 6 54 56.88718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.209195   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.43906 a  
## WT/BR 55.38666 a  
## BLK 55.30092 a  
## WHT 55.24986 a  
## BL/BR 54.95266 a  
## WT/BLK 54.48592 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.531545   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.32725 0.768214 18 55.29004 58.10682  
## MornLow 53.94444 1.349171 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8513967   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.32725 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.531545 24 55.13585 2.244558 3.643345  
##   
## $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 56.23865 0.8620850 3 55.29004 56.97430 55.87082 56.45160  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.60184 1.3057689 3 55.76982 58.10682 55.84936 55.92890  
## BLK:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## BRN:MornHigh 56.54479 0.3342791 3 56.34706 56.93074 56.35181 56.35656  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 56.49972 1.0828969 3 55.40620 57.57167 55.96375 56.52129  
## WHT:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.63851 0.4023746 3 55.40620 56.10313 55.40620 55.40620  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.43998 0.3881664 3 56.19025 56.88718 56.21639 56.24252  
## WT/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.71295  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.01786  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.64365  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.04648  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.75467  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.56485  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.60184 a  
## BRN:MornHigh 56.54479 a  
## WHT:MornHigh 56.49972 a  
## WT/BR:MornHigh 56.43998 a  
## BL/BR:MornHigh 56.23865 a  
## WT/BLK:MornHigh 55.63851 a  
## BRN:MornLow 54.33333 a  
## WT/BR:MornLow 54.33333 a  
## BLK:MornLow 54.00000 a  
## WHT:MornLow 54.00000 a  
## BL/BR:MornLow 53.66667 a  
## WT/BLK:MornLow 53.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT2 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.026 6.405 2.5301 0.0563678 .   
## THIregime 1 49.538 49.538 19.5680 0.0001799 \*\*\*  
## Colour:THIregime 5 2.653 0.531 0.2096 0.9551552   
## Residuals 24 60.758 2.532   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.531573   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.03584 1.847405 6 52 57.17031  
## BLK 55.53583 1.902833 6 52 57.13936  
## BRN 55.08892 1.875174 6 52 57.25941  
## WHT 52.74097 2.402727 6 49 55.63021  
## WT/BLK 53.83316 1.561210 6 52 55.92890  
## WT/BR 54.80359 1.956840 6 52 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.840301   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.53583 a  
## BRN 55.08892 a  
## BL/BR 55.03584 a  
## WT/BR 54.80359 a  
## WT/BLK 53.83316 a  
## WHT 52.74097 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.531573   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.67943 1.174148 18 53.3154 57.25941  
## MornLow 53.33333 2.057983 18 49.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.094617   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.67943 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.531573 24 54.50638 2.919092 4.684148  
##   
## $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 56.07167 1.1460325 3 54.88350 57.17031 55.52236 56.16121  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 56.40498 1.2051071 3 55.01418 57.13936 56.03780 57.06142  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 56.17784 1.1106076 3 55.04031 57.25941 55.63706 56.23381  
## BRN:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WHT:MornHigh 54.48193 1.1575151 3 53.31540 55.63021 53.90779 54.50019  
## WHT:MornLow 51.00000 2.0000000 3 49.00000 53.00000 50.00000 51.00000  
## WT/BLK:MornHigh 54.99966 0.8233946 3 54.36080 55.92890 54.53503 54.70927  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.94052 1.1670165 3 54.97062 57.23565 55.29295 55.61528  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.66576  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 57.10039  
## BLK:MornLow 56.00000  
## BRN:MornHigh 56.74661  
## BRN:MornLow 55.00000  
## WHT:MornHigh 55.06520  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.42547  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.40498 a  
## BRN:MornHigh 56.17784 a  
## BL/BR:MornHigh 56.07167 a  
## WT/BR:MornHigh 55.94052 a  
## WT/BLK:MornHigh 54.99966 ab  
## BLK:MornLow 54.66667 ab  
## WHT:MornHigh 54.48193 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WT/BR:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.66667 ab  
## WHT:MornLow 51.00000 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 3.179 0.636 0.4904 0.7801   
## THIregime 1 49.086 49.086 37.8608 2.341e-06 \*\*\*  
## Colour:THIregime 5 0.141 0.028 0.0218 0.9998   
## Residuals 24 31.116 1.296   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.29649   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.56561 1.412519 6 53 56.16121  
## BLK 55.40632 1.603948 6 53 57.35181  
## BRN 55.11426 1.416157 6 53 56.78423  
## WHT 54.87375 1.718321 6 52 56.78762  
## WT/BLK 54.57304 1.627504 6 52 56.45160  
## WT/BR 54.80649 1.973277 6 52 57.28792  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.032608   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.40632 a  
## BRN 55.11426 a  
## WHT 54.87375 a  
## WT/BR 54.80649 a  
## WT/BLK 54.57304 a  
## BL/BR 54.56561 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.29649   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05760 0.7204814 18 54.8835 57.35181  
## MornLow 53.72222 1.2274103 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7833423   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05760 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.29649 24 54.88991 2.074397 3.352123  
##   
## $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 55.79788 0.3149659 3 55.60221 56.16121 55.61621 55.63021  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.47931 0.8027205 3 55.77209 57.35181 56.04307 56.31405  
## BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BRN:MornHigh 56.22853 0.5375826 3 55.71111 56.78423 55.95068 56.19025  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.08084 0.8228463 3 55.17752 56.78762 55.72744 56.27737  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.81274 0.8233946 3 54.88350 56.45160 55.49332 56.10313  
## WT/BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BR:MornHigh 55.94632 1.2262116 3 54.88350 57.28792 55.27553 55.66755  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.89571  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.83293  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.48724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.53249  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.27737  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.47774  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.47931 a  
## BRN:MornHigh 56.22853 a  
## WHT:MornHigh 56.08084 a  
## WT/BR:MornHigh 55.94632 a  
## WT/BLK:MornHigh 55.81274 a  
## BL/BR:MornHigh 55.79788 a  
## BLK:MornLow 54.33333 a  
## BRN:MornLow 54.00000 a  
## WHT:MornLow 53.66667 a  
## WT/BR:MornLow 53.66667 a  
## BL/BR:MornLow 53.33333 a  
## WT/BLK:MornLow 53.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT4 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)  
## Colour 5 119.41 23.883 1.0072 0.4358  
## THIregime 1 10.10 10.095 0.4257 0.5206  
## Colour:THIregime 5 91.28 18.256 0.7699 0.5811  
## Residuals 23 545.37 23.712   
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 23.71187   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.48842 1.788219 6 51.00000 55.53688  
## BLK 54.80767 1.662373 6 52.00000 56.66683  
## BRN 54.46414 1.307885 6 53.00000 55.97246  
## WHT 49.30720 12.042890 5 27.87733 56.10313  
## WT/BLK 54.11598 1.945931 6 51.00000 56.45160  
## WT/BR 55.04286 1.365909 6 53.00000 56.66068  
##   
## 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  
## WT/BR 55.04286 a  
## BLK 54.80767 a  
## BRN 54.46414 a  
## WT/BLK 54.11598 a  
## BL/BR 53.48842 a  
## WHT 49.30720 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 23.71187   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.05836 6.576155 18 27.87733 56.66683  
## MornLow 53.23529 1.251470 17 51.00000 55.00000  
##   
## 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 54.05836 a  
## MornLow 53.23529 a  
## $statistics  
## MSerror Df Mean CV  
## 23.71187 23 53.65858 9.074939  
##   
## $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 54.97684 0.5900342 3 54.36080 55.53688 54.69682 55.03284  
## BL/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BLK:MornHigh 55.94868 0.8183466 3 55.05773 56.66683 55.58960 56.12147  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 55.59495 0.3269294 3 55.40620 55.97246 55.40620 55.40620  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 46.51200 16.1404199 3 27.87733 56.10313 41.71644 55.55554  
## WHT:MornLow 53.50000 0.7071068 2 53.00000 54.00000 53.25000 53.50000  
## WT/BLK:MornHigh 55.23197 1.3154328 3 53.83810 56.45160 54.62215 55.40620  
## WT/BLK:MornLow 53.00000 2.0000000 3 51.00000 55.00000 52.00000 53.00000  
## WT/BR:MornHigh 56.08571 0.6337401 3 55.40620 56.66068 55.79823 56.19025  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.28486  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.39415  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.68933  
## BRN:MornLow 53.50000  
## WHT:MornHigh 55.82934  
## WHT:MornLow 53.75000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.42547  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.08571 a  
## BLK:MornHigh 55.94868 a  
## BRN:MornHigh 55.59495 a  
## WT/BLK:MornHigh 55.23197 a  
## BL/BR:MornHigh 54.97684 a  
## WT/BR:MornLow 54.00000 a  
## BLK:MornLow 53.66667 a  
## WHT:MornLow 53.50000 a  
## BRN:MornLow 53.33333 a  
## WT/BLK:MornLow 53.00000 a  
## BL/BR:MornLow 52.00000 a  
## WHT:MornHigh 46.51200 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT5 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.361 0.472 0.3368 0.8855   
## THIregime 1 50.201 50.201 35.8156 3.539e-06 \*\*\*  
## Colour:THIregime 5 0.615 0.123 0.0878 0.9935   
## Residuals 24 33.640 1.402   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.40166   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.87574 1.565898 6 53 56.82496  
## BLK 54.37741 1.669714 6 52 56.28654  
## BRN 54.86919 1.381182 6 53 56.26153  
## WHT 54.87961 1.723883 6 52 56.82496  
## WT/BLK 54.26813 1.985600 6 51 56.62583  
## WT/BR 54.81521 1.682031 6 52 56.71295  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.113443   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 54.87961 a  
## BL/BR 54.87574 a  
## BRN 54.86919 a  
## WT/BR 54.81521 a  
## BLK 54.37741 a  
## WT/BLK 54.26813 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.40166   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.86176 0.8442016 18 53.3154 56.82496  
## MornLow 53.50000 1.2004901 18 51.0000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8144949   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.86176 a  
## MornLow 53.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.40166 24 54.68088 2.165139 3.485433  
##   
## $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 56.08481 0.6412421 3 55.69659 56.82496 55.71474 55.73289  
## BL/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BLK:MornHigh 55.75482 0.5273410 3 55.23197 56.28654 55.48896 55.74596  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 56.07172 0.3124422 3 55.71111 56.26153 55.97681 56.24252  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.09255 0.8260739 3 55.19712 56.82496 55.72635 56.25559  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.20293 1.7034223 3 53.31540 56.62583 54.49148 55.66755  
## WT/BLK:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## WT/BR:MornHigh 55.96375 0.8844809 3 54.98804 56.71295 55.58915 56.19025  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.27892  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.01625  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.25202  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.54027  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.14669  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.45160  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.09255 a  
## BL/BR:MornHigh 56.08481 a  
## BRN:MornHigh 56.07172 a  
## WT/BR:MornHigh 55.96375 a  
## BLK:MornHigh 55.75482 a  
## WT/BLK:MornHigh 55.20293 a  
## BL/BR:MornLow 53.66667 a  
## BRN:MornLow 53.66667 a  
## WHT:MornLow 53.66667 a  
## WT/BR:MornLow 53.66667 a  
## WT/BLK:MornLow 53.33333 a  
## BLK:MornLow 53.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT6 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.664 5.733 5.1859 0.002292 \*\*   
## THIregime 1 43.628 43.628 39.4661 1.709e-06 \*\*\*  
## Colour:THIregime 5 2.094 0.419 0.3789 0.858176   
## Residuals 24 26.531 1.105   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.105468   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.39085 1.228120 6 53 55.77956  
## BLK 53.46544 1.762184 6 51 55.49332  
## BRN 54.15453 1.777563 6 52 56.40408  
## WHT 55.99514 1.328597 6 54 57.62768  
## WT/BLK 53.22396 1.899439 6 50 55.40620  
## WT/BR 54.04193 1.142139 6 53 55.14485  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.876905   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.99514 a  
## BL/BR 54.39085 ab  
## BRN 54.15453 ab  
## WT/BR 54.04193 b  
## BLK 53.46544 b  
## WT/BLK 53.22396 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.105468   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.31284 0.955238 18 53.05405 57.62768  
## MornLow 53.11111 1.567647 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.723336   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.31284 a  
## MornLow 53.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.105468 24 54.21198 1.939447 3.095341  
##   
## $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 55.44838 0.28690355 3 55.27553 55.77956 55.28278 55.29004  
## BL/BR:MornLow 53.33333 0.57735027 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 54.93088 0.56629701 3 54.36080 55.49332 54.64966 54.93852  
## BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 55.30905 0.94896390 3 54.72669 56.40408 54.76154 54.79638  
## BRN:MornLow 53.00000 1.73205081 3 52.00000 55.00000 52.00000 52.00000  
## WHT:MornHigh 56.65695 0.87500291 3 55.92890 57.62768 56.17158 56.41426  
## WHT:MornLow 55.33333 1.52752523 3 54.00000 57.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.44792 1.23509191 3 53.05405 55.40620 53.96878 54.88350  
## WT/BLK:MornLow 52.00000 1.73205081 3 50.00000 53.00000 51.50000 53.00000  
## WT/BR:MornHigh 55.08387 0.06577164 3 55.01418 55.14485 55.05338 55.09258  
## WT/BR:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.53480  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.21592  
## BLK:MornLow 52.50000  
## BRN:MornHigh 55.60023  
## BRN:MornLow 53.50000  
## WHT:MornHigh 57.02097  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.14485  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.11872  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.65695 a  
## BL/BR:MornHigh 55.44838 ab  
## WHT:MornLow 55.33333 ab  
## BRN:MornHigh 55.30905 ab  
## WT/BR:MornHigh 55.08387 abc  
## BLK:MornHigh 54.93088 abc  
## WT/BLK:MornHigh 54.44792 abc  
## BL/BR:MornLow 53.33333 bc  
## BRN:MornLow 53.00000 bc  
## WT/BR:MornLow 53.00000 bc  
## BLK:MornLow 52.00000 c  
## WT/BLK:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT7 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 27.690 5.538 4.8873 0.00318 \*\*   
## THIregime 1 56.734 56.734 50.0684 2.58e-07 \*\*\*  
## Colour:THIregime 5 2.109 0.422 0.3723 0.86261   
## Residuals 24 27.195 1.133   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.13313   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.03113 2.130061 6 52 57.72101  
## BLK 53.89814 1.904440 6 51 55.87082  
## BRN 54.68708 1.540196 6 53 56.40408  
## WHT 55.43841 1.279886 6 54 56.90461  
## WT/BLK 54.00739 1.748922 6 52 56.45160  
## WT/BR 56.47003 1.405183 6 54 57.88903  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.900243   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.47003 a  
## WHT 55.43841 ab  
## BL/BR 55.03113 ab  
## BRN 54.68708 ab  
## WT/BLK 54.00739 b  
## BLK 53.89814 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.13313   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.17740 0.9391492 18 54.70927 57.88903  
## MornLow 53.66667 1.5718105 18 51.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7323302   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.17740 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.13313 24 54.92203 1.938176 3.133829  
##   
## $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 56.39560 1.1934296 3 55.40620 57.72101 55.73289 56.05958  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 55.46295 0.6229045 3 54.74595 55.87082 55.25902 55.77209  
## BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## BRN:MornHigh 56.04083 0.3150659 3 55.84178 56.40408 55.85921 55.87663  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.54349 0.3136079 3 56.33959 56.90461 56.36293 56.38626  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.34812 0.9596024 3 54.70927 56.45160 54.79638 54.88350  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 57.27340 0.8165919 3 56.34706 57.88903 56.96559 57.58412  
## WT/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.89029  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.82146  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.14036  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.64543  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.73657  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.27340 a  
## WHT:MornHigh 56.54349 ab  
## BL/BR:MornHigh 56.39560 abc  
## BRN:MornHigh 56.04083 abc  
## WT/BR:MornLow 55.66667 abcd  
## BLK:MornHigh 55.46295 abcde  
## WT/BLK:MornHigh 55.34812 abcde  
## WHT:MornLow 54.33333 abcde  
## BL/BR:MornLow 53.66667 bcde  
## BRN:MornLow 53.33333 cde  
## WT/BLK:MornLow 52.66667 de  
## BLK:MornLow 52.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT8 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.551 2.310 3.7099 0.01251 \*   
## THIregime 1 47.708 47.708 76.6113 6.197e-09 \*\*\*  
## Colour:THIregime 5 0.894 0.179 0.2871 0.91552   
## Residuals 24 14.945 0.623   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6227248   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.76425 1.270373 6 53 56.05958  
## BLK 54.37789 1.673732 6 52 56.30641  
## BRN 54.78960 1.298552 6 53 56.10313  
## WHT 55.86327 1.574954 6 53 57.33366  
## WT/BLK 54.20310 1.317930 6 53 55.40620  
## WT/BR 54.24230 1.546124 6 52 56.05958  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.408696   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.86327 a  
## BRN 54.78960 ab  
## BL/BR 54.76425 ab  
## BLK 54.37789 b  
## WT/BR 54.24230 b  
## WT/BLK 54.20310 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6227248   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.85792 0.6392125 18 54.8835 57.33366  
## MornLow 53.55556 1.0966378 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5428941   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.85792 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6227248 24 54.70674 1.442472 2.323183  
##   
## $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 55.86183 0.2953275 3 55.52236 56.05958 55.76296 56.00357  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 55.75579 0.5546866 3 55.19712 56.30641 55.48048 55.76384  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 55.91253 0.3151615 3 55.54875 56.10313 55.81723 56.08571  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.72654 0.9826026 3 55.59288 57.33366 56.42298 57.25307  
## WHT:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WT/BLK:MornHigh 55.40620 0.0000000 3 55.40620 55.40620 55.40620 55.40620  
## WT/BLK:MornLow 53.00000 0.0000000 3 53.00000 53.00000 53.00000 53.00000  
## WT/BR:MornHigh 55.48461 0.5884729 3 54.88350 56.05958 55.19712 55.51074  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.03157  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.03512  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.09442  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.29336  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.40620  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.78516  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.72654 a  
## BRN:MornHigh 55.91253 ab  
## BL/BR:MornHigh 55.86183 ab  
## BLK:MornHigh 55.75579 ab  
## WT/BR:MornHigh 55.48461 ab  
## WT/BLK:MornHigh 55.40620 ab  
## WHT:MornLow 55.00000 abc  
## BL/BR:MornLow 53.66667 bc  
## BRN:MornLow 53.66667 bc  
## BLK:MornLow 53.00000 c  
## WT/BLK:MornLow 53.00000 c  
## WT/BR:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT9 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 45.625 9.125 8.9514 6.624e-05 \*\*\*  
## THIregime 1 46.674 46.674 45.7861 5.343e-07 \*\*\*  
## Colour:THIregime 5 3.164 0.633 0.6208 0.6853   
## Residuals 24 24.465 1.019   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.019389   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.36809 1.209150 6 54 56.77829  
## BLK 53.40917 2.207040 6 50 55.87388  
## BRN 55.12958 1.760387 6 53 57.36633  
## WHT 56.26966 1.493468 6 54 58.05704  
## WT/BLK 53.18040 1.293063 6 52 54.36080  
## WT/BR 55.47492 1.235379 6 54 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.80235   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.26966 a  
## WT/BR 55.47492 a  
## BL/BR 55.36809 a  
## BRN 55.12958 ab  
## BLK 53.40917 bc  
## WT/BLK 53.18040 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.019389   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.94394 1.118143 18 54.20399 58.05704  
## MornLow 53.66667 1.748949 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6946035   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.94394 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.019389 24 54.8053 1.842245 2.972387  
##   
## $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 56.40286 0.3310342 3 56.15291 56.77829 56.21514 56.27737  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 55.15168 0.8574758 3 54.20399 55.87388 54.79058 55.37716  
## BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## BRN:MornHigh 56.25915 0.9589465 3 55.69131 57.36633 55.70556 55.71982  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 57.20599 0.7827244 3 56.51694 58.05704 56.78047 57.04399  
## WHT:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## 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 56.28317 0.7226659 3 55.66755 57.07884 55.88534 56.10313  
## WT/BR:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.52783  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.62552  
## BLK:MornLow 52.50000  
## BRN:MornHigh 56.54307  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.55051  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 56.59099  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.20599 a  
## BL/BR:MornHigh 56.40286 ab  
## WT/BR:MornHigh 56.28317 ab  
## BRN:MornHigh 56.25915 ab  
## WHT:MornLow 55.33333 ab  
## BLK:MornHigh 55.15168 ab  
## WT/BR:MornLow 54.66667 abc  
## WT/BLK:MornHigh 54.36080 abcd  
## BL/BR:MornLow 54.33333 abcd  
## BRN:MornLow 54.00000 bcd  
## WT/BLK:MornLow 52.00000 cd  
## BLK:MornLow 51.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT10 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 48.403 9.681 5.9389 0.001039 \*\*   
## THIregime 1 38.204 38.204 23.4373 6.219e-05 \*\*\*  
## Colour:THIregime 5 2.420 0.484 0.2969 0.909823   
## Residuals 24 39.121 1.630   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.63004   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.65580 1.443962 6 53 56.97430  
## BLK 53.84738 1.984677 6 51 56.21639  
## BRN 54.71647 1.598541 6 52 56.53872  
## WHT 55.86908 1.731987 6 53 57.81062  
## WT/BLK 52.67979 1.670748 6 50 54.62215  
## WT/BR 53.41240 1.256351 6 52 54.88350  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.279126   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.86908 a  
## BL/BR 55.65580 ab  
## BRN 54.71647 abc  
## BLK 53.84738 abc  
## WT/BR 53.41240 bc  
## WT/BLK 52.67979 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.63004   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.39364 1.327187 18 52.27 57.81062  
## MornLow 53.33333 1.878673 18 50.00 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8783472   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.39364 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.63004 24 54.36349 2.348507 3.758674  
##   
## $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 56.31159 0.9603973 3 55.21019 56.97430 55.98024 56.75029  
## BL/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## BLK:MornHigh 55.36142 0.7981525 3 54.63591 56.21639 54.93394 55.23197  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 55.76628 0.8652809 3 54.83123 56.53872 55.38007 55.92890  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.73815 1.1106618 3 55.59288 57.81062 56.20192 56.81096  
## WHT:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## WT/BLK:MornHigh 53.69291 1.2513706 3 52.27000 54.62215 53.22828 54.18657  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 54.49148 0.3457336 3 54.23013 54.88350 54.29546 54.36080  
## WT/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.86229  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 55.72418  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.23381  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.31079  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 54.40436  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 54.62215  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.73815 a  
## BL/BR:MornHigh 56.31159 a  
## BRN:MornHigh 55.76628 ab  
## BLK:MornHigh 55.36142 abc  
## BL/BR:MornLow 55.00000 abc  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornHigh 54.49148 abc  
## WT/BLK:MornHigh 53.69291 abc  
## BRN:MornLow 53.66667 abc  
## BLK:MornLow 52.33333 bc  
## WT/BR:MornLow 52.33333 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT11 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.672 3.934 3.5474 0.01528 \*   
## THIregime 1 46.417 46.417 41.8525 1.087e-06 \*\*\*  
## Colour:THIregime 5 1.207 0.241 0.2176 0.95151   
## Residuals 24 26.618 1.109   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.109073   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.83996 1.352542 6 53 56.21929  
## BLK 54.18843 1.718001 6 52 55.92890  
## BRN 55.67687 1.178794 6 54 56.87926  
## WHT 55.71434 2.024170 6 52 57.52967  
## WT/BLK 53.74604 1.480017 6 52 55.75467  
## WT/BR 55.31406 1.546043 6 53 57.28792  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.879963   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.71434 a  
## BRN 55.67687 a  
## WT/BR 55.31406 ab  
## BL/BR 54.83996 ab  
## BLK 54.18843 ab  
## WT/BLK 53.74604 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.109073   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.04879 0.9198847 18 54.3608 57.52967  
## MornLow 53.77778 1.3956047 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7245147   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.04879 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.109073 24 54.91328 1.917797 3.100385  
##   
## $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 56.01325 0.3320372 3 55.63021 56.21929 55.91023 56.19025  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 55.71019 0.3133756 3 55.35118 55.92890 55.60084 55.85050  
## BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BRN:MornHigh 56.68708 0.2810782 3 56.36448 56.87926 56.59099 56.81749  
## BRN:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WHT:MornHigh 56.76200 1.2716108 3 55.29419 57.52967 56.37817 57.46215  
## WHT:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WT/BLK:MornHigh 54.82542 0.8047493 3 54.36080 55.75467 54.36080 54.36080  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.29479 0.8699462 3 55.66755 57.28792 55.79823 55.92890  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.20477  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 55.88970  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.84838  
## BRN:MornLow 55.00000  
## WHT:MornHigh 57.49591  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.05773  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.60841  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.76200 a  
## BRN:MornHigh 56.68708 a  
## WT/BR:MornHigh 56.29479 a  
## BL/BR:MornHigh 56.01325 a  
## BLK:MornHigh 55.71019 ab  
## WT/BLK:MornHigh 54.82542 ab  
## BRN:MornLow 54.66667 ab  
## WHT:MornLow 54.66667 ab  
## WT/BR:MornLow 54.33333 ab  
## BL/BR:MornLow 53.66667 ab  
## BLK:MornLow 52.66667 b  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT12 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.302 2.260 2.1679 0.0916 .   
## THIregime 1 49.133 49.133 47.1228 4.236e-07 \*\*\*  
## Colour:THIregime 5 0.834 0.167 0.1600 0.9748   
## Residuals 24 25.024 1.043   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.04266   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.61099 1.115776 6 54 56.80007  
## BLK 54.38661 1.677530 6 52 56.29479  
## BRN 55.15333 1.776720 6 53 57.40196  
## WHT 54.65533 1.819510 6 52 56.89963  
## WT/BLK 53.83316 1.727163 6 51 55.75467  
## WT/BR 54.70341 1.220103 6 53 56.01602  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.822806   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.61099 a  
## BRN 55.15333 a  
## WT/BR 54.70341 a  
## WHT 54.65533 a  
## BLK 54.38661 a  
## WT/BLK 53.83316 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.04266   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.89205 0.7939162 18 53.8381 57.40196  
## MornLow 53.55556 1.2472191 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7024871   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.89205 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.04266 24 54.7238 1.865929 3.006123  
##   
## $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 56.55531 0.3222171 3 56.19025 56.80007 56.43293 56.67561  
## BL/BR:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BLK:MornHigh 55.77321 0.5169560 3 55.26101 56.29479 55.51242 55.76384  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 56.30667 0.9493623 3 55.71982 57.40196 55.75902 55.79823  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 55.97733 0.8367547 3 55.26681 56.89963 55.51618 55.76556  
## WHT:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 54.99966 1.0209142 3 53.83810 55.75467 54.62215 55.40620  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.74015 0.4047254 3 55.27553 56.01602 55.60221 55.92890  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.73784  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.02931  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.60009  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.33259  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.58043  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.97246  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.55531 a  
## BRN:MornHigh 56.30667 ab  
## WHT:MornHigh 55.97733 abc  
## BLK:MornHigh 55.77321 abc  
## WT/BR:MornHigh 55.74015 abc  
## WT/BLK:MornHigh 54.99966 abcd  
## BL/BR:MornLow 54.66667 abcd  
## BRN:MornLow 54.00000 abcd  
## WT/BR:MornLow 53.66667 abcd  
## WHT:MornLow 53.33333 bcd  
## BLK:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT13 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 29.743 5.949 7.1501 0.0003195 \*\*\*  
## THIregime 1 40.244 40.244 48.3730 3.423e-07 \*\*\*  
## Colour:THIregime 5 0.980 0.196 0.2356 0.9429421   
## Residuals 24 19.967 0.832   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8319502   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.31459 1.614401 6 52 56.22759  
## BLK 55.12475 1.426627 6 53 56.79136  
## BRN 55.07453 1.382129 6 53 56.71295  
## WHT 55.63396 1.138023 6 54 56.81096  
## WT/BLK 53.09328 1.445449 6 51 54.88350  
## WT/BR 55.76936 1.517202 6 53 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.628238   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.76936 a  
## WHT 55.63396 a  
## BLK 55.12475 a  
## BRN 55.07453 a  
## BL/BR 54.31459 ab  
## WT/BLK 53.09328 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8319502   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.89238 1.016869 18 53.3154 57.23565  
## MornLow 53.77778 1.395605 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6275029   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.89238 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8319502 24 54.83508 1.663375 2.685246  
##   
## $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 55.62918 0.5755867 3 55.07951 56.22759 55.32997 55.58043  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.24950 0.5412706 3 55.70882 56.79136 55.97857 56.24833  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.14907 0.5584212 3 55.59627 56.71295 55.86713 56.13798  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.60125 0.3121503 3 56.24252 56.81096 56.49640 56.75029  
## WHT:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.18657 0.7984374 3 53.31540 54.88350 53.83810 54.36080  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 56.53872 0.9894551 3 55.40620 57.23565 56.19025 56.97430  
## WT/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 55.90401  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.51984  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.42547  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.78062  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.62215  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 57.10498  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.60125 a  
## WT/BR:MornHigh 56.53872 a  
## BLK:MornHigh 56.24950 a  
## BRN:MornHigh 56.14907 a  
## BL/BR:MornHigh 55.62918 ab  
## WT/BR:MornLow 55.00000 ab  
## WHT:MornLow 54.66667 abc  
## WT/BLK:MornHigh 54.18657 abc  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## BL/BR:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT14 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.615 6.123 5.7205 0.001301 \*\*   
## THIregime 1 36.934 36.934 34.5061 4.646e-06 \*\*\*  
## Colour:THIregime 5 0.285 0.057 0.0532 0.997988   
## Residuals 24 25.689 1.070   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.070362   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.17977 1.481815 6 52 55.92890  
## BLK 55.67801 1.560148 6 53 57.41860  
## BRN 54.73311 1.242842 6 53 56.01602  
## WHT 55.59860 1.316548 6 54 57.25307  
## WT/BLK 52.96261 1.772199 6 50 54.88350  
## WT/BR 54.92525 1.238157 6 53 56.32093  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.846862   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.67801 a  
## WHT 55.59860 a  
## WT/BR 54.92525 a  
## BRN 54.73311 ab  
## BL/BR 54.17977 ab  
## WT/BLK 52.96261 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.070362   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.69245 1.152707 18 52.27 57.4186  
## MornLow 53.66667 1.414214 18 50.00 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.711758   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.69245 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.070362 24 54.67956 1.892084 3.045795  
##   
## $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 55.35953 0.5602690 3 54.80883 55.92890 55.07485 55.34086  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.68936 0.8266494 3 55.79135 57.41860 56.32475 56.85814  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 55.79954 0.3412216 3 55.40620 56.01602 55.69131 55.97642  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.53052 0.6280439 3 56.11558 57.25307 56.16925 56.22292  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 53.92522 1.4394036 3 52.27000 54.88350 53.44608 54.62215  
## WT/BLK:MornLow 52.00000 1.7320508 3 50.00000 53.00000 51.50000 53.00000  
## WT/BR:MornHigh 55.85050 0.5141360 3 55.30166 56.32093 55.61528 55.92890  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.63488  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.13837  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.99622  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.73800  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.75283  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.12491  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.68936 a  
## WHT:MornHigh 56.53052 a  
## WT/BR:MornHigh 55.85050 ab  
## BRN:MornHigh 55.79954 ab  
## BL/BR:MornHigh 55.35953 ab  
## BLK:MornLow 54.66667 abc  
## WHT:MornLow 54.66667 abc  
## WT/BR:MornLow 54.00000 abc  
## WT/BLK:MornHigh 53.92522 abc  
## BRN:MornLow 53.66667 abc  
## BL/BR:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.00000 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 16.134 3.227 2.3354 0.0731 .   
## THIregime 1 43.329 43.329 31.3595 9.182e-06 \*\*\*  
## Colour:THIregime 5 1.063 0.213 0.1538 0.9768   
## Residuals 24 33.160 1.382   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.381685   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.07041 1.3841126 6 53 56.74199  
## BLK 54.95413 1.7869913 6 52 56.97430  
## BRN 55.10568 1.7428895 6 53 57.32277  
## WHT 56.46443 0.9678159 6 55 57.49700  
## WT/BLK 54.68163 1.6675435 6 52 56.80007  
## WT/BR 54.30619 1.9095175 6 52 56.76522  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.09833   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.46443 a  
## BRN 55.10568 ab  
## BL/BR 55.07041 ab  
## BLK 54.95413 ab  
## WT/BLK 54.68163 ab  
## WT/BR 54.30619 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.381685   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.19416 0.9189794 18 54.3608 57.497  
## MornLow 54.00000 1.4552138 18 52.0000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8086705   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.19416 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.381685 24 55.09708 2.133418 3.460509  
##   
## $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 56.14081 0.5933829 3 55.55554 56.74199 55.84023 56.12491  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.24160 0.8229756 3 55.35118 56.97430 55.87525 56.39933  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 56.21137 0.9625718 3 55.64379 57.32277 55.65567 55.66755  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 57.26220 0.3147079 3 56.90461 57.49700 57.14480 57.38499  
## WHT:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WT/BLK:MornHigh 55.69659 1.2361156 3 54.36080 56.80007 55.14485 55.92890  
## WT/BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BR:MornHigh 55.61238 0.9986296 3 55.01418 56.76522 55.03595 55.05773  
## WT/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.43345  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.68682  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.49516  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.44100  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 55.91148  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.26220 a  
## BLK:MornHigh 56.24160 ab  
## BRN:MornHigh 56.21137 ab  
## BL/BR:MornHigh 56.14081 ab  
## WT/BLK:MornHigh 55.69659 ab  
## WHT:MornLow 55.66667 ab  
## WT/BR:MornHigh 55.61238 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## BLK:MornLow 53.66667 b  
## WT/BLK:MornLow 53.66667 b  
## WT/BR:MornLow 53.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT16 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 44.970 8.994 9.8876 3.142e-05 \*\*\*  
## THIregime 1 45.769 45.769 50.3161 2.477e-07 \*\*\*  
## Colour:THIregime 5 3.299 0.660 0.7254 0.6111   
## Residuals 24 21.831 0.910   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9096256   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.86606 1.9977182 6 52 57.34766  
## BLK 53.95327 1.9590526 6 51 55.98698  
## BRN 55.11426 1.4161567 6 53 56.78423  
## WHT 57.25996 0.7725145 6 56 58.11771  
## WT/BLK 53.87672 1.3993586 6 52 55.40620  
## WT/BR 55.02834 1.3381180 6 53 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.702553   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 57.25996 a  
## BRN 55.11426 b  
## WT/BR 55.02834 b  
## BL/BR 54.86606 b  
## BLK 53.95327 b  
## WT/BLK 53.87672 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9096256   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.14398 1.038165 18 54.62215 58.11771  
## MornLow 53.88889 1.745208 18 51.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6561428   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.14398 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9096256 24 55.01643 1.73356 2.807804  
##   
## $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 56.06545 1.1524901 3 55.11581 57.34766 55.42435 55.73289  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 55.57320 0.6235675 3 54.85599 55.98698 55.36631 55.87663  
## BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## BRN:MornHigh 56.22853 0.5375826 3 55.71111 56.78423 55.95068 56.19025  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 57.85324 0.3203705 3 57.49700 58.11771 57.72101 57.94503  
## WHT:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WT/BLK:MornHigh 55.08677 0.4116973 3 54.62215 55.40620 54.92706 55.23197  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.05667 0.5513414 3 55.58043 56.66068 55.75467 55.92890  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.54027  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.93180  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.48724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 58.03137  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.29479  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.85324 a  
## WHT:MornLow 56.66667 ab  
## BRN:MornHigh 56.22853 abc  
## BL/BR:MornHigh 56.06545 abc  
## WT/BR:MornHigh 56.05667 abc  
## BLK:MornHigh 55.57320 abc  
## WT/BLK:MornHigh 55.08677 abcd  
## BRN:MornLow 54.00000 bcd  
## WT/BR:MornLow 54.00000 bcd  
## BL/BR:MornLow 53.66667 cd  
## WT/BLK:MornLow 52.66667 d  
## BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT17 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.956 2.791 3.5639 0.01497 \*   
## THIregime 1 45.950 45.950 58.6693 6.754e-08 \*\*\*  
## Colour:THIregime 5 0.756 0.151 0.1931 0.96223   
## Residuals 24 18.797 0.783   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.783199   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.54291 1.388775 6 52 55.11581  
## BLK 54.55770 1.403655 6 53 56.13798  
## BRN 55.15158 1.428187 6 53 56.87926  
## WHT 54.78638 1.643552 6 52 56.60094  
## WT/BLK 53.83316 1.561210 6 52 55.92890  
## WT/BR 53.57357 1.422405 6 52 55.19712  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.579811   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.15158 a  
## WHT 54.78638 ab  
## BLK 54.55770 ab  
## WT/BLK 53.83316 ab  
## WT/BR 53.57357 ab  
## BL/BR 53.54291 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.783199   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.37065 0.7565869 18 54.3608 56.87926  
## MornLow 53.11111 1.1826634 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6088399   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.37065 a  
## MornLow 53.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.783199 24 54.24088 1.631584 2.605383  
##   
## $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 54.75248 0.3149659 3 54.55681 55.11581 54.57081 54.58481  
## BL/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 55.78208 0.3082689 3 55.59877 56.13798 55.60412 55.60947  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 55.96982 0.8702873 3 55.14485 56.87926 55.51510 55.88534  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 55.90608 0.8115291 3 55.01418 56.60094 55.55865 56.10313  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.99966 0.8233946 3 54.36080 55.92890 54.53503 54.70927  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 54.81381 0.3319591 3 54.62215 55.19712 54.62215 54.62215  
## WT/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 54.85031  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.87373  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.38230  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.35204  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 54.90964  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.96982 a  
## WHT:MornHigh 55.90608 ab  
## BLK:MornHigh 55.78208 ab  
## WT/BLK:MornHigh 54.99966 abc  
## WT/BR:MornHigh 54.81381 abcd  
## BL/BR:MornHigh 54.75248 abcd  
## BRN:MornLow 54.33333 abcd  
## WHT:MornLow 53.66667 abcd  
## BLK:MornLow 53.33333 bcd  
## WT/BLK:MornLow 52.66667 cd  
## BL/BR:MornLow 52.33333 d  
## WT/BR:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT18 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.695 1.539 1.8564 0.1398   
## THIregime 1 58.529 58.529 70.5997 1.31e-08 \*\*\*  
## Colour:THIregime 5 0.260 0.052 0.0628 0.9970   
## Residuals 24 19.897 0.829   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8290229   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.59862 1.446549 6 53 56.21929  
## BLK 54.08228 1.896566 6 51 56.20401  
## BRN 54.86127 1.373213 6 53 56.24252  
## WHT 54.86136 1.550034 6 53 56.77829  
## WT/BLK 55.55218 1.408488 6 54 57.23565  
## WT/BR 54.36136 1.943068 6 52 56.80007  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.625371   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 55.55218 a  
## WHT 54.86136 a  
## BRN 54.86127 a  
## BL/BR 54.59862 a  
## WT/BR 54.36136 a  
## BLK 54.08228 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8290229   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.99458 0.6601001 18 54.62215 57.23565  
## MornLow 53.44444 1.0966378 18 51.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6263979   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.99458 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8290229 24 54.71951 1.663953 2.680518  
##   
## $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 55.86391 0.3083343 3 55.66755 56.21929 55.68622 55.70489  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.49790 0.8044575 3 54.62215 56.20401 55.14485 55.66755  
## BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## BRN:MornHigh 56.05588 0.3157570 3 55.69131 56.24252 55.96256 56.23381  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.05605 0.6255563 3 55.68497 56.77829 55.69493 55.70489  
## WHT:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.77103 0.4116973 3 56.45160 57.23565 56.53872 56.62583  
## WT/BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BR:MornHigh 55.72272 0.9374795 3 55.09258 56.80007 55.18405 55.27553  
## WT/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 55.96209  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.93578  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.23816  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.24159  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 56.93074  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.03780  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 56.77103 a  
## WHT:MornHigh 56.05605 ab  
## BRN:MornHigh 56.05588 ab  
## BL/BR:MornHigh 55.86391 abc  
## WT/BR:MornHigh 55.72272 abc  
## BLK:MornHigh 55.49790 abcd  
## WT/BLK:MornLow 54.33333 abcde  
## BRN:MornLow 53.66667 bcde  
## WHT:MornLow 53.66667 bcde  
## BL/BR:MornLow 53.33333 cde  
## WT/BR:MornLow 53.00000 de  
## BLK:MornLow 52.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT19 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.898 2.980 2.2291 0.08434 .   
## THIregime 1 48.453 48.453 36.2491 3.238e-06 \*\*\*  
## Colour:THIregime 5 1.042 0.208 0.1559 0.97614   
## Residuals 24 32.080 1.337   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336677   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.53657 2.246968 6 51 57.19831  
## BLK 53.77386 1.631526 6 52 55.57126  
## BRN 55.00933 1.676214 6 52 56.62583  
## WHT 54.78601 1.294490 6 53 56.09224  
## WT/BLK 53.26752 1.607146 6 51 55.40620  
## WT/BR 54.92089 1.239372 6 53 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.06387   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.00933 a  
## WT/BR 54.92089 a  
## WHT 54.78601 a  
## BL/BR 54.53657 a  
## BLK 53.77386 a  
## WT/BLK 53.26752 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336677   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.54250 0.8714034 18 53.8381 57.19831  
## MornLow 53.22222 1.4371359 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7953903   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.54250 a  
## MornLow 53.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.336677 24 54.38236 2.12596 3.403679  
##   
## $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 55.73980 1.3948171 3 54.41888 57.19831 55.01055 55.60221  
## BL/BR:MornLow 53.33333 2.5166115 3 51.00000 56.00000 52.00000 53.00000  
## BLK:MornHigh 55.21439 0.3098272 3 55.01418 55.57126 55.03595 55.05773  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 56.01866 0.9838716 3 54.88350 56.62583 55.71507 56.54664  
## BRN:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## WHT:MornHigh 55.90536 0.3116495 3 55.54559 56.09224 55.81191 56.07824  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.53503 0.7984374 3 53.83810 55.40620 54.09945 54.36080  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.84178 0.5440434 3 55.40620 56.45160 55.53688 55.66755  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.40026  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.31450  
## BLK:MornLow 52.50000  
## BRN:MornHigh 56.58623  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.08524  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 54.88350  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.05958  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.01866 a  
## WHT:MornHigh 55.90536 a  
## WT/BR:MornHigh 55.84178 a  
## BL/BR:MornHigh 55.73980 a  
## BLK:MornHigh 55.21439 ab  
## WT/BLK:MornHigh 54.53503 ab  
## BRN:MornLow 54.00000 ab  
## WT/BR:MornLow 54.00000 ab  
## WHT:MornLow 53.66667 ab  
## BL/BR:MornLow 53.33333 ab  
## BLK:MornLow 52.33333 b  
## WT/BLK:MornLow 52.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT20 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.241 1.248 0.9343 0.4765   
## THIregime 1 62.877 62.877 47.0615 4.281e-07 \*\*\*  
## Colour:THIregime 5 0.299 0.060 0.0447 0.9987   
## Residuals 24 32.065 1.336   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336057   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.72100 1.580104 6 53 56.52627  
## BLK 54.35927 1.653949 6 52 56.25903  
## BRN 54.95750 1.794212 6 52 56.97430  
## WHT 54.62505 1.788987 6 52 56.81096  
## WT/BLK 55.44359 2.128263 6 53 58.54240  
## WT/BR 55.48975 1.693146 6 53 57.60154  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.063391   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.48975 a  
## WT/BLK 55.44359 a  
## BRN 54.95750 a  
## BL/BR 54.72100 a  
## WHT 54.62505 a  
## BLK 54.35927 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336057   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.25427 0.8515591 18 55.17099 58.5424  
## MornLow 53.61111 1.2432826 18 52.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7952057   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.25427 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.336057 24 54.93269 2.104173 3.40289  
##   
## $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 56.10866 0.3628221 3 55.87082 56.52627 55.89986 55.92890  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.71855 0.5440552 3 55.17099 56.25903 55.44831 55.72563  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 56.24833 0.8461237 3 55.31908 56.97430 55.88534 56.45160  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 55.91677 0.8137917 3 55.21952 56.81096 55.46967 55.71982  
## WHT:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 56.88718 1.4394036 3 55.92890 58.54240 56.05958 56.19025  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.64616 0.9064460 3 55.79823 57.60154 56.16847 56.53872  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.22759  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.99233  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.71295  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.26539  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 57.36633  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.07013  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 56.88718 a  
## WT/BR:MornHigh 56.64616 ab  
## BRN:MornHigh 56.24833 abc  
## BL/BR:MornHigh 56.10866 abc  
## WHT:MornHigh 55.91677 abc  
## BLK:MornHigh 55.71855 abc  
## WT/BR:MornLow 54.33333 abc  
## WT/BLK:MornLow 54.00000 abc  
## BRN:MornLow 53.66667 abc  
## BL/BR:MornLow 53.33333 bc  
## WHT:MornLow 53.33333 bc  
## BLK:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT21 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.820 5.764 3.9192 0.009714 \*\*   
## THIregime 1 38.501 38.501 26.1792 3.095e-05 \*\*\*  
## Colour:THIregime 5 0.474 0.095 0.0645 0.996824   
## Residuals 24 35.296 1.471   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.470681   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.78914 1.941076 6 52 57.19831  
## BLK 56.49882 1.415781 6 54 57.99066  
## BRN 55.06727 1.371215 6 53 56.66068  
## WHT 55.12676 1.427440 6 53 56.80007  
## WT/BLK 53.46322 1.315323 6 52 55.05773  
## WT/BR 54.59306 1.853182 6 52 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.164853   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.49882 a  
## WHT 55.12676 ab  
## BRN 55.06727 ab  
## BL/BR 54.78914 ab  
## WT/BR 54.59306 ab  
## WT/BLK 53.46322 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.470681   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95720 1.106464 18 54.3608 57.99066  
## MornLow 53.88889 1.604732 18 52.0000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8343077   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95720 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.470681 24 54.92305 2.208028 3.570217  
##   
## $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 55.91161 1.1429166 3 55.01418 57.19831 55.26827 55.52236  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 57.33097 0.7748097 3 56.47774 57.99066 57.00112 57.52451  
## BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BRN:MornHigh 56.13455 0.5323075 3 55.59627 56.66068 55.87148 56.14669  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.25351 0.5340618 3 55.73289 56.80007 55.98024 56.22759  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.59311 0.4023746 3 54.36080 55.05773 54.36080 54.36080  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.51945 1.2952874 3 54.49148 56.97430 54.79203 55.09258  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.36033  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.75759  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.40369  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.51383  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 54.70927  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.03344  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.33097 a  
## WHT:MornHigh 56.25351 ab  
## BRN:MornHigh 56.13455 ab  
## BL/BR:MornHigh 55.91161 ab  
## BLK:MornLow 55.66667 abc  
## WT/BR:MornHigh 55.51945 abc  
## WT/BLK:MornHigh 54.59311 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 54.00000 abc  
## BL/BR:MornLow 53.66667 bc  
## WT/BR:MornLow 53.66667 bc  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT22 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.761 2.552 3.1509 0.02512 \*   
## THIregime 1 47.977 47.977 59.2337 6.217e-08 \*\*\*  
## Colour:THIregime 5 0.939 0.188 0.2319 0.94474   
## Residuals 24 19.439 0.810   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8099638   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.37906 1.677463 6 52 56.32093  
## BLK 55.89456 1.221419 6 54 57.36633  
## BRN 54.85256 1.364646 6 53 56.23381  
## WHT 54.31340 1.606336 6 52 56.15758  
## WT/BLK 54.39881 1.504641 6 52 56.10313  
## WT/BR 55.42151 1.630601 6 53 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.606579   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.89456 a  
## WT/BR 55.42151 a  
## BRN 54.85256 a  
## WT/BLK 54.39881 a  
## BL/BR 54.37906 a  
## WHT 54.31340 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8099638   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.03107 0.7486443 18 54.3608 57.497  
## MornLow 53.72222 1.1785113 18 52.0000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6191557   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.03107 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8099638 24 54.87665 1.640005 2.649526  
##   
## $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 55.75812 0.5738184 3 55.17389 56.32093 55.47672 55.77956  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.78911 0.5735537 3 56.21929 57.36633 56.50051 56.78173  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 56.03846 0.3213664 3 55.66755 56.23381 55.94078 56.21401  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 55.62679 0.5251281 3 55.10751 56.15758 55.36140 55.61528  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 55.46428 0.9596024 3 54.36080 56.10313 55.14485 55.92890  
## WT/BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.50968 0.8726174 3 55.84178 57.49700 56.01602 56.19025  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.05024  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.07403  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.22391  
## BRN:MornLow 54.00000  
## WHT:MornHigh 55.88643  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 56.01602  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.84363  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.78911 a  
## WT/BR:MornHigh 56.50968 a  
## BRN:MornHigh 56.03846 ab  
## BL/BR:MornHigh 55.75812 abc  
## WHT:MornHigh 55.62679 abcd  
## WT/BLK:MornHigh 55.46428 abcd  
## BLK:MornLow 55.00000 abcd  
## WT/BR:MornLow 54.33333 abcd  
## BRN:MornLow 53.66667 bcd  
## WT/BLK:MornLow 53.33333 cd  
## BL/BR:MornLow 53.00000 d  
## WHT:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT23 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.817 3.763 1.7392 0.1640094   
## THIregime 1 40.509 40.509 18.7206 0.0002301 \*\*\*  
## Colour:THIregime 5 1.101 0.220 0.1018 0.9908143   
## Residuals 24 51.932 2.164   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.16385   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.01535 1.532638 6 52 55.53688  
## BLK 55.34129 1.384504 6 53 56.73909  
## BRN 55.29426 1.845212 6 52 57.23565  
## WHT 54.55551 1.401695 6 53 56.13798  
## WT/BLK 53.48469 2.579389 6 50 56.80007  
## WT/BR 55.34020 1.555570 6 53 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.625928   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.34129 a  
## WT/BR 55.34020 a  
## BRN 55.29426 a  
## WHT 54.55551 a  
## BL/BR 54.01535 a  
## WT/BLK 53.48469 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.16385   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.73266 1.226484 18 52.27 57.23565  
## MornLow 53.61111 1.649916 18 50.00 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.012   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.73266 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.16385 24 54.67188 2.690603 4.330609  
##   
## $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 55.36402 0.2869036 3 55.03284 55.53688 55.27760 55.52236  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.34925 0.6409773 3 55.60947 56.73909 56.15433 56.69919  
## BLK:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## BRN:MornHigh 56.25519 1.1868167 3 54.93577 57.23565 55.76496 56.59415  
## BRN:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WHT:MornHigh 55.77769 0.3120549 3 55.59288 56.13798 55.59755 55.60221  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 54.30272 2.3004959 3 52.27000 56.80007 53.05405 53.83810  
## WT/BLK:MornLow 52.66667 3.0550505 3 50.00000 56.00000 51.00000 52.00000  
## WT/BR:MornHigh 56.34706 0.8214875 3 55.61528 57.23565 55.90277 56.19025  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.52962  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.71914  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.91490  
## BRN:MornLow 55.50000  
## WHT:MornHigh 55.87010  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.71295  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.34925 a  
## WT/BR:MornHigh 56.34706 a  
## BRN:MornHigh 56.25519 a  
## WHT:MornHigh 55.77769 a  
## BL/BR:MornHigh 55.36402 a  
## BLK:MornLow 54.33333 a  
## BRN:MornLow 54.33333 a  
## WT/BR:MornLow 54.33333 a  
## WT/BLK:MornHigh 54.30272 a  
## WHT:MornLow 53.33333 a  
## BL/BR:MornLow 52.66667 a  
## WT/BLK:MornLow 52.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT24 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.475 0.495 0.4873 0.7823   
## THIregime 1 50.436 50.436 49.6596 2.76e-07 \*\*\*  
## Colour:THIregime 5 0.186 0.037 0.0366 0.9992   
## Residuals 24 24.375 1.016   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.015635   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.24792 1.546229 6 53 57.03238  
## BLK 55.49772 1.341693 6 54 57.02657  
## BRN 55.24890 1.852322 6 53 57.59204  
## WHT 55.21377 1.511671 6 53 56.97430  
## WT/BLK 54.85586 1.581627 6 53 56.97430  
## WT/BR 55.70433 1.609572 6 53 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.799028   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.70433 a  
## BLK 55.49772 a  
## BRN 55.24890 a  
## BL/BR 55.24792 a  
## WHT 55.21377 a  
## WT/BLK 54.85586 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.015635   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.47839 0.6534113 18 55.4062 57.59204  
## MornLow 54.11111 1.0786096 18 53.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6933235   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.47839 a  
## MornLow 54.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.015635 24 55.29475 1.822573 2.966909  
##   
## $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 56.49585 0.5523676 3 55.92890 57.03238 56.22759 56.52627  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.66211 0.3156356 3 56.47911 57.02657 56.47987 56.48064  
## BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 56.49780 0.9478883 3 55.92890 57.59204 55.95068 55.97246  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 56.42754 0.5414484 3 55.89156 56.97430 56.15416 56.41675  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.04506 0.8233946 3 55.40620 56.97430 55.58043 55.75467  
## WT/BLK:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.74199 0.9556398 3 55.66755 57.49700 56.36448 57.06142  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.77932  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.75360  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.78225  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.69553  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.27921  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.74199 a  
## BLK:MornHigh 56.66211 a  
## BRN:MornHigh 56.49780 ab  
## BL/BR:MornHigh 56.49585 ab  
## WHT:MornHigh 56.42754 ab  
## WT/BLK:MornHigh 56.04506 ab  
## WT/BR:MornLow 54.66667 ab  
## BLK:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BLK:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT25 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 27.914 5.583 5.9176 0.001062 \*\*   
## THIregime 1 41.993 41.993 44.5110 6.695e-07 \*\*\*  
## Colour:THIregime 5 0.836 0.167 0.1773 0.968501   
## Residuals 24 22.642 0.943   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9434314   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.89786 1.744812 6 52 56.89963  
## BLK 54.97660 1.657086 6 53 57.00181  
## BRN 55.42309 1.264587 6 54 56.87926  
## WHT 55.99218 1.300662 6 54 57.53185  
## WT/BLK 53.33255 1.631158 6 51 55.58043  
## WT/BR 55.85793 1.162958 6 54 57.10498  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.733901   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.99218 a  
## WT/BR 55.85793 a  
## BRN 55.42309 a  
## BLK 54.97660 ab  
## BL/BR 54.89786 ab  
## WT/BLK 53.33255 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9434314   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.16007 1.068068 18 53.3154 57.53185  
## MornLow 54.00000 1.371989 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6682242   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.16007 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9434314 24 55.08003 1.763441 2.859503  
##   
## $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 56.12906 0.8544289 3 55.21019 56.89963 55.74378 56.27737  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.28654 0.6194452 3 55.92890 57.00181 55.92890 55.92890  
## BLK:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BRN:MornHigh 56.51285 0.3192349 3 56.29479 56.87926 56.32964 56.36448  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 56.98436 0.5253947 3 56.48427 57.53185 56.71062 56.93696  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.33176 1.1502479 3 53.31540 55.58043 53.70743 54.09945  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 56.71585 0.4160068 3 56.27737 57.10498 56.52129 56.76522  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.58850  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.46536  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.62187  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.23441  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.83994  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.93510  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.98436 a  
## WT/BR:MornHigh 56.71585 a  
## BRN:MornHigh 56.51285 ab  
## BLK:MornHigh 56.28654 ab  
## BL/BR:MornHigh 56.12906 ab  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 55.00000 abc  
## BRN:MornLow 54.33333 abc  
## WT/BLK:MornHigh 54.33176 abc  
## BL/BR:MornLow 53.66667 bc  
## BLK:MornLow 53.66667 bc  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT26 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 33.351 6.670 11.1415 1.236e-05 \*\*\*  
## THIregime 1 35.282 35.282 58.9333 6.497e-08 \*\*\*  
## Colour:THIregime 5 0.609 0.122 0.2034 0.9579   
## Residuals 24 14.368 0.599   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5986769   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.19213 1.040297 6 54 56.50968  
## BLK 55.91318 1.234174 6 54 57.39246  
## BRN 55.02675 1.338527 6 53 56.62583  
## WHT 55.85782 1.188949 6 54 57.25307  
## WT/BLK 53.22396 1.539716 6 51 55.14485  
## WT/BR 54.05936 1.367645 6 52 55.71982  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.381228   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.91318 a  
## WHT 55.85782 a  
## BL/BR 55.19213 ab  
## BRN 55.02675 ab  
## WT/BR 54.05936 bc  
## WT/BLK 53.22396 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5986769   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.86884 0.9866828 18 53.8381 57.39246  
## MornLow 53.88889 1.3672165 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5323084   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.86884 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5986769 24 54.87887 1.409909 2.277884  
##   
## $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 56.05093 0.3994993 3 55.77956 56.50968 55.82156 55.86356  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 56.82635 0.5534300 3 56.28654 57.39246 56.54330 56.80007  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 56.05350 0.5625669 3 55.50124 56.62583 55.76734 56.03344  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.71565 0.5713287 3 56.11558 57.25307 56.44693 56.77829  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.44792 0.6577164 3 53.83810 55.14485 54.09945 54.36080  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.11872 0.5562520 3 54.62215 55.71982 54.81816 55.01418  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.18662  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.09626  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.32964  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.01568  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.75283  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.36700  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.82635 a  
## WHT:MornHigh 56.71565 ab  
## BRN:MornHigh 56.05350 abc  
## BL/BR:MornHigh 56.05093 abc  
## WT/BR:MornHigh 55.11872 abcd  
## BLK:MornLow 55.00000 abcd  
## WHT:MornLow 55.00000 abcd  
## WT/BLK:MornHigh 54.44792 bcd  
## BL/BR:MornLow 54.33333 cd  
## BRN:MornLow 54.00000 cde  
## WT/BR:MornLow 53.00000 de  
## WT/BLK:MornLow 52.00000 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 36.370 7.274 4.5277 0.004765 \*\*   
## THIregime 1 37.247 37.247 23.1844 6.647e-05 \*\*\*  
## Colour:THIregime 5 1.136 0.227 0.1414 0.980735   
## Residuals 24 38.557 1.607   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.606555   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.01838 2.217465 6 51 57.14853  
## BLK 56.42510 1.379578 6 54 57.94130  
## BRN 55.08245 1.185884 6 54 56.19025  
## WHT 54.32543 1.451969 6 53 55.66755  
## WT/BLK 53.04973 1.402926 6 51 54.88350  
## WT/BR 54.86862 1.756413 6 52 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.262648   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.42510 a  
## BRN 55.08245 ab  
## BL/BR 55.01838 ab  
## WT/BR 54.86862 ab  
## WHT 54.32543 ab  
## WT/BLK 53.04973 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.606555   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.81212 1.211520 18 53.3154 57.9413  
## MornLow 53.77778 1.733937 18 51.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8719967   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.81212 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.606555 24 54.79495 2.313168 3.731498  
##   
## $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 56.03676 1.47702135 3 54.36080 57.14853 55.48087 56.60094  
## BL/BR:MornLow 54.00000 2.64575131 3 51.00000 56.00000 53.00000 55.00000  
## BLK:MornHigh 57.18353 0.83611942 3 56.28654 57.94130 56.80465 57.32277  
## BLK:MornLow 55.66667 1.52752523 3 54.00000 57.00000 55.00000 56.00000  
## BRN:MornHigh 56.16491 0.02617097 3 56.13798 56.19025 56.15224 56.16649  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 55.65085 0.01634647 3 55.63488 55.66755 55.64250 55.65013  
## WHT:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## WT/BLK:MornHigh 54.09945 0.78405000 3 53.31540 54.88350 53.70743 54.09945  
## WT/BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.73724 1.20372412 3 54.56988 56.97430 55.11872 55.66755  
## WT/BR:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.87474  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.63203  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.17837  
## BRN:MornLow 54.00000  
## WHT:MornHigh 55.65884  
## WHT:MornLow 53.00000  
## WT/BLK:MornHigh 54.49148  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.32093  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.18353 a  
## BRN:MornHigh 56.16491 ab  
## BL/BR:MornHigh 56.03676 ab  
## WT/BR:MornHigh 55.73724 ab  
## BLK:MornLow 55.66667 abc  
## WHT:MornHigh 55.65085 abc  
## WT/BLK:MornHigh 54.09945 abc  
## BL/BR:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WT/BR:MornLow 54.00000 abc  
## WHT:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT28 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.837 2.167 4.0557 0.008255 \*\*   
## THIregime 1 45.913 45.913 85.9172 2.118e-09 \*\*\*  
## Colour:THIregime 5 0.430 0.086 0.1611 0.974373   
## Residuals 24 12.825 0.534   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5343834   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.49958 1.344856 6 53 56.04506  
## BLK 55.39690 1.235049 6 54 56.80007  
## BRN 55.32753 1.166635 6 54 56.68919  
## WHT 54.33123 1.626849 6 52 56.20767  
## WT/BLK 53.83316 1.561210 6 52 55.92890  
## WT/BR 54.72083 1.433404 6 53 56.55614  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.304955   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.39690 a  
## BRN 55.32753 a  
## WT/BR 54.72083 ab  
## BL/BR 54.49958 ab  
## WHT 54.33123 ab  
## WT/BLK 53.83316 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5343834   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.81419 0.6707212 18 54.3608 56.80007  
## MornLow 53.55556 0.9835244 18 52.0000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5029138   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.81419 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5343834 24 54.68487 1.336778 2.152097  
##   
## $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 55.66582 0.3284595 3 55.47154 56.04506 55.47620 55.48087  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.46046 0.2941330 3 56.28654 56.80007 56.29066 56.29479  
## BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 56.32172 0.3225058 3 56.08571 56.68919 56.13798 56.19025  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 55.66247 0.5477637 3 55.11218 56.20767 55.38987 55.66755  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 54.99966 0.8233946 3 54.36080 55.92890 54.53503 54.70927  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.77499 0.6852009 3 55.27553 56.55614 55.38442 55.49332  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.76296  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.54743  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.43972  
## BRN:MornLow 54.50000  
## WHT:MornHigh 55.93761  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.02473  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.46046 a  
## BRN:MornHigh 56.32172 a  
## WT/BR:MornHigh 55.77499 ab  
## BL/BR:MornHigh 55.66582 ab  
## WHT:MornHigh 55.66247 ab  
## WT/BLK:MornHigh 54.99966 abc  
## BLK:MornLow 54.33333 abcd  
## BRN:MornLow 54.33333 abcd  
## WT/BR:MornLow 53.66667 bcd  
## BL/BR:MornLow 53.33333 cd  
## WHT:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.66667 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 14.295 2.859 1.7686 0.1576   
## THIregime 1 47.035 47.035 29.0957 1.538e-05 \*\*\*  
## Colour:THIregime 5 0.692 0.138 0.0856 0.9938   
## Residuals 24 38.797 1.617   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.61656   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.88265 1.730882 6 52 56.85814  
## BLK 55.72804 1.600925 6 53 57.49700  
## BRN 55.17723 1.795340 6 53 57.44948  
## WHT 54.89631 1.581877 6 53 56.84363  
## WT/BLK 53.96384 1.872438 6 51 56.45160  
## WT/BR 55.87680 1.585657 6 53 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.269682   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.87680 a  
## BLK 55.72804 a  
## BRN 55.17723 a  
## WHT 54.89631 a  
## BL/BR 54.88265 a  
## WT/BLK 53.96384 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.61656   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.23051 0.9343026 18 54.09945 57.497  
## MornLow 53.94444 1.5135553 18 51.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8747077   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.23051 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.61656 24 55.08748 2.308038 3.743099  
##   
## $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 56.09864 0.8489311 3 55.18219 56.85814 55.71889 56.25559  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.78942 0.8333723 3 55.87082 57.49700 56.43563 57.00044  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 56.35445 0.9489639 3 55.77209 57.44948 55.80694 55.84178  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 56.12595 0.6216497 3 55.75467 56.84363 55.76711 55.77956  
## WHT:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BLK:MornHigh 55.26101 1.1763438 3 54.09945 56.45160 54.66571 55.23197  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 56.75360 0.9896596 3 55.61528 57.40988 56.42547 57.23565  
## WT/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.55687  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.24872  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.64563  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.31159  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.84178  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.32277  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.78942 a  
## WT/BR:MornHigh 56.75360 a  
## BRN:MornHigh 56.35445 ab  
## WHT:MornHigh 56.12595 ab  
## BL/BR:MornHigh 56.09864 ab  
## WT/BLK:MornHigh 55.26101 ab  
## WT/BR:MornLow 55.00000 ab  
## BLK:MornLow 54.66667 ab  
## BRN:MornLow 54.00000 ab  
## BL/BR:MornLow 53.66667 ab  
## WHT:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT30 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 56.840 11.368 14.0734 1.778e-06 \*\*\*  
## THIregime 1 32.160 32.160 39.8145 1.598e-06 \*\*\*  
## Colour:THIregime 5 1.082 0.216 0.2678 0.9262   
## Residuals 24 19.386 0.808   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8077552   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.37841 1.2195269 6 53 55.79823  
## BLK 56.14834 0.9895917 6 55 57.36633  
## BRN 54.67740 1.3907232 6 53 56.45160  
## WHT 55.81743 1.1439299 6 54 57.18338  
## WT/BLK 52.24482 1.5857122 6 50 54.36080  
## WT/BR 54.73795 1.5172065 6 53 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.604387   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.14834 a  
## WHT 55.81743 ab  
## WT/BR 54.73795 ab  
## BRN 54.67740 ab  
## BL/BR 54.37841 b  
## WT/BLK 52.24482 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8077552   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.61256 1.276395 18 52.7927 57.36633  
## MornLow 53.72222 1.708303 18 50.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.618311   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.61256 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8077552 24 54.66739 1.644037 2.645912  
##   
## $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 55.42349 0.3289846 3 55.18219 55.79823 55.23612 55.29004  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.96335 0.3495545 3 56.74199 57.36633 56.76186 56.78173  
## BLK:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BRN:MornHigh 55.68814 0.6611918 3 55.30166 56.45160 55.30641 55.31116  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.63486 0.5165976 3 56.15758 57.18338 56.36059 56.56361  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 53.48963 0.7984374 3 52.79270 54.36080 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 55.47589 1.0588170 3 54.62215 56.66068 54.88350 55.14485  
## WT/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.54413  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.07403  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.88138  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.87349  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 53.83810  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 55.90277  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.96335 a  
## WHT:MornHigh 56.63486 ab  
## BRN:MornHigh 55.68814 abc  
## WT/BR:MornHigh 55.47589 abc  
## BL/BR:MornHigh 55.42349 abc  
## BLK:MornLow 55.33333 abc  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 54.00000 bc  
## BRN:MornLow 53.66667 c  
## WT/BLK:MornHigh 53.48963 cd  
## BL/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 51.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT31 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 9.236 1.847 3.014 0.02994 \*   
## THIregime 1 44.701 44.701 72.936 9.737e-09 \*\*\*  
## Colour:THIregime 5 0.386 0.077 0.126 0.98509   
## Residuals 24 14.709 0.613   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6128825   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.47901 1.507731 6 52 56.00357  
## BLK 55.10613 1.410225 6 53 56.76522  
## BRN 55.03467 1.133640 6 54 56.10313  
## WHT 54.86172 1.373055 6 53 56.24252  
## WT/BLK 53.59390 1.460220 6 52 55.40620  
## WT/BR 54.61048 1.547484 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.397519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.10613 a  
## BRN 55.03467 a  
## WHT 54.86172 ab  
## WT/BR 54.61048 ab  
## BL/BR 54.47901 ab  
## WT/BLK 53.59390 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6128825   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.72864 0.6787357 18 54.49148 56.76522  
## MornLow 53.50000 0.9851844 18 52.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5385867   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.72864 a  
## MornLow 53.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6128825 24 54.61432 1.433448 2.304751  
##   
## $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 55.62468 0.64193699 3 54.88350 56.00357 55.43524 55.98698  
## BL/BR:MornLow 53.33333 1.15470054 3 52.00000 54.00000 53.00000 54.00000  
## BLK:MornHigh 56.21226 0.54888154 3 55.66755 56.76522 55.93578 56.20401  
## BLK:MornLow 54.00000 1.00000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.06934 0.03489463 3 56.03344 56.10313 56.05245 56.07145  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.05677 0.30887689 3 55.70022 56.24252 55.96390 56.22759  
## WHT:MornLow 53.66667 0.57735027 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.85446 0.47980119 3 54.53503 55.40620 54.57859 54.62215  
## WT/BLK:MornLow 52.33333 0.57735027 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.55430 0.99049007 3 54.49148 56.45160 55.10565 55.71982  
## WT/BR:MornLow 53.66667 1.52752523 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.99527  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.48461  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.08729  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.23505  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.01418  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.08571  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.21226 a  
## BRN:MornHigh 56.06934 a  
## WHT:MornHigh 56.05677 a  
## BL/BR:MornHigh 55.62468 ab  
## WT/BR:MornHigh 55.55430 ab  
## WT/BLK:MornHigh 54.85446 ab  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 53.66667 bc  
## WT/BR:MornLow 53.66667 bc  
## BL/BR:MornLow 53.33333 bc  
## WT/BLK:MornLow 52.33333 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 25.188 5.038 5.9148 0.001065 \*\*   
## THIregime 1 47.013 47.013 55.1986 1.139e-07 \*\*\*  
## Colour:THIregime 5 1.186 0.237 0.2785 0.920372   
## Residuals 24 20.441 0.852   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8517048   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.06286 1.367107 6 54 57.64634  
## BLK 54.97686 1.493926 6 53 56.48064  
## BRN 55.02772 1.707440 6 53 57.11685  
## WHT 55.26620 1.561460 6 53 57.07231  
## WT/BLK 53.65893 1.651068 6 51 55.75467  
## WT/BR 56.19738 1.244029 6 54 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.647456   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.19738 a  
## BL/BR 56.06286 a  
## WHT 55.26620 ab  
## BRN 55.02772 ab  
## BLK 54.97686 ab  
## WT/BLK 53.65893 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8517048   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.34109 1.025282 18 53.3154 57.64634  
## MornLow 54.05556 1.304843 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6349092   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.34109 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8517048 24 55.19832 1.671932 2.71694  
##   
## $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 57.12572 0.5324007 3 56.58228 57.64634 56.86540 57.14853  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 56.28705 0.3105034 3 55.92890 56.48064 56.19025 56.45160  
## BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BRN:MornHigh 56.38877 0.6305995 3 56.01602 57.11685 56.02473 56.03344  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.53239 0.5344538 3 56.00357 57.07231 56.26243 56.52129  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.65119 1.2361156 3 53.31540 55.75467 54.09945 54.88350  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 57.06142 0.5440434 3 56.45160 57.49700 56.84363 57.23565  
## WT/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.39744  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.46612  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.57515  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.79680  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.36633  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 57.12572 a  
## WT/BR:MornHigh 57.06142 a  
## WHT:MornHigh 56.53239 ab  
## BRN:MornHigh 56.38877 ab  
## BLK:MornHigh 56.28705 abc  
## WT/BR:MornLow 55.33333 abcd  
## BL/BR:MornLow 55.00000 abcd  
## WT/BLK:MornHigh 54.65119 abcd  
## WHT:MornLow 54.00000 bcd  
## BLK:MornLow 53.66667 cd  
## BRN:MornLow 53.66667 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT33 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.556 3.711 4.2413 0.006634 \*\*   
## THIregime 1 39.879 39.879 45.5741 5.545e-07 \*\*\*  
## Colour:THIregime 5 0.525 0.105 0.1201 0.986629   
## Residuals 24 21.001 0.875   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8750295   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.03803 1.137407 6 53 55.11581  
## BLK 55.25425 1.090994 6 54 56.53413  
## BRN 54.06701 1.377139 6 52 55.71111  
## WHT 54.91047 1.604479 6 52 56.41893  
## WT/BLK 53.26752 1.607146 6 51 55.40620  
## WT/BR 53.44435 1.656265 6 51 55.51074  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.669862   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.25425 a  
## WHT 54.91047 ab  
## BRN 54.06701 ab  
## BL/BR 54.03803 ab  
## WT/BR 53.44435 b  
## WT/BLK 53.26752 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8750295   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.21610 0.8507656 18 53.70743 56.53413  
## MornLow 53.11111 1.2782750 18 51.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6435442   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.21610 a  
## MornLow 53.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8750295 24 54.1636 1.727046 2.753891  
##   
## $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 55.07606 0.04159202 3 55.03284 55.11581 55.05618 55.07951  
## BL/BR:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## BLK:MornHigh 56.17517 0.31315345 3 55.95794 56.53413 55.99569 56.03344  
## BLK:MornLow 54.33333 0.57735027 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 55.13403 0.57072412 3 54.56988 55.71111 54.84549 55.12109  
## BRN:MornLow 53.00000 1.00000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 55.82094 0.97417615 3 54.69682 56.41893 55.52194 56.34706  
## WHT:MornLow 54.00000 1.73205081 3 52.00000 55.00000 53.50000 55.00000  
## WT/BLK:MornHigh 54.53503 0.79843744 3 53.83810 55.40620 54.09945 54.36080  
## WT/BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 54.55536 0.90644602 3 53.70743 55.51074 54.07767 54.44792  
## WT/BR:MornLow 52.33333 1.52752523 3 51.00000 54.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 55.09766  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.28379  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.41610  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.38300  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.88350  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 54.97933  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.17517 a  
## WHT:MornHigh 55.82094 a  
## BRN:MornHigh 55.13403 ab  
## BL/BR:MornHigh 55.07606 abc  
## WT/BR:MornHigh 54.55536 abcd  
## WT/BLK:MornHigh 54.53503 abcd  
## BLK:MornLow 54.33333 abcd  
## WHT:MornLow 54.00000 abcd  
## BL/BR:MornLow 53.00000 bcd  
## BRN:MornLow 53.00000 bcd  
## WT/BR:MornLow 52.33333 cd  
## WT/BLK:MornLow 52.00000 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 12.366 2.473 4.2388 0.006653 \*\*   
## THIregime 1 43.792 43.792 75.0543 7.489e-09 \*\*\*  
## Colour:THIregime 5 0.763 0.153 0.2615 0.929663   
## Residuals 24 14.003 0.583   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5834709   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.43355 1.277791 6 53 55.92890  
## BLK 55.61370 1.117147 6 54 56.76522  
## BRN 54.99415 1.313147 6 53 56.58228  
## WHT 54.82096 1.330823 6 53 56.15758  
## WT/BLK 53.72457 1.966515 6 51 56.45160  
## WT/BR 54.36396 1.211705 6 53 55.84178  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.363574   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.61370 a  
## BRN 54.99415 ab  
## WHT 54.82096 ab  
## BL/BR 54.43355 ab  
## WT/BR 54.36396 ab  
## WT/BLK 53.72457 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5834709   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.76141 0.7148778 18 54.01233 56.76522  
## MornLow 53.55556 1.0416176 18 51.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5255048   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.76141 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5834709 24 54.65848 1.397501 2.24877  
##   
## $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 55.53376 0.3422299 3 55.33153 55.92890 55.33620 55.34086  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.56073 0.3100320 3 56.20401 56.76522 56.45848 56.71295  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 55.98830 0.5881275 3 55.40620 56.58228 55.69131 55.97642  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 55.97526 0.3117593 3 55.61528 56.15758 55.88410 56.15291  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.11581 1.2361156 3 54.01233 56.45160 54.44792 54.88350  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.39458 0.3881664 3 55.14485 55.84178 55.17099 55.19712  
## WT/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.63488  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.73909  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.27935  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.15525  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.51945  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.56073 a  
## BRN:MornHigh 55.98830 ab  
## WHT:MornHigh 55.97526 ab  
## BL/BR:MornHigh 55.53376 abc  
## WT/BR:MornHigh 55.39458 abc  
## WT/BLK:MornHigh 55.11581 abc  
## BLK:MornLow 54.66667 abc  
## BRN:MornLow 54.00000 bcd  
## WHT:MornLow 53.66667 cd  
## BL/BR:MornLow 53.33333 cd  
## WT/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.33333 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 37.532 7.506 4.9543 0.002953 \*\*   
## THIregime 1 42.198 42.198 27.8508 2.062e-05 \*\*\*  
## Colour:THIregime 5 2.201 0.440 0.2905 0.913556   
## Residuals 24 36.364 1.515   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.515149   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.23880 1.466953 6 53 56.97430  
## BLK 53.58488 1.881532 6 51 55.75467  
## BRN 54.75700 1.267047 6 53 56.05958  
## WHT 55.12131 1.746250 6 52 56.80007  
## WT/BLK 52.30985 1.614576 6 50 54.53503  
## WT/BR 54.48416 1.788480 6 52 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.197338   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.23880 a  
## WHT 55.12131 a  
## BRN 54.75700 a  
## WT/BR 54.48416 ab  
## BLK 53.58488 ab  
## WT/BLK 52.30985 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.515149   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.33200 1.274092 18 52.27 56.9743  
## MornLow 53.16667 1.689065 18 50.00 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.846827   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.33200 a  
## MornLow 53.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.515149 24 54.24933 2.268993 3.623791  
##   
## $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 56.14427 0.7661100 3 55.46428 56.97430 55.72926 55.99424  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 55.16976 0.5611249 3 54.63591 55.75467 54.87731 55.11872  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 55.84733 0.3372313 3 55.45847 56.05958 55.74120 56.02394  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.24262 0.9227437 3 55.17752 56.80007 55.96390 56.75029  
## WHT:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## WT/BLK:MornHigh 53.28636 1.1502479 3 52.27000 54.53503 52.66202 53.05405  
## WT/BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WT/BR:MornHigh 55.30166 1.2877953 3 54.09945 56.66068 54.62215 55.14485  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.48427  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 55.43669  
## BLK:MornLow 52.50000  
## BRN:MornHigh 56.04176  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.77518  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 55.90277  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.24262 a  
## BL/BR:MornHigh 56.14427 a  
## BRN:MornHigh 55.84733 a  
## WT/BR:MornHigh 55.30166 ab  
## BLK:MornHigh 55.16976 ab  
## BL/BR:MornLow 54.33333 abc  
## WHT:MornLow 54.00000 abc  
## BRN:MornLow 53.66667 abc  
## WT/BR:MornLow 53.66667 abc  
## WT/BLK:MornHigh 53.28636 abc  
## BLK:MornLow 52.00000 bc  
## WT/BLK:MornLow 51.33333 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 6.431 1.286 1.3406 0.2813   
## THIregime 1 57.399 57.399 59.8231 5.705e-08 \*\*\*  
## Colour:THIregime 5 0.730 0.146 0.1521 0.9774   
## Residuals 24 23.028 0.959   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9594848   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.99691 1.832045 6 52 57.12364  
## BLK 54.14225 1.666856 6 52 55.79135  
## BRN 55.21788 1.516378 6 53 56.97430  
## WHT 54.69531 1.548600 6 53 56.41675  
## WT/BLK 55.05157 1.763465 6 53 57.49700  
## WT/BR 55.47232 1.513005 6 53 57.06142  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.748591   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.47232 a  
## BRN 55.21788 a  
## WT/BLK 55.05157 a  
## BL/BR 54.99691 a  
## WHT 54.69531 a  
## BLK 54.14225 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9594848   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.19208 0.6940353 18 55.29004 57.497  
## MornLow 53.66667 1.1375929 18 52.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6738855   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.19208 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9594848 24 54.92937 1.783259 2.883729  
##   
## $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 56.32715 0.8654587 3 55.40620 57.12364 55.92890 56.45160  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 55.61783 0.2840315 3 55.29004 55.79135 55.53107 55.77209  
## BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BRN:MornHigh 56.43576 0.5466312 3 55.88138 56.97430 56.16649 56.45160  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.05729 0.3116161 3 55.86356 56.41675 55.87756 55.89156  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.10313 1.2071239 3 55.40620 57.49700 55.40620 55.40620  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.61131 0.7055016 3 55.79823 57.06142 56.38626 56.97430  
## WT/BR:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.78762  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.78172  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.71295  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.15416  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 56.45160  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.01786  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.61131 a  
## BRN:MornHigh 56.43576 ab  
## BL/BR:MornHigh 56.32715 ab  
## WT/BLK:MornHigh 56.10313 abc  
## WHT:MornHigh 56.05729 abc  
## BLK:MornHigh 55.61783 abc  
## WT/BR:MornLow 54.33333 abcd  
## BRN:MornLow 54.00000 abcd  
## WT/BLK:MornLow 54.00000 abcd  
## BL/BR:MornLow 53.66667 bcd  
## WHT:MornLow 53.33333 cd  
## BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT37 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.436 2.887 2.3497 0.07171 .   
## THIregime 1 47.162 47.162 38.3835 2.111e-06 \*\*\*  
## Colour:THIregime 5 0.822 0.164 0.1339 0.98294   
## Residuals 24 29.489 1.229   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.22871   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.06286 1.367107 6 54 57.64634  
## BLK 55.10040 1.911572 6 52 57.23565  
## BRN 55.56644 1.413487 6 54 57.16437  
## WHT 56.39121 1.231217 6 55 57.81062  
## WT/BLK 54.44236 1.721274 6 52 56.71295  
## WT/BR 55.63754 1.869498 6 53 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.978764   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.39121 a  
## BL/BR 56.06286 a  
## WT/BR 55.63754 a  
## BRN 55.56644 a  
## BLK 55.10040 a  
## WT/BLK 54.44236 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.22871   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.67805 0.9225746 18 54.3608 58.0197  
## MornLow 54.38889 1.3345583 18 52.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7625913   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.67805 a  
## MornLow 54.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.22871 24 55.53347 1.996043 3.263324  
##   
## $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 57.12572 0.5324007 3 56.58228 57.64634 56.86540 57.14853  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 56.53413 0.7969748 3 55.66755 57.23565 56.18337 56.69919  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 56.79954 0.3160756 3 56.60841 57.16437 56.61712 56.62583  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 57.44909 0.3147975 3 57.23565 57.81062 57.26832 57.30099  
## WHT:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WT/BLK:MornHigh 55.55139 1.1763438 3 54.36080 56.71295 54.97062 55.58043  
## WT/BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.60841 1.2555685 3 55.61528 58.01970 55.90277 56.19025  
## WT/BR:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.39744  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.96742  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.89510  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.55580  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.14669  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.10498  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.44909 a  
## BL/BR:MornHigh 57.12572 a  
## BRN:MornHigh 56.79954 ab  
## WT/BR:MornHigh 56.60841 ab  
## BLK:MornHigh 56.53413 abc  
## WT/BLK:MornHigh 55.55139 abc  
## WHT:MornLow 55.33333 abc  
## BL/BR:MornLow 55.00000 abc  
## WT/BR:MornLow 54.66667 abc  
## BRN:MornLow 54.33333 abc  
## BLK:MornLow 53.66667 bc  
## WT/BLK:MornLow 53.33333 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 16.899 3.380 2.4648 0.06149 .   
## THIregime 1 52.983 52.983 38.6388 2.008e-06 \*\*\*  
## Colour:THIregime 5 1.176 0.235 0.1715 0.97066   
## Residuals 24 32.910 1.371   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.37123   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.08137 1.601454 6 52 55.66755  
## BLK 54.69090 1.848379 6 52 56.94679  
## BRN 55.08179 1.725616 6 53 57.27921  
## WHT 56.23430 1.784369 6 53 58.05455  
## WT/BLK 55.50862 1.362226 6 54 57.14853  
## WT/BR 54.68193 1.847992 6 52 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.090376   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.23430 a  
## WT/BLK 55.50862 ab  
## BRN 55.08179 ab  
## BLK 54.69090 ab  
## WT/BR 54.68193 ab  
## BL/BR 54.08137 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.37123   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.25964 0.856955 18 55.18219 58.05455  
## MornLow 53.83333 1.504894 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8056052   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.25964 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.37123 24 55.04649 2.127285 3.447392  
##   
## $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 55.49608 0.2722299 3 55.18219 55.66755 55.41035 55.63851  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.04847 0.8239870 3 55.32780 56.94679 55.59931 55.87082  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 56.16359 0.9662031 3 55.59627 57.27921 55.60578 55.61528  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 57.13526 1.0915129 3 55.92890 58.05455 56.67561 57.42233  
## WHT:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## WT/BLK:MornHigh 56.68391 0.4023746 3 56.45160 57.14853 56.45160 56.45160  
## WT/BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BR:MornHigh 56.03054 0.8649739 3 55.27553 56.97430 55.55865 55.84178  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.65303  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.40881  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.44724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.73844  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 56.80007  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.40804  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.13526 a  
## WT/BLK:MornHigh 56.68391 ab  
## BRN:MornHigh 56.16359 ab  
## BLK:MornHigh 56.04847 abc  
## WT/BR:MornHigh 56.03054 abc  
## BL/BR:MornHigh 55.49608 abc  
## WHT:MornLow 55.33333 abc  
## WT/BLK:MornLow 54.33333 abc  
## BRN:MornLow 54.00000 abc  
## BLK:MornLow 53.33333 bc  
## WT/BR:MornLow 53.33333 bc  
## BL/BR:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT39 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.936 2.787 5.1213 0.002459 \*\*   
## THIregime 1 45.766 45.766 84.0952 2.594e-09 \*\*\*  
## Colour:THIregime 5 0.599 0.120 0.2202 0.950323   
## Residuals 24 13.061 0.544   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5442205   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.61220 1.498760 6 53 57.19831  
## BLK 54.69116 1.545211 6 53 56.42256  
## BRN 55.39128 1.234153 6 54 56.84363  
## WHT 55.42094 1.261822 6 54 56.86976  
## WT/BLK 53.87672 1.399359 6 52 55.40620  
## WT/BR 54.43946 1.475760 6 52 55.92890  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.316912   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.61220 a  
## WHT 55.42094 a  
## BRN 55.39128 a  
## BLK 54.69116 ab  
## WT/BR 54.43946 ab  
## WT/BLK 53.87672 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5442205   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.03280 0.7064814 18 54.62215 57.19831  
## MornLow 53.77778 1.0602750 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5075216   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.03280 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5442205 24 54.90529 1.34361 2.171815  
##   
## $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 56.55773 0.7747767 3 55.69659 57.19831 56.23744 56.77829  
## BL/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BLK:MornHigh 56.04898 0.3237434 3 55.85050 56.42256 55.86219 55.87388  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.44922 0.3416934 3 56.24252 56.84363 56.25202 56.26153  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 56.50854 0.3138796 3 56.30226 56.86976 56.32793 56.35359  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.08677 0.4116973 3 54.62215 55.40620 54.92706 55.23197  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.54559 0.6639182 3 54.77896 55.92890 55.35393 55.92890  
## WT/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.98830  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.14822  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.55258  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.61168  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.92890  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.55773 a  
## WHT:MornHigh 56.50854 a  
## BRN:MornHigh 56.44922 ab  
## BLK:MornHigh 56.04898 ab  
## WT/BR:MornHigh 55.54559 ab  
## WT/BLK:MornHigh 55.08677 abc  
## BL/BR:MornLow 54.66667 abcd  
## BRN:MornLow 54.33333 bcd  
## WHT:MornLow 54.33333 bcd  
## BLK:MornLow 53.33333 cd  
## WT/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT40 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.954 0.991 0.4592 0.8025   
## THIregime 1 50.099 50.099 23.2177 6.589e-05 \*\*\*  
## Colour:THIregime 5 0.363 0.073 0.0337 0.9993   
## Residuals 24 51.787 2.158   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.157802   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.51202 1.538092 6 52 56.07824  
## BLK 54.59492 2.036164 6 51 56.74199  
## BRN 55.33544 1.552687 6 53 57.25941  
## WHT 54.32501 1.912312 6 52 56.73037  
## WT/BLK 54.15954 1.850304 6 52 56.71295  
## WT/BR 54.48447 2.108767 6 52 57.18338  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.622255   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.33544 a  
## BLK 54.59492 a  
## BL/BR 54.51202 a  
## WT/BR 54.48447 a  
## WHT 54.32501 a  
## WT/BLK 54.15954 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.157802   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.74825 0.9339065 18 54.3608 57.25941  
## MornLow 53.38889 1.5769997 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.010585   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.74825 a  
## MornLow 53.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.157802 24 54.56857 2.691927 4.324553  
##   
## $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 55.69071 0.6426964 3 54.94884 56.07824 55.49695 56.04506  
## BL/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## BLK:MornHigh 55.85651 1.1210597 3 54.59602 56.74199 55.41377 56.23152  
## BLK:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## BRN:MornHigh 56.33756 0.8252719 3 55.66755 57.25941 55.87663 56.08571  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 55.65002 0.9356138 3 55.10751 56.73037 55.10985 55.11218  
## WHT:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## WT/BLK:MornHigh 55.31908 1.2350919 3 54.36080 56.71295 54.62215 54.88350  
## WT/BLK:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.63561 1.3448267 3 54.75283 57.18338 54.86172 54.97062  
## WT/BR:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.06165  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.48675  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.67256  
## BRN:MornLow 55.00000  
## WHT:MornHigh 55.92128  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 55.79823  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.07700  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.33756 a  
## BLK:MornHigh 55.85651 a  
## BL/BR:MornHigh 55.69071 a  
## WHT:MornHigh 55.65002 a  
## WT/BR:MornHigh 55.63561 a  
## WT/BLK:MornHigh 55.31908 a  
## BRN:MornLow 54.33333 a  
## BL/BR:MornLow 53.33333 a  
## BLK:MornLow 53.33333 a  
## WT/BR:MornLow 53.33333 a  
## WHT:MornLow 53.00000 a  
## WT/BLK:MornLow 53.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT41 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.409 2.682 2.2173 0.08568 .   
## THIregime 1 46.550 46.550 38.4886 2.068e-06 \*\*\*  
## Colour:THIregime 5 1.297 0.259 0.2144 0.95297   
## Residuals 24 29.027 1.209   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.20946   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.39093 1.691605 6 51 55.40620  
## BLK 54.26742 1.562480 6 52 56.05958  
## BRN 54.90584 1.764597 6 52 56.97430  
## WHT 55.01065 1.315374 6 53 56.52627  
## WT/BLK 53.63746 1.683230 6 51 55.40620  
## WT/BR 54.61048 1.547484 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.963202   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.01065 a  
## BRN 54.90584 a  
## WT/BR 54.61048 a  
## BLK 54.26742 a  
## WT/BLK 53.63746 a  
## BL/BR 53.39093 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.20946   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.44093 0.8128662 18 54.01233 56.9743  
## MornLow 53.16667 1.3826658 18 51.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7565939   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.44093 a  
## MornLow 53.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.20946 24 54.3038 2.025189 3.23766  
##   
## $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 54.78186 0.5913889 3 54.23013 55.40620 54.46970 54.70927  
## BL/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BLK:MornHigh 55.53484 0.5332093 3 54.99354 56.05958 55.27247 55.55139  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 55.81169 1.1501494 3 54.67442 56.97430 55.23038 55.78635  
## BRN:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WHT:MornHigh 56.02131 0.5111406 3 55.50421 56.52627 55.76882 56.03344  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.94158 0.8047493 3 54.01233 55.40620 54.70927 55.40620  
## WT/BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.55430 0.9904901 3 54.49148 56.45160 55.10565 55.71982  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.05773  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.80548  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.38032  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.27986  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.40620  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.08571  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.02131 a  
## BRN:MornHigh 55.81169 a  
## WT/BR:MornHigh 55.55430 ab  
## BLK:MornHigh 55.53484 ab  
## WT/BLK:MornHigh 54.94158 abc  
## BL/BR:MornHigh 54.78186 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 54.00000 abc  
## WT/BR:MornLow 53.66667 abc  
## BLK:MornLow 53.00000 abc  
## WT/BLK:MornLow 52.33333 bc  
## BL/BR:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT42 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.074 1.215 0.8945 0.5005   
## THIregime 1 52.346 52.346 38.5420 2.047e-06 \*\*\*  
## Colour:THIregime 5 0.476 0.095 0.0701 0.9961   
## Residuals 24 32.595 1.358   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.358144   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.20402 1.957974 6 52 57.49700  
## BLK 56.00529 1.312404 6 54 57.52604  
## BRN 54.67916 1.530229 6 53 56.36448  
## WHT 55.22539 1.831022 6 53 57.53185  
## WT/BLK 55.46506 1.738915 6 53 57.75835  
## WT/BR 54.98944 1.676104 6 53 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.080377   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.00529 a  
## WT/BLK 55.46506 a  
## WHT 55.22539 a  
## BL/BR 55.20402 a  
## WT/BR 54.98944 a  
## BRN 54.67916 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.358144   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.46723 0.7746583 18 55.27553 57.75835  
## MornLow 54.05556 1.3048427 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8017519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.46723 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.358144 24 55.26139 2.108876 3.430903  
##   
## $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 56.40804 1.1113779 3 55.27553 57.49700 55.86356 56.45160  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 57.01057 0.5236475 3 56.47911 57.52604 56.75284 57.02657  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 56.02499 0.2947844 3 55.83386 56.36448 55.85525 55.87663  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.45077 0.9364257 3 55.89156 57.53185 55.91023 55.92890  
## WHT:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.59679 1.1763438 3 55.40620 57.75835 56.01602 56.62583  
## WT/BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BR:MornHigh 56.31221 0.6639182 3 55.92890 57.07884 55.92890 55.92890  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.97430  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 57.27630  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.12056  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.73037  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 57.19209  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 56.50387  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.01057 a  
## WT/BLK:MornHigh 56.59679 ab  
## WHT:MornHigh 56.45077 ab  
## BL/BR:MornHigh 56.40804 ab  
## WT/BR:MornHigh 56.31221 ab  
## BRN:MornHigh 56.02499 ab  
## BLK:MornLow 55.00000 ab  
## WT/BLK:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BR:MornLow 53.66667 ab  
## BRN:MornLow 53.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT43 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.724 6.145 10.0894 2.691e-05 \*\*\*  
## THIregime 1 39.378 39.378 64.6562 2.883e-08 \*\*\*  
## Colour:THIregime 5 0.903 0.181 0.2965 0.9101   
## Residuals 24 14.617 0.609   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.609041   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.44444 1.287313 6 53 55.92890  
## BLK 55.12014 1.420757 6 53 56.78173  
## BRN 55.00207 1.317555 6 53 56.54664  
## WHT 54.84425 1.354639 6 53 56.20767  
## WT/BLK 52.48408 1.337981 6 51 54.09945  
## WT/BR 55.04690 1.393801 6 53 56.88718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.393133   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.12014 a  
## WT/BR 55.04690 a  
## BRN 55.00207 a  
## WHT 54.84425 a  
## BL/BR 54.44444 a  
## WT/BLK 52.48408 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.609041   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.53618 1.023246 18 53.3154 56.88718  
## MornLow 53.44444 1.293523 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5368962   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.53618 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.609041 24 54.49031 1.432201 2.297517  
##   
## $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 55.55554 0.3254852 3 55.33153 55.92890 55.36886 55.40620  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.24028 0.5312642 3 55.71982 56.78173 55.96955 56.21929  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.00414 0.5722358 3 55.40620 56.54664 55.73289 56.05958  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.02182 0.3069343 3 55.66755 56.20767 55.92890 56.19025  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 53.63483 0.4116973 3 53.31540 54.09945 53.40252 53.48963  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 55.76047 0.9979074 3 54.98804 56.88718 55.19712 55.40620  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.66755  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.50051  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.30311  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.19896  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 56.14669  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.24028 a  
## WHT:MornHigh 56.02182 a  
## BRN:MornHigh 56.00414 a  
## WT/BR:MornHigh 55.76047 ab  
## BL/BR:MornHigh 55.55554 abc  
## WT/BR:MornLow 54.33333 abc  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 53.66667 bc  
## WT/BLK:MornHigh 53.63483 bc  
## BL/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 51.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT44 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.286 1.457 1.0166 0.4298   
## THIregime 1 53.736 53.736 37.4898 2.521e-06 \*\*\*  
## Colour:THIregime 5 0.809 0.162 0.1129 0.9884   
## Residuals 24 34.401 1.433   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.433362   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.63164 1.480699 6 53 56.27737  
## BLK 54.14683 1.820919 6 52 56.34156  
## BRN 55.38112 2.385077 6 51 57.40988  
## WHT 54.92581 1.440465 6 53 56.37693  
## WT/BLK 54.52948 1.384938 6 53 56.19025  
## WT/BR 55.38230 1.612264 6 53 57.39246  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.13721   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.38230 a  
## BRN 55.38112 a  
## WHT 54.92581 a  
## BL/BR 54.63164 a  
## WT/BLK 54.52948 a  
## BLK 54.14683 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.433362   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05462 0.7752583 18 54.56988 57.40988  
## MornLow 53.61111 1.3779306 18 51.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8236543   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05462 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.433362 24 54.83286 2.183419 3.524629  
##   
## $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 55.92994 0.3017863 3 55.73289 56.27737 55.75622 55.77956  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.62700 0.6191613 3 55.24939 56.34156 55.26972 55.29004  
## BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BRN:MornHigh 56.42890 1.6107786 3 54.56988 57.40988 55.93840 57.30693  
## BRN:MornLow 54.33333 2.8867513 3 51.00000 56.00000 53.50000 56.00000  
## WHT:MornHigh 56.18496 0.3125073 3 55.82436 56.37693 56.08898 56.35359  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.72563 0.4116973 3 55.40620 56.19025 55.49332 55.58043  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.43127 0.9295938 3 55.53688 57.39246 55.95068 56.36448  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.02846  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.81580  
## BLK:MornLow 53.00000  
## BRN:MornHigh 57.35841  
## BRN:MornLow 56.00000  
## WHT:MornHigh 56.36526  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.88534  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.87847  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.43127 a  
## BRN:MornHigh 56.42890 a  
## WHT:MornHigh 56.18496 ab  
## BL/BR:MornHigh 55.92994 ab  
## WT/BLK:MornHigh 55.72563 ab  
## BLK:MornHigh 55.62700 ab  
## BRN:MornLow 54.33333 ab  
## WT/BR:MornLow 54.33333 ab  
## WHT:MornLow 53.66667 ab  
## BL/BR:MornLow 53.33333 ab  
## WT/BLK:MornLow 53.33333 ab  
## BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT45 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.957 2.191 1.7925 0.1525   
## THIregime 1 48.112 48.112 39.3559 1.746e-06 \*\*\*  
## Colour:THIregime 5 0.451 0.090 0.0738 0.9956   
## Residuals 24 29.340 1.222   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.222483   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.80850 1.670026 6 52 56.68391  
## BLK 54.89392 1.579352 6 53 56.83675  
## BRN 54.28995 1.585284 6 52 56.11897  
## WHT 55.65761 1.976145 6 52 57.39246  
## WT/BLK 53.92028 1.443587 6 52 55.40620  
## WT/BR 55.03269 1.339772 6 53 56.58228  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.973743   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.65761 a  
## WT/BR 55.03269 a  
## BLK 54.89392 a  
## BL/BR 54.80850 a  
## BRN 54.28995 a  
## WT/BLK 53.92028 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.222483   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.92320 0.7847699 18 54.70927 57.39246  
## MornLow 53.61111 1.3345583 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7606562   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.92320 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.222483 24 54.76716 2.018837 3.255044  
##   
## $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 55.95033 0.8531025 3 55.01418 56.68391 55.58354 56.15291  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.12117 0.6197711 3 55.75467 56.83675 55.76338 55.77209  
## BLK:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BRN:MornHigh 55.57991 0.5393316 3 55.04031 56.11897 55.31037 55.58043  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.64855 1.2180555 3 55.24286 57.39246 56.27659 57.31032  
## WHT:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WT/BLK:MornHigh 55.17389 0.4023746 3 54.70927 55.40620 55.05773 55.40620  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.06538 0.5367640 3 55.51074 56.58228 55.80694 56.10313  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.41841  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.30442  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.84970  
## BRN:MornLow 53.50000  
## WHT:MornHigh 57.35139  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.40620  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.34270  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.64855 a  
## BLK:MornHigh 56.12117 ab  
## WT/BR:MornHigh 56.06538 ab  
## BL/BR:MornHigh 55.95033 ab  
## BRN:MornHigh 55.57991 abc  
## WT/BLK:MornHigh 55.17389 abc  
## WHT:MornLow 54.66667 abc  
## WT/BR:MornLow 54.00000 abc  
## BL/BR:MornLow 53.66667 abc  
## BLK:MornLow 53.66667 abc  
## BRN:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT46 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 22.953 4.591 4.8223 0.003418 \*\*   
## THIregime 1 48.578 48.578 51.0303 2.204e-07 \*\*\*  
## Colour:THIregime 5 1.278 0.256 0.2685 0.925865   
## Residuals 24 22.847 0.952   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9519479   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.38874 1.681578 6 52 56.32093  
## BLK 54.70929 1.562066 6 53 56.42547  
## BRN 54.85190 1.984898 6 52 57.32277  
## WHT 55.72134 1.227593 6 54 56.97430  
## WT/BLK 53.78960 1.318560 6 52 55.23197  
## WT/BR 56.17560 1.444796 6 54 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.74171   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.17560 a  
## WHT 55.72134 ab  
## BRN 54.85190 abc  
## BLK 54.70929 abc  
## BL/BR 54.38874 bc  
## WT/BLK 53.78960 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9519479   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.10105 0.9063985 18 54.3608 58.0197  
## MornLow 53.77778 1.3956047 18 52.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6712335   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.10105 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9519479 24 54.93941 1.775917 2.872381  
##   
## $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 55.77748 0.5324007 3 55.25686 56.32093 55.50576 55.75467  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.08525 0.2949545 3 55.90139 56.42547 55.91514 55.92890  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.03714 1.1409954 3 55.14485 57.32277 55.39432 55.64379  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 56.77601 0.3116814 3 56.41675 56.97430 56.67686 56.93696  
## WHT:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.91254 0.4798012 3 54.36080 55.23197 54.75283 55.14485  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 57.01786 0.8700770 3 56.45160 58.01970 56.51694 56.58228  
## WT/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.03780  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.17718  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.48328  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.95563  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.18841  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.30099  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.01786 a  
## WHT:MornHigh 56.77601 a  
## BLK:MornHigh 56.08525 ab  
## BRN:MornHigh 56.03714 ab  
## BL/BR:MornHigh 55.77748 abc  
## WT/BR:MornLow 55.33333 abcd  
## WT/BLK:MornHigh 54.91254 abcd  
## WHT:MornLow 54.66667 abcd  
## BRN:MornLow 53.66667 bcd  
## BLK:MornLow 53.33333 bcd  
## BL/BR:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.66667 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 17.755 3.551 4.5538 0.004626 \*\*   
## THIregime 1 54.768 54.768 70.2343 1.373e-08 \*\*\*  
## Colour:THIregime 5 1.405 0.281 0.3603 0.870475   
## Residuals 24 18.715 0.780   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7797846   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.77735 1.940249 6 52 57.19831  
## BLK 54.74169 1.751521 6 52 56.53872  
## BRN 55.21709 1.515963 6 53 56.97430  
## WHT 55.24908 1.545781 6 53 57.04399  
## WT/BLK 54.24666 1.561418 6 52 56.19025  
## WT/BR 56.50198 1.009678 6 55 57.67123  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.576364   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.50198 a  
## WHT 55.24908 ab  
## BRN 55.21709 ab  
## BL/BR 54.77735 b  
## BLK 54.74169 b  
## WT/BLK 54.24666 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7797846   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.35573 0.7706702 18 54.8835 57.67123  
## MornLow 53.88889 1.2782750 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6075113   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.35573 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7797846 24 55.12231 1.60199 2.599697  
##   
## $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 56.22136 0.9069454 3 55.40620 57.19831 55.73289 56.05958  
## BL/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BLK:MornHigh 56.15005 0.6211206 3 55.43371 56.53872 55.95572 56.47774  
## BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## BRN:MornHigh 56.43418 0.5490424 3 55.87663 56.97430 56.16412 56.45160  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.49817 0.5412713 3 55.96157 57.04399 56.22525 56.48894  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.49332 0.6577164 3 54.88350 56.19025 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 57.33729 0.3493730 3 56.97430 57.67123 57.17031 57.36633  
## WT/BR:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.62894  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.50823  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.71295  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.76646  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.79823  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.51878  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.33729 a  
## WHT:MornHigh 56.49817 ab  
## BRN:MornHigh 56.43418 ab  
## BL/BR:MornHigh 56.22136 ab  
## BLK:MornHigh 56.15005 ab  
## WT/BR:MornLow 55.66667 abc  
## WT/BLK:MornHigh 55.49332 abcd  
## BRN:MornLow 54.00000 bcd  
## WHT:MornLow 54.00000 bcd  
## BL/BR:MornLow 53.33333 cd  
## BLK:MornLow 53.33333 cd  
## WT/BLK:MornLow 53.00000 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 33.192 6.638 6.5004 0.0005935 \*\*\*  
## THIregime 1 37.471 37.471 36.6920 2.959e-06 \*\*\*  
## Colour:THIregime 5 0.725 0.145 0.1419 0.9805895   
## Residuals 24 24.510 1.021   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.02124   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.08072 1.392297 6 52 55.75467  
## BLK 55.04229 1.345567 6 53 56.59679  
## BRN 53.85296 1.985695 6 51 56.30905  
## WHT 55.48871 1.215083 6 54 56.97430  
## WT/BLK 52.48408 1.337981 6 51 54.09945  
## WT/BR 54.50594 1.257976 6 53 56.13798  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.803986   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.48871 a  
## BLK 55.04229 a  
## WT/BR 54.50594 a  
## BL/BR 54.08072 ab  
## BRN 53.85296 ab  
## WT/BLK 52.48408 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.02124   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.26268 1.065937 18 53.3154 56.9743  
## MornLow 53.22222 1.516791 18 51.0000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.695234   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.26268 a  
## MornLow 53.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.02124 24 54.24245 1.863051 2.975085  
##   
## $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 55.16144 0.5851027 3 54.58481 55.75467 54.86483 55.14485  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.08459 0.5169560 3 55.56301 56.59679 55.82849 56.09396  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 55.03925 1.1411603 3 54.09945 56.30905 54.40436 54.70927  
## BRN:MornLow 52.66667 2.0816660 3 51.00000 55.00000 51.50000 52.00000  
## WHT:MornHigh 56.31076 0.5748435 3 55.96375 56.97430 55.97899 55.99424  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 53.63483 0.4116973 3 53.31540 54.09945 53.40252 53.48963  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 55.34522 0.7139847 3 54.75283 56.13798 54.94884 55.14485  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.44976  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.34538  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.50916  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.48427  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 55.64142  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.31076 a  
## BLK:MornHigh 56.08459 a  
## WT/BR:MornHigh 55.34522 ab  
## BL/BR:MornHigh 55.16144 ab  
## BRN:MornHigh 55.03925 ab  
## WHT:MornLow 54.66667 ab  
## BLK:MornLow 54.00000 abc  
## WT/BR:MornLow 53.66667 abc  
## WT/BLK:MornHigh 53.63483 abc  
## BL/BR:MornLow 53.00000 bc  
## BRN:MornLow 52.66667 bc  
## WT/BLK:MornLow 51.33333 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 13.985 2.797 2.9293 0.0334 \*   
## THIregime 1 47.409 47.409 49.6511 2.764e-07 \*\*\*  
## Colour:THIregime 5 0.811 0.162 0.1698 0.9713   
## Residuals 24 22.916 0.955   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9548385   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.83028 1.340207 6 53 56.19025  
## BLK 54.65853 1.816961 6 52 56.86976  
## BRN 54.28995 1.585284 6 52 56.11897  
## WHT 55.39179 1.595643 6 53 57.35761  
## WT/BLK 53.50678 1.361435 6 52 55.14485  
## WT/BR 55.20807 1.488932 6 53 57.14853  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.744352   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.39179 a  
## WT/BR 55.20807 ab  
## BL/BR 54.83028 ab  
## BLK 54.65853 ab  
## BRN 54.28995 ab  
## WT/BLK 53.50678 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9548385   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.79513 0.8121075 18 54.3608 57.35761  
## MornLow 53.50000 1.2485285 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6722519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.79513 a  
## MornLow 53.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9548385 24 54.64757 1.78811 2.876739  
##   
## $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 55.99389 0.3083343 3 55.63851 56.19025 55.89571 56.15291  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 55.98372 0.8072360 3 55.29004 56.86976 55.54070 55.79135  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 55.57991 0.5393316 3 55.04031 56.11897 55.31037 55.58043  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.45025 0.8190522 3 55.76556 57.35761 55.99657 56.22759  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.68023 0.4116973 3 54.36080 55.14485 54.44792 54.53503  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.08281 0.9557589 3 55.30166 57.14853 55.54994 55.79823  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.17158  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.33055  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.84970  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.79260  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.83994  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.47338  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.45025 a  
## WT/BR:MornHigh 56.08281 ab  
## BL/BR:MornHigh 55.99389 ab  
## BLK:MornHigh 55.98372 ab  
## BRN:MornHigh 55.57991 abc  
## WT/BLK:MornHigh 54.68023 abcd  
## WHT:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.33333 abcd  
## BL/BR:MornLow 53.66667 abcd  
## BLK:MornLow 53.33333 bcd  
## BRN:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT50 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 21.751 4.350 2.4643 0.06153 .   
## THIregime 1 40.985 40.985 23.2168 6.591e-05 \*\*\*  
## Colour:THIregime 5 0.829 0.166 0.0939 0.99237   
## Residuals 24 42.367 1.765   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.765306   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.29273 1.839599 6 52 57.20661  
## BLK 54.69090 1.848379 6 52 56.94679  
## BRN 55.34204 1.873407 6 52 57.32277  
## WHT 56.21101 1.262097 6 54 57.46215  
## WT/BLK 53.74604 1.480017 6 52 55.75467  
## WT/BR 54.45253 1.656062 6 52 56.55614  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.371806   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.21101 a  
## BRN 55.34204 ab  
## BL/BR 55.29273 ab  
## BLK 54.69090 ab  
## WT/BR 54.45253 ab  
## WT/BLK 53.74604 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.765306   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.02287 1.061899 18 54.3608 57.46215  
## MornLow 53.88889 1.640979 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.914065   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.02287 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.765306 24 54.95588 2.417664 3.911519  
##   
## $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 56.25213 1.1686051 3 54.94884 57.20661 55.77489 56.60094  
## BL/BR:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## BLK:MornHigh 56.04847 0.8239870 3 55.32780 56.94679 55.59931 55.87082  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 56.35076 1.1782639 3 55.04031 57.32277 55.86475 56.68919  
## BRN:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WHT:MornHigh 57.08869 0.5813119 3 56.41893 57.46215 56.90196 57.38499  
## WHT:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BLK:MornHigh 54.82542 0.8047493 3 54.36080 55.75467 54.36080 54.36080  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.57172 0.8747745 3 54.88350 56.55614 55.07951 55.27553  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.90378  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.40881  
## BLK:MornLow 54.00000  
## BRN:MornHigh 57.00598  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.42357  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.05773  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.91583  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.08869 a  
## BRN:MornHigh 56.35076 ab  
## BL/BR:MornHigh 56.25213 ab  
## BLK:MornHigh 56.04847 ab  
## WT/BR:MornHigh 55.57172 ab  
## WHT:MornLow 55.33333 ab  
## WT/BLK:MornHigh 54.82542 ab  
## BL/BR:MornLow 54.33333 ab  
## BRN:MornLow 54.33333 ab  
## BLK:MornLow 53.33333 ab  
## WT/BR:MornLow 53.33333 ab  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT51 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.617 1.523 2.1096 0.09911 .   
## THIregime 1 48.822 48.822 67.6081 1.936e-08 \*\*\*  
## Colour:THIregime 5 0.565 0.113 0.1566 0.97591   
## Residuals 24 17.331 0.722   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7221321   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.61911 1.533367 6 53 57.30099  
## BLK 54.70010 1.553487 6 53 56.42409  
## BRN 54.89242 1.579336 6 53 56.84363  
## WHT 55.19666 1.494731 6 53 56.93945  
## WT/BLK 54.11598 1.466119 6 52 55.92890  
## WT/BR 54.79633 1.304279 6 53 56.13798  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.516972   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.61911 a  
## WHT 55.19666 a  
## BRN 54.89242 a  
## WT/BR 54.79633 a  
## BLK 54.70010 a  
## WT/BLK 54.11598 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7221321   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05131 0.6818057 18 54.3608 57.30099  
## MornLow 53.72222 1.0178152 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5846223   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05131 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7221321 24 54.88677 1.548249 2.501749  
##   
## $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 56.57156 0.9073274 3 55.55554 57.30099 56.20684 56.85814  
## BL/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BLK:MornHigh 56.06686 0.3095876 3 55.87663 56.42409 55.88825 55.89986  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.11818 0.6284732 3 55.73883 56.84363 55.75546 55.77209  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.39331 0.5381326 3 55.86356 56.93945 56.12025 56.37693  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.23197 0.7984374 3 54.36080 55.92890 54.88350 55.40620  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.92600 0.3018229 3 55.58043 56.13798 55.82000 56.05958  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.07957  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.16198  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.30786  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.65819  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.09878  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.57156 a  
## WHT:MornHigh 56.39331 ab  
## BRN:MornHigh 56.11818 abc  
## BLK:MornHigh 56.06686 abc  
## WT/BR:MornHigh 55.92600 abc  
## WT/BLK:MornHigh 55.23197 abcd  
## BL/BR:MornLow 54.66667 abcd  
## WHT:MornLow 54.00000 bcd  
## BRN:MornLow 53.66667 cd  
## WT/BR:MornLow 53.66667 cd  
## BLK:MornLow 53.33333 d  
## WT/BLK:MornLow 53.00000 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 6.918 1.384 1.0742 0.3993   
## THIregime 1 48.258 48.258 37.4688 2.531e-06 \*\*\*  
## Colour:THIregime 5 0.248 0.050 0.0385 0.9991   
## Residuals 24 30.911 1.288   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.287959   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.84272 1.534171 6 53 56.75029  
## BLK 55.73747 1.436481 6 54 57.52451  
## BRN 55.09763 1.404266 6 53 56.73671  
## WHT 55.45625 1.934467 6 52 57.49700  
## WT/BLK 54.66016 1.704386 6 52 56.45160  
## WT/BR 54.48592 1.687380 6 52 56.62583  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.025911   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.73747 a  
## WHT 55.45625 a  
## BRN 55.09763 a  
## BL/BR 54.84272 a  
## WT/BLK 54.66016 a  
## WT/BR 54.48592 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.287959   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.20449 0.7783515 18 54.8835 57.52451  
## MornLow 53.88889 1.2782750 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7807611   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.20449 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.287959 24 55.04669 2.061673 3.341077  
##   
## $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 56.01878 0.6336669 3 55.63851 56.75029 55.65303 55.66755  
## BL/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BLK:MornHigh 56.80827 0.6208966 3 56.42256 57.52451 56.45015 56.47774  
## BLK:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## BRN:MornHigh 56.19527 0.5617072 3 55.61528 56.73671 55.92454 56.23381  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.57916 1.1132185 3 55.34086 57.49700 56.12025 56.89963  
## WHT:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WT/BLK:MornHigh 55.98698 0.8047493 3 55.05773 56.45160 55.75467 56.45160  
## WT/BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BR:MornHigh 55.63851 0.8940960 3 54.88350 56.62583 55.14485 55.40620  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.20892  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 57.00112  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.48526  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.19831  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.45160  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.01602  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.80827 a  
## WHT:MornHigh 56.57916 ab  
## BRN:MornHigh 56.19527 ab  
## BL/BR:MornHigh 56.01878 ab  
## WT/BLK:MornHigh 55.98698 ab  
## WT/BR:MornHigh 55.63851 ab  
## BLK:MornLow 54.66667 ab  
## WHT:MornLow 54.33333 ab  
## BRN:MornLow 54.00000 ab  
## BL/BR:MornLow 53.66667 ab  
## WT/BLK:MornLow 53.33333 b  
## WT/BR:MornLow 53.33333 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 14.040 2.808 1.6524 0.1846   
## THIregime 1 48.084 48.084 28.2951 1.855e-05 \*\*\*  
## Colour:THIregime 5 1.187 0.237 0.1397 0.9813   
## Residuals 24 40.785 1.699   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.699389   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.10350 1.774900 6 52 56.21929  
## BLK 55.23451 1.971849 6 52 57.54927  
## BRN 55.12232 1.426341 6 53 56.80007  
## WHT 56.24016 1.072177 6 55 57.45966  
## WT/BLK 54.96445 1.923479 6 52 57.49700  
## WT/BR 55.26936 2.022143 6 52 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.327103   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.24016 a  
## WT/BR 55.26936 a  
## BLK 55.23451 a  
## BRN 55.12232 a  
## WT/BLK 54.96445 a  
## BL/BR 54.10350 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.699389   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.31143 0.9705082 18 54.3608 57.75835  
## MornLow 54.00000 1.5339300 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.896837   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.31143 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.699389 24 55.15572 2.363502 3.837796  
##   
## $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 55.54033 0.5906549 3 55.14485 56.21929 55.20085 55.25686  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 56.46902 1.0716412 3 55.40620 57.54927 55.92890 56.45160  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 56.24463 0.5543818 3 55.69131 56.80007 55.96691 56.24252  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 57.14698 0.2712867 3 56.97430 57.45966 56.99063 57.00697  
## WHT:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WT/BLK:MornHigh 55.92890 1.5681000 3 54.36080 57.49700 55.14485 55.92890  
## WT/BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.53872 1.1784924 3 55.40620 57.75835 55.92890 56.45160  
## WT/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.73807  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 57.00044  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.52129  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.23332  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 57.10498  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.14698 a  
## WT/BR:MornHigh 56.53872 a  
## BLK:MornHigh 56.46902 ab  
## BRN:MornHigh 56.24463 ab  
## WT/BLK:MornHigh 55.92890 ab  
## BL/BR:MornHigh 55.54033 ab  
## WHT:MornLow 55.33333 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WT/BLK:MornLow 54.00000 ab  
## WT/BR:MornLow 54.00000 ab  
## BL/BR:MornLow 52.66667 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 11.032 2.206 2.1203 0.09769 .   
## THIregime 1 46.187 46.187 44.3839 6.849e-07 \*\*\*  
## Colour:THIregime 5 0.592 0.118 0.1138 0.98815   
## Residuals 24 24.975 1.041   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.040625   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.93835 1.270279 6 53 56.50968  
## BLK 55.12885 1.755474 6 52 56.81749  
## BRN 55.03467 1.133640 6 54 56.10313  
## WHT 55.11006 1.879288 6 52 57.27299  
## WT/BLK 54.29022 1.628678 6 52 56.45160  
## WT/BR 53.62729 1.478557 6 52 55.30166  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.821027   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.12885 a  
## WHT 55.11006 a  
## BRN 55.03467 a  
## BL/BR 54.93835 a  
## WT/BLK 54.29022 a  
## WT/BR 53.62729 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.040625   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.82092 0.7728841 18 54.70927 57.27299  
## MornLow 53.55556 1.2472191 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7018015   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.82092 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.040625 24 54.68824 1.86532 3.003189  
##   
## $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 55.87670 0.62651362 3 55.25686 56.50968 55.56021 55.86356  
## BL/BR:MornLow 54.00000 1.00000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.25770 0.93877978 3 55.17389 56.81749 55.97781 56.78173  
## BLK:MornLow 54.00000 1.73205081 3 52.00000 55.00000 53.50000 55.00000  
## BRN:MornHigh 56.06934 0.03489463 3 56.03344 56.10313 56.05245 56.07145  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.22012 1.06424470 3 55.14485 57.27299 55.69369 56.24252  
## WHT:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.58043 0.79843744 3 54.88350 56.45160 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.00000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 54.92125 0.33016336 3 54.70927 55.30166 54.73105 54.75283  
## WT/BR:MornLow 52.33333 0.57735027 3 52.00000 53.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.18662  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.79961  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.08729  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.75775  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.02724  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.25770 a  
## WHT:MornHigh 56.22012 a  
## BRN:MornHigh 56.06934 a  
## BL/BR:MornHigh 55.87670 ab  
## WT/BLK:MornHigh 55.58043 ab  
## WT/BR:MornHigh 54.92125 abc  
## BL/BR:MornLow 54.00000 abc  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 54.00000 abc  
## WT/BLK:MornLow 53.00000 bc  
## WT/BR:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT55 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 1010.98 202.197 2.4670 0.06131 .  
## THIregime 1 44.30 44.295 0.5404 0.46937   
## Colour:THIregime 5 52.58 10.517 0.1283 0.98449   
## Residuals 24 1967.09 81.962   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 81.96197   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 40.22848 20.0499844 6 5 53.00000  
## BLK 54.50895 1.3643502 6 53 56.09396  
## BRN 53.90453 0.6696103 6 53 55.00000  
## WHT 54.55298 1.1165138 6 53 56.00000  
## WT/BLK 54.13807 2.3435067 6 51 57.49700  
## WT/BR 54.98913 1.3201273 6 53 56.55614  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 16.16127   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 54.98913 a  
## WHT 54.55298 a  
## BLK 54.50895 a  
## WT/BLK 54.13807 a  
## BRN 53.90453 a  
## BL/BR 40.22848 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 81.96197   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.16294 6.702544 18 26.88171 57.497  
## MornLow 50.94444 11.547713 18 5.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 6.228354   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.16294 a  
## MornLow 50.94444 a  
## $statistics  
## MSerror Df Mean CV MSD  
## 81.96197 24 52.05369 17.39221 26.65273  
##   
## $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 43.79030 14.6496333 3 26.88171 52.67654 39.34718 51.81264  
## BL/BR:MornLow 36.66667 27.4286954 3 5.00000 53.00000 28.50000 52.00000  
## BLK:MornHigh 55.01789 0.9362410 3 54.38984 56.09396 54.47986 54.56988  
## BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BRN:MornHigh 53.80906 0.3059437 3 53.48963 54.09945 53.66387 53.83810  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 54.77263 0.7990216 3 54.19746 55.68497 54.31646 54.43547  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.60947 1.7034223 3 54.18657 57.49700 54.66571 55.14485  
## WT/BLK:MornLow 52.66667 2.0816660 3 51.00000 55.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.97827 0.6493747 3 55.27553 56.55614 55.68933 56.10313  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 52.24459  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.33192  
## BLK:MornLow 54.50000  
## BRN:MornHigh 53.96878  
## BRN:MornLow 54.50000  
## WHT:MornHigh 55.06022  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.32093  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.32964  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 55.97827 a  
## WT/BLK:MornHigh 55.60947 a  
## BLK:MornHigh 55.01789 a  
## WHT:MornHigh 54.77263 a  
## WHT:MornLow 54.33333 a  
## BLK:MornLow 54.00000 a  
## BRN:MornLow 54.00000 a  
## WT/BR:MornLow 54.00000 a  
## BRN:MornHigh 53.80906 a  
## WT/BLK:MornLow 52.66667 a  
## BL/BR:MornHigh 43.79030 a  
## BL/BR:MornLow 36.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT56 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.401 2.280 3.3696 0.01906 \*   
## THIregime 1 43.707 43.707 64.5917 2.909e-08 \*\*\*  
## Colour:THIregime 5 0.344 0.069 0.1017 0.99083   
## Residuals 24 16.240 0.677   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6766711   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.82815 1.522613 6 52 55.73289  
## BLK 54.28143 1.577680 6 52 56.10313  
## BRN 54.63754 1.146956 6 53 55.84178  
## WHT 54.73317 1.433492 6 53 56.52129  
## WT/BLK 53.04973 1.402926 6 51 54.88350  
## WT/BR 54.08114 1.382851 6 52 55.66755  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.468446   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 54.73317 a  
## BRN 54.63754 a  
## BLK 54.28143 ab  
## WT/BR 54.08114 ab  
## BL/BR 53.82815 ab  
## WT/BLK 53.04973 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6766711   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.20372 0.7663807 18 53.3154 56.52129  
## MornLow 53.00000 1.0289915 18 51.0000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5659211   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.20372 a  
## MornLow 53.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6766711 24 54.10186 1.520466 2.421722  
##   
## $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 54.98963 0.6445347 3 54.58481 55.73289 54.61800 54.65119  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 55.56286 0.5445278 3 55.01418 56.10313 55.29272 55.57126  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 55.60842 0.3572699 3 55.19712 55.84178 55.49173 55.78635  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 55.79968 0.6257914 3 55.40620 56.52129 55.43887 55.47154  
## WHT:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BLK:MornHigh 54.09945 0.7840500 3 53.31540 54.88350 53.70743 54.09945  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.16227 0.5235704 3 54.62215 55.66755 54.90964 55.19712  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.19204  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 55.83720  
## BLK:MornLow 53.50000  
## BRN:MornHigh 55.81406  
## BRN:MornLow 54.00000  
## WHT:MornHigh 55.99642  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 54.49148  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.43234  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 55.79968 a  
## BRN:MornHigh 55.60842 a  
## BLK:MornHigh 55.56286 a  
## WT/BR:MornHigh 55.16227 ab  
## BL/BR:MornHigh 54.98963 abc  
## WT/BLK:MornHigh 54.09945 abcd  
## BRN:MornLow 53.66667 abcd  
## WHT:MornLow 53.66667 abcd  
## BLK:MornLow 53.00000 bcd  
## WT/BR:MornLow 53.00000 bcd  
## BL/BR:MornLow 52.66667 cd  
## WT/BLK:MornLow 52.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT57 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 38.096 7.619 4.6169 0.004306 \*\*   
## THIregime 1 37.555 37.555 22.7561 7.446e-05 \*\*\*  
## Colour:THIregime 5 1.034 0.207 0.1254 0.985273   
## Residuals 24 39.607 1.650   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.65031   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.49958 1.3448561 6 53 56.04506  
## BLK 55.27150 1.5662157 6 53 57.07884  
## BRN 56.41288 0.9083644 6 55 57.35445  
## WHT 55.99218 1.3006618 6 54 57.53185  
## WT/BLK 53.24543 1.9728908 6 50 55.58043  
## WT/BR 55.03995 2.2290098 6 52 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.293253   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.41288 a  
## WHT 55.99218 a  
## BLK 55.27150 ab  
## WT/BR 55.03995 ab  
## BL/BR 54.49958 ab  
## WT/BLK 53.24543 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.65031   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.09828 1.323849 18 52.27 57.75835  
## MornLow 54.05556 1.696787 18 50.00 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8837916   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.09828 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.65031 24 55.07692 2.332455 3.781972  
##   
## $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 55.66582 0.3284595 3 55.47154 56.04506 55.47620 55.48087  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.54300 0.5314671 3 56.01602 57.07884 56.27507 56.53413  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 57.15909 0.2428564 3 56.88718 57.35445 57.06142 57.23565  
## BRN:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WHT:MornHigh 56.98436 0.5253947 3 56.48427 57.53185 56.71062 56.93696  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.15753 1.7034223 3 52.27000 55.58043 53.44608 54.62215  
## WT/BLK:MornLow 52.33333 2.0816660 3 50.00000 54.00000 51.50000 53.00000  
## WT/BR:MornHigh 56.07990 1.4753699 3 54.98804 57.75835 55.24068 55.49332  
## WT/BR:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.76296  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.80649  
## BLK:MornLow 54.50000  
## BRN:MornHigh 57.29505  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.23441  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.10129  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.62583  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.15909 a  
## WHT:MornHigh 56.98436 ab  
## BLK:MornHigh 56.54300 ab  
## WT/BR:MornHigh 56.07990 abc  
## BRN:MornLow 55.66667 abc  
## BL/BR:MornHigh 55.66582 abc  
## WHT:MornLow 55.00000 abc  
## WT/BLK:MornHigh 54.15753 abc  
## BLK:MornLow 54.00000 abc  
## WT/BR:MornLow 54.00000 abc  
## BL/BR:MornLow 53.33333 bc  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT58 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.740 3.348 3.3127 0.02047 \*   
## THIregime 1 49.217 49.217 48.7000 3.24e-07 \*\*\*  
## Colour:THIregime 5 1.069 0.214 0.2116 0.95424   
## Residuals 24 24.255 1.011   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.010619   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.05162 1.692482 6 53 57.69301  
## BLK 54.86063 1.998486 6 52 57.27692  
## BRN 56.34231 1.185237 6 55 57.75835  
## WHT 56.16071 1.779893 6 54 58.40301  
## WT/BLK 54.52948 1.384938 6 53 56.19025  
## WT/BR 55.40408 1.248585 6 54 56.86976  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.79458   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.34231 a  
## WHT 56.16071 ab  
## BL/BR 56.05162 ab  
## WT/BR 55.40408 ab  
## BLK 54.86063 ab  
## WT/BLK 54.52948 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.010619   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.72739 0.8326419 18 55.4062 58.40301  
## MornLow 54.38889 1.3345583 18 52.0000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6916092   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.72739 a  
## MornLow 54.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.010619 24 55.55814 1.809448 2.959574  
##   
## $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 57.10325 0.9184264 3 56.04506 57.69301 56.80836 57.57167  
## BL/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## BLK:MornHigh 56.38792 0.8084942 3 55.69659 57.27692 55.94342 56.19025  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 57.35128 0.3529271 3 57.13111 57.75835 57.14774 57.16437  
## BRN:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WHT:MornHigh 57.32142 0.9371797 3 56.75029 58.40301 56.78062 56.81096  
## WHT:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.72563 0.4116973 3 55.40620 56.19025 55.49332 55.58043  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.47483 0.3529390 3 56.19025 56.86976 56.27737 56.36448  
## WT/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.63234  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 56.73358  
## BLK:MornLow 54.00000  
## BRN:MornHigh 57.46136  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.60698  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.88534  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.61712  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.35128 a  
## WHT:MornHigh 57.32142 a  
## BL/BR:MornHigh 57.10325 ab  
## WT/BR:MornHigh 56.47483 ab  
## BLK:MornHigh 56.38792 ab  
## WT/BLK:MornHigh 55.72563 abc  
## BRN:MornLow 55.33333 abc  
## BL/BR:MornLow 55.00000 abc  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 54.33333 bc  
## BLK:MornLow 53.33333 c  
## WT/BLK:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT59 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 44.680 8.936 8.3942 0.0001056 \*\*\*  
## THIregime 1 36.559 36.559 34.3423 4.809e-06 \*\*\*  
## Colour:THIregime 5 1.373 0.275 0.2580 0.9315308   
## Residuals 24 25.549 1.065   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.064546   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.04016 1.345993 6 53 56.60094  
## BLK 55.99102 1.305953 6 54 57.54927  
## BRN 56.17573 1.230594 6 54 57.40196  
## WHT 54.67784 1.530165 6 53 56.38191  
## WT/BLK 52.76690 1.295392 6 51 54.18657  
## WT/BR 55.06142 1.909245 6 53 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.841838   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.17573 a  
## BLK 55.99102 a  
## WT/BR 55.06142 a  
## BL/BR 55.04016 a  
## WHT 54.67784 a  
## WT/BLK 52.76690 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.064546   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95991 1.252234 18 53.3154 57.54927  
## MornLow 53.94444 1.625974 18 51.0000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7098218   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95991 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.064546 24 54.95218 1.877575 3.03751  
##   
## $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 56.08032 0.5324007 3 55.53688 56.60094 55.82000 56.10313  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.98204 0.5633944 3 56.42256 57.54927 56.69843 56.97430  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 57.01812 0.5689327 3 56.36448 57.40196 56.82620 57.28792  
## BRN:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WHT:MornHigh 56.02234 0.3116098 3 55.83089 56.38191 55.84256 55.85423  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 53.86714 0.4798012 3 53.31540 54.18657 53.70743 54.09945  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.78951 1.4796504 3 54.88350 57.49700 54.93577 54.98804  
## WT/BR:MornLow 54.33333 2.3094011 3 53.00000 57.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.35204  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.26179  
## BLK:MornLow 55.50000  
## BRN:MornHigh 57.34494  
## BRN:MornLow 56.00000  
## WHT:MornHigh 56.11807  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 56.24252  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.01812 a  
## BLK:MornHigh 56.98204 a  
## BL/BR:MornHigh 56.08032 ab  
## WHT:MornHigh 56.02234 ab  
## WT/BR:MornHigh 55.78951 ab  
## BRN:MornLow 55.33333 ab  
## BLK:MornLow 55.00000 ab  
## WT/BR:MornLow 54.33333 abc  
## BL/BR:MornLow 54.00000 abc  
## WT/BLK:MornHigh 53.86714 bc  
## WHT:MornLow 53.33333 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT60 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 46.993 9.399 6.698 0.0004901 \*\*\*  
## THIregime 1 37.884 37.884 26.998 2.532e-05 \*\*\*  
## Colour:THIregime 5 1.270 0.254 0.181 0.9670659   
## Residuals 24 33.677 1.403   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.403215   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.23490 1.841790 6 52 56.56776  
## BLK 56.27188 1.821780 6 53 58.15038  
## BRN 55.05064 1.360248 6 53 56.66939  
## WHT 55.92772 1.249320 6 54 57.39246  
## WT/BLK 52.94114 1.813907 6 50 55.14485  
## WT/BR 55.72870 1.074162 6 54 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.114615   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.27188 a  
## WHT 55.92772 a  
## WT/BR 55.72870 a  
## BRN 55.05064 ab  
## BL/BR 54.23490 ab  
## WT/BLK 52.94114 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.403215   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05166 1.235279 18 53.14117 58.15038  
## MornLow 54.00000 1.814970 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8149466   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05166 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.403215 24 55.02583 2.152759 3.487366  
##   
## $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 55.46981 0.9515823 3 54.88350 56.56776 54.92084 54.95817  
## BL/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## BLK:MornHigh 57.21043 1.1494564 3 55.92890 58.15038 56.74046 57.55202  
## BLK:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BRN:MornHigh 56.10129 0.5604809 3 55.54875 56.66939 55.81723 56.08571  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.85545 0.5656710 3 56.26492 57.39246 56.58694 56.90896  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.21561 1.0097018 3 53.14117 55.14485 53.75098 54.36080  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 56.45741 0.5399360 3 56.10313 57.07884 56.14669 56.19025  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 55.76296  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.85120  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.37755  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.15071  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.75283  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.63455  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.21043 a  
## WHT:MornHigh 56.85545 a  
## WT/BR:MornHigh 56.45741 ab  
## BRN:MornHigh 56.10129 ab  
## BL/BR:MornHigh 55.46981 ab  
## BLK:MornLow 55.33333 ab  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 55.00000 abc  
## WT/BLK:MornHigh 54.21561 abc  
## BRN:MornLow 54.00000 abc  
## BL/BR:MornLow 53.00000 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT61 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 1.952 0.390 0.3690 0.8648   
## THIregime 1 51.425 51.425 48.6008 3.294e-07 \*\*\*  
## Colour:THIregime 5 0.274 0.055 0.0518 0.9981   
## Residuals 24 25.395 1.058   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.058109   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.30272 1.600974 6 53 57.17031  
## BLK 55.59441 1.611271 6 53 57.22189  
## BRN 55.78696 1.653150 6 53 57.67123  
## WHT 55.60772 1.624718 6 53 57.25307  
## WT/BLK 55.13868 1.486916 6 53 56.97430  
## WT/BR 55.74063 1.635808 6 53 57.67123  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.836261   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.78696 a  
## WT/BR 55.74063 a  
## WHT 55.60772 a  
## BLK 55.59441 a  
## BL/BR 55.30272 a  
## WT/BLK 55.13868 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.058109   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.72371 0.6695381 18 55.4062 57.67123  
## MornLow 54.33333 1.0846523 18 53.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7076724   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.72371 a  
## MornLow 54.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.058109 24 55.52852 1.852461 3.028312  
##   
## $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 56.60544 0.5626419 3 56.04506 57.17031 56.32300 56.60094  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.85550 0.6214335 3 56.13798 57.22189 56.67230 57.20661  
## BLK:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## BRN:MornHigh 56.90725 0.8566115 3 55.98117 57.67123 56.52525 57.06934  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 56.88210 0.6275134 3 56.15758 57.25307 56.69662 57.23565  
## WHT:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## WT/BLK:MornHigh 56.27737 0.7984374 3 55.40620 56.97430 55.92890 56.45160  
## WT/BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BR:MornHigh 56.81459 0.9466633 3 55.79823 57.67123 56.38626 56.97430  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.88563  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.21425  
## BLK:MornLow 55.00000  
## BRN:MornHigh 57.37028  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.24436  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.32277  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.90725 a  
## WHT:MornHigh 56.88210 a  
## BLK:MornHigh 56.85550 a  
## WT/BR:MornHigh 56.81459 a  
## BL/BR:MornHigh 56.60544 a  
## WT/BLK:MornHigh 56.27737 a  
## BRN:MornLow 54.66667 a  
## WT/BR:MornLow 54.66667 a  
## BLK:MornLow 54.33333 a  
## WHT:MornLow 54.33333 a  
## BL/BR:MornLow 54.00000 a  
## WT/BLK:MornLow 54.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT62 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.394 3.279 4.4845 0.005007 \*\*   
## THIregime 1 46.276 46.276 63.2936 3.481e-08 \*\*\*  
## Colour:THIregime 5 1.162 0.232 0.3178 0.897362   
## Residuals 24 17.547 0.731   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7311255   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.30086 1.545294 6 53 57.26469  
## BLK 54.67712 1.836177 6 52 56.91928  
## BRN 54.85256 1.364646 6 53 56.23381  
## WHT 55.15590 1.266238 6 54 56.32093  
## WT/BLK 53.31108 1.645781 6 51 55.40620  
## WT/BR 55.17177 1.031097 6 54 56.53872  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.526389   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.30086 a  
## WT/BR 55.17177 a  
## WHT 55.15590 a  
## BRN 54.85256 a  
## BLK 54.67712 ab  
## WT/BLK 53.31108 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7311255   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.87865 0.7979565 18 53.8381 57.26469  
## MornLow 53.61111 1.1950333 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5882515   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.87865 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7311255 24 54.74488 1.561897 2.517279  
##   
## $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 56.26838 0.91005513 3 55.48087 57.26469 55.77022 56.05958  
## BL/BR:MornLow 54.33333 1.52752523 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 56.02091 0.82355136 3 55.30166 56.91928 55.57172 55.84178  
## BLK:MornLow 53.33333 1.52752523 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 56.03846 0.32136637 3 55.66755 56.23381 55.94078 56.21401  
## BRN:MornLow 53.66667 0.57735027 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.31180 0.00934084 3 56.30226 56.32093 56.30724 56.31221  
## WHT:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WT/BLK:MornHigh 54.62215 0.78405000 3 53.83810 55.40620 54.23013 54.62215  
## WT/BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 56.01021 0.46436806 3 55.66755 56.53872 55.74596 55.82436  
## WT/BR:MornLow 54.33333 0.57735027 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.66213  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.38053  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.22391  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.31657  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.01418  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.18154  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.31180 a  
## BL/BR:MornHigh 56.26838 a  
## BRN:MornHigh 56.03846 ab  
## BLK:MornHigh 56.02091 ab  
## WT/BR:MornHigh 56.01021 ab  
## WT/BLK:MornHigh 54.62215 abc  
## BL/BR:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.33333 abcd  
## WHT:MornLow 54.00000 abcd  
## BRN:MornLow 53.66667 bcd  
## BLK:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT63 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.177 2.235 1.9933 0.1161   
## THIregime 1 48.673 48.673 43.4026 8.175e-07 \*\*\*  
## Colour:THIregime 5 0.567 0.113 0.1011 0.9910   
## Residuals 24 26.914 1.121   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.121437   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.20523 1.505509 6 53 56.97430  
## BLK 54.71872 1.574510 6 53 56.48064  
## BRN 55.20191 1.316628 6 54 56.40804  
## WHT 55.75665 1.618040 6 53 57.53434  
## WT/BLK 54.11598 1.466119 6 52 55.92890  
## WT/BR 55.64480 1.996047 6 52 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.890412   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.75665 a  
## WT/BR 55.64480 a  
## BL/BR 55.20523 a  
## BRN 55.20191 a  
## BLK 54.71872 a  
## WT/BLK 54.11598 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.121437   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.26998 0.8300848 18 54.3608 57.53434  
## MornLow 53.94444 1.2589549 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7285418   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.26998 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.121437 24 55.10721 1.921671 3.117618  
##   
## $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 56.41046 0.555562467 3 55.86356 56.97430 56.12854 56.39352  
## BL/BR:MornLow 54.00000 1.000000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.10410 0.326352844 3 55.90277 56.48064 55.91583 55.92890  
## BLK:MornLow 53.33333 0.577350269 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.40382 0.004361829 3 56.39933 56.40804 56.40171 56.40408  
## BRN:MornLow 54.00000 0.000000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.84663 0.804743702 3 55.96157 57.53434 56.50278 57.04399  
## WHT:MornLow 54.66667 1.527525232 3 53.00000 56.00000 54.00000 55.00000  
## WT/BLK:MornHigh 55.23197 0.798437439 3 54.36080 55.92890 54.88350 55.40620  
## WT/BLK:MornLow 53.00000 1.000000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.62293 1.325500433 3 55.09258 57.40988 56.22945 57.36633  
## WT/BR:MornLow 54.66667 2.309401077 3 52.00000 56.00000 54.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.68391  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.20477  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.40606  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.28916  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.38810  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.84663 a  
## WT/BR:MornHigh 56.62293 a  
## BL/BR:MornHigh 56.41046 ab  
## BRN:MornHigh 56.40382 ab  
## BLK:MornHigh 56.10410 abc  
## WT/BLK:MornHigh 55.23197 abc  
## WHT:MornLow 54.66667 abc  
## WT/BR:MornLow 54.66667 abc  
## BL/BR:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## BLK:MornLow 53.33333 bc  
## WT/BLK:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT64 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 17.799 3.560 2.5532 0.05467 .   
## THIregime 1 47.310 47.310 33.9313 5.247e-06 \*\*\*  
## Colour:THIregime 5 1.218 0.244 0.1747 0.96947   
## Residuals 24 33.463 1.394   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.394274   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.22367 1.523253 6 52 55.99424  
## BLK 55.01407 2.335564 6 51 57.61316  
## BRN 55.84314 1.552555 6 53 57.27921  
## WHT 55.97470 1.284558 6 54 57.49700  
## WT/BLK 54.33378 1.667525 6 52 56.45160  
## WT/BR 54.48883 1.334808 6 53 56.03344  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.107867   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.97470 a  
## BRN 55.84314 a  
## BLK 55.01407 a  
## WT/BR 54.48883 a  
## WT/BLK 54.33378 a  
## BL/BR 54.22367 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.394274   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.12606 0.9068264 18 54.8835 57.61316  
## MornLow 53.83333 1.5048940 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.812346   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.12606 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.394274 24 54.9797 2.14769 3.476237  
##   
## $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 55.44734 0.5555625 3 54.88350 55.99424 55.17389 55.46428  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.36148 1.3628299 3 54.90964 57.61316 55.73564 56.56164  
## BLK:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## BRN:MornHigh 56.68629 0.9451953 3 55.59627 57.27921 56.38983 57.18338  
## BRN:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WHT:MornHigh 56.94941 0.5244749 3 56.45160 57.49700 56.67561 56.89963  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.66755 0.7840500 3 54.88350 56.45160 55.27553 55.66755  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.64432 0.3397922 3 55.40620 56.03344 55.44976 55.49332  
## WT/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.72926  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.08740  
## BLK:MornLow 55.00000  
## BRN:MornHigh 57.23129  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.19831  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.76338  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.94941 a  
## BRN:MornHigh 56.68629 ab  
## BLK:MornHigh 56.36148 abc  
## WT/BLK:MornHigh 55.66755 abc  
## WT/BR:MornHigh 55.64432 abc  
## BL/BR:MornHigh 55.44734 abc  
## BRN:MornLow 55.00000 abc  
## WHT:MornLow 55.00000 abc  
## BLK:MornLow 53.66667 abc  
## WT/BR:MornLow 53.33333 bc  
## BL/BR:MornLow 53.00000 c  
## WT/BLK:MornLow 53.00000 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 21.251 4.250 3.2064 0.02341 \*   
## THIregime 1 45.599 45.599 34.3995 4.752e-06 \*\*\*  
## Colour:THIregime 5 1.252 0.250 0.1889 0.96395   
## Residuals 24 31.813 1.326   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.325558   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.13912 0.9656052 6 55 57.19831  
## BLK 55.03221 1.8572173 6 52 57.11949  
## BRN 55.69218 1.8802544 6 53 58.01970  
## WHT 55.79160 1.6473823 6 53 57.60901  
## WT/BLK 54.44236 1.6784132 6 52 56.62583  
## WT/BR 53.98852 1.5115622 6 52 55.53688  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.055268   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 56.13912 a  
## WHT 55.79160 ab  
## BRN 55.69218 ab  
## BLK 55.03221 ab  
## WT/BLK 54.44236 ab  
## WT/BR 53.98852 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.325558   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.30644 0.950917 18 54.62215 58.0197  
## MornLow 54.05556 1.513555 18 52.00000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7920751   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.30644 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.325558 24 55.181 2.086458 3.389493  
##   
## $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 56.94492 0.2230527 3 56.77829 57.19831 56.81822 56.85814  
## BL/BR:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BLK:MornHigh 56.39775 0.8340815 3 55.48461 57.11949 56.03688 56.58915  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 56.71770 1.1618949 3 55.78635 58.01970 56.06670 56.34706  
## BRN:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WHT:MornHigh 56.91653 0.8092669 3 56.02691 57.60901 56.57030 57.11369  
## WHT:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WT/BLK:MornHigh 55.55139 1.0097018 3 54.62215 56.62583 55.01418 55.40620  
## WT/BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.31037 0.3699126 3 54.88350 55.53688 55.19712 55.51074  
## WT/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 57.02823  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.85432  
## BLK:MornLow 54.50000  
## BRN:MornHigh 57.18338  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.36135  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.01602  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.52381  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.94492 a  
## WHT:MornHigh 56.91653 a  
## BRN:MornHigh 56.71770 ab  
## BLK:MornHigh 56.39775 ab  
## WT/BLK:MornHigh 55.55139 abc  
## BL/BR:MornLow 55.33333 abc  
## WT/BR:MornHigh 55.31037 abc  
## BRN:MornLow 54.66667 abc  
## WHT:MornLow 54.66667 abc  
## BLK:MornLow 53.66667 abc  
## WT/BLK:MornLow 53.33333 bc  
## WT/BR:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT66 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.789 3.958 5.2178 0.002215 \*\*   
## THIregime 1 40.301 40.301 53.1298 1.573e-07 \*\*\*  
## Colour:THIregime 5 0.338 0.068 0.0892 0.993225   
## Residuals 24 18.205 0.759   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7585294   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.33508 1.175568 6 54 56.71295  
## BLK 55.67776 1.184941 6 54 56.89590  
## BRN 54.59152 1.439717 6 53 56.21401  
## WHT 55.36270 1.204007 6 54 56.77829  
## WT/BLK 53.41966 1.660503 6 51 55.58043  
## WT/BR 54.96155 1.644067 6 52 56.53872  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.554731   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.67776 a  
## WHT 55.36270 a  
## BL/BR 55.33508 a  
## WT/BR 54.96155 ab  
## BRN 54.59152 ab  
## WT/BLK 53.41966 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7585294   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.94942 0.9020261 18 53.57675 56.8959  
## MornLow 53.83333 1.2004901 18 51.00000 55.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5991744   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.94942 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7585294 24 54.89138 1.586653 2.564021  
##   
## $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 56.33683 0.3332788 3 56.07824 56.71295 56.14877 56.21929  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 56.68885 0.3315866 3 56.30641 56.89590 56.58533 56.86426  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 55.84970 0.3154983 3 55.66755 56.21401 55.66755 55.66755  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.39207 0.3345874 3 56.19025 56.77829 56.19896 56.20767  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 54.50599 1.0097018 3 53.57675 55.58043 53.96878 54.36080  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.92309 0.9918045 3 54.77896 56.53872 55.61528 56.45160  
## WT/BR:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.46612  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.88008  
## BLK:MornLow 55.00000  
## BRN:MornHigh 55.94078  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.49298  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.49516  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.68885 a  
## WHT:MornHigh 56.39207 ab  
## BL/BR:MornHigh 56.33683 ab  
## WT/BR:MornHigh 55.92309 ab  
## BRN:MornHigh 55.84970 abc  
## BLK:MornLow 54.66667 abcd  
## WT/BLK:MornHigh 54.50599 abcd  
## BL/BR:MornLow 54.33333 abcd  
## WHT:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.00000 bcd  
## BRN:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT67 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.172 2.634 2.7804 0.04053 \*   
## THIregime 1 47.601 47.601 50.2399 2.508e-07 \*\*\*  
## Colour:THIregime 5 0.482 0.096 0.1017 0.99083   
## Residuals 24 22.740 0.947   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9474806   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.55593 1.403251 6 53 56.15291  
## BLK 56.24503 1.292054 6 54 57.52451  
## BRN 54.82220 1.677191 6 52 56.71295  
## WHT 55.15626 1.774201 6 52 56.86976  
## WT/BLK 54.61660 1.483758 6 53 56.45160  
## WT/BR 54.50335 1.537432 6 52 56.10313  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.737618   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.24503 a  
## WHT 55.15626 ab  
## BRN 54.82220 ab  
## WT/BLK 54.61660 ab  
## BL/BR 54.55593 ab  
## WT/BR 54.50335 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9474806   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.13312 0.7628566 18 54.8835 57.52451  
## MornLow 53.83333 1.2485285 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6696567   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.13312 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9474806 24 54.98323 1.770333 2.865633  
##   
## $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 55.77852 0.3244177 3 55.58043 56.15291 55.59132 55.60221  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 57.15674 0.5887111 3 56.47774 57.52451 56.97285 57.46796  
## BLK:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BRN:MornHigh 55.97774 0.8326454 3 55.07357 56.71295 55.61013 56.14669  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.31252 0.9266307 3 55.24286 56.86976 56.03391 56.82496  
## WHT:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## WT/BLK:MornHigh 55.89986 0.4798012 3 55.58043 56.45160 55.62399 55.66755  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 55.67336 0.6849239 3 54.88350 56.10313 55.45847 56.03344  
## WT/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.87756  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.49624  
## BLK:MornLow 56.00000  
## BRN:MornHigh 56.42982  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.84736  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.06829  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.15674 a  
## WHT:MornHigh 56.31252 ab  
## BRN:MornHigh 55.97774 abc  
## WT/BLK:MornHigh 55.89986 abc  
## BL/BR:MornHigh 55.77852 abc  
## WT/BR:MornHigh 55.67336 abc  
## BLK:MornLow 55.33333 abc  
## WHT:MornLow 54.00000 bc  
## BRN:MornLow 53.66667 bc  
## BL/BR:MornLow 53.33333 c  
## WT/BLK:MornLow 53.33333 c  
## WT/BR:MornLow 53.33333 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 54.295 10.859 19.6814 8.676e-08 \*\*\*  
## THIregime 1 34.921 34.921 63.2929 3.482e-08 \*\*\*  
## Colour:THIregime 5 1.528 0.306 0.5538 0.734   
## Residuals 24 13.242 0.552   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5517434   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.79513 1.492711 6 52 55.66755  
## BLK 55.05608 1.358622 6 53 56.62583  
## BRN 55.69029 1.058971 6 54 56.92678  
## WHT 54.49728 1.341333 6 53 56.02691  
## WT/BLK 51.83132 1.352343 6 50 53.31540  
## WT/BR 54.70600 1.055813 6 53 56.03344  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.325982   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.69029 a  
## BLK 55.05608 ab  
## WT/BR 54.70600 ab  
## WHT 54.49728 ab  
## BL/BR 53.79513 b  
## WT/BLK 51.83132 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5517434   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.24759 1.223638 18 52.53135 56.92678  
## MornLow 53.27778 1.601674 18 50.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5110173   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.24759 a  
## MornLow 53.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5517434 24 54.26268 1.368886 2.186774  
##   
## $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 54.92360 0.6456126 3 54.51014 55.66755 54.55163 54.59311  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 56.11215 0.5184070 3 55.58915 56.62583 55.85531 56.12147  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.38059 0.6115834 3 55.71982 56.92678 56.10749 56.49516  
## BRN:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WHT:MornHigh 55.66122 0.3167002 3 55.47589 56.02691 55.47838 55.48087  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 52.99597 0.4116973 3 52.53135 53.31540 52.83626 53.14117  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 55.41201 0.5399360 3 55.05773 56.03344 55.10129 55.14485  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.13033  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.37365  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.71097  
## BRN:MornLow 55.50000  
## WHT:MornHigh 55.75389  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 53.22828  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 55.58915  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.38059 a  
## BLK:MornHigh 56.11215 ab  
## WHT:MornHigh 55.66122 ab  
## WT/BR:MornHigh 55.41201 abc  
## BRN:MornLow 55.00000 abcd  
## BL/BR:MornHigh 54.92360 abcd  
## BLK:MornLow 54.00000 bcde  
## WT/BR:MornLow 54.00000 bcde  
## WHT:MornLow 53.33333 cde  
## WT/BLK:MornHigh 52.99597 de  
## BL/BR:MornLow 52.66667 ef  
## WT/BLK:MornLow 50.66667 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT69 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 42.707 8.541 3.9328 0.0095575 \*\*   
## THIregime 1 38.049 38.049 17.5192 0.0003293 \*\*\*  
## Colour:THIregime 5 0.774 0.155 0.0712 0.9959873   
## Residuals 24 52.125 2.172   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.17187   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.98381 1.302623 6 53 56.56776  
## BLK 56.22134 1.790523 6 53 57.99219  
## BRN 55.03401 1.691769 6 53 57.19209  
## WHT 55.13256 1.897580 6 52 57.35761  
## WT/BLK 52.61476 1.662177 6 50 54.36080  
## WT/BR 55.18193 2.015203 6 52 57.36633  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.630789   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.22134 a  
## WT/BR 55.18193 ab  
## WHT 55.13256 ab  
## BRN 55.03401 ab  
## BL/BR 54.98381 ab  
## WT/BLK 52.61476 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.17187   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.88947 1.308477 18 52.96693 57.99219  
## MornLow 53.83333 1.977818 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.013874   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.88947 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.17187 24 54.8614 2.686272 4.338627  
##   
## $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 55.96762 0.5817449 3 55.40620 56.56776 55.66755 55.92890  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 57.10936 1.1471289 3 55.81274 57.99219 56.66794 57.52314  
## BLK:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BRN:MornHigh 56.06802 0.9734839 3 55.50124 57.19209 55.50599 55.51074  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 56.26513 1.0742051 3 55.21019 57.35761 55.71889 56.22759  
## WHT:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 53.89618 0.8047493 3 52.96693 54.36080 53.66387 54.36080  
## WT/BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WT/BR:MornHigh 56.03054 1.2879819 3 54.79638 57.36633 55.36264 55.92890  
## WT/BR:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.24833  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.75766  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.35142  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.79260  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 56.64761  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.10936 a  
## WHT:MornHigh 56.26513 a  
## BRN:MornHigh 56.06802 a  
## WT/BR:MornHigh 56.03054 a  
## BL/BR:MornHigh 55.96762 a  
## BLK:MornLow 55.33333 ab  
## WT/BR:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BLK:MornHigh 53.89618 ab  
## WT/BLK:MornLow 51.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT70 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 22.301 4.460 3.9926 0.008898 \*\*   
## THIregime 1 41.130 41.130 36.8187 2.884e-06 \*\*\*  
## Colour:THIregime 5 0.472 0.094 0.0845 0.994020   
## Residuals 24 26.811 1.117   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.117108   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.24693 1.487793 6 53 57.10498  
## BLK 55.21660 1.513606 6 53 56.97430  
## BRN 55.61391 1.321583 6 54 57.23565  
## WHT 55.19744 1.945160 6 52 57.45966  
## WT/BLK 53.37611 1.485435 6 51 55.05773  
## WT/BR 54.09566 1.200551 6 53 55.23197  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.88676   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.61391 a  
## BL/BR 55.24693 ab  
## BLK 55.21660 ab  
## WHT 55.19744 ab  
## WT/BR 54.09566 ab  
## WT/BLK 53.37611 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.117108   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.85999 1.028199 18 53.3154 57.45966  
## MornLow 53.72222 1.363626 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7271342   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.85999 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.117108 24 54.79111 1.929023 3.111594  
##   
## $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 56.16052 0.83458479 3 55.52236 57.10498 55.68829 55.85423  
## BL/BR:MornLow 54.33333 1.52752523 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 56.43321 0.53584685 3 55.90277 56.97430 56.16266 56.42256  
## BLK:MornLow 54.00000 1.00000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.56116 0.58421299 3 56.21401 57.23565 56.22391 56.23381  
## BRN:MornLow 54.66667 1.15470054 3 54.00000 56.00000 54.00000 54.00000  
## WHT:MornHigh 56.39487 1.07590219 3 55.30819 57.45966 55.86247 56.41675  
## WHT:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.41888 0.95960238 3 53.31540 55.05773 54.09945 54.88350  
## WT/BLK:MornLow 52.33333 1.15470054 3 51.00000 53.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.19131 0.04384776 3 55.14485 55.23197 55.17099 55.19712  
## WT/BR:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.47960  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.69843  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.73473  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.93821  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.21454  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.56116 a  
## BLK:MornHigh 56.43321 a  
## WHT:MornHigh 56.39487 a  
## BL/BR:MornHigh 56.16052 a  
## WT/BR:MornHigh 55.19131 ab  
## BRN:MornLow 54.66667 ab  
## WT/BLK:MornHigh 54.41888 ab  
## BL/BR:MornLow 54.33333 ab  
## BLK:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BR:MornLow 53.00000 b  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT71 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.351 3.870 5.2996 0.002028 \*\*   
## THIregime 1 41.800 41.800 57.2389 8.355e-08 \*\*\*  
## Colour:THIregime 5 0.668 0.134 0.1829 0.966321   
## Residuals 24 17.527 0.730   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7302734   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.96176 1.479336 6 52 55.48087  
## BLK 55.62722 1.339860 6 54 57.30443  
## BRN 55.26390 1.507772 6 53 57.14853  
## WHT 54.81510 1.668564 6 52 56.69553  
## WT/BLK 53.50678 1.361435 6 52 55.14485  
## WT/BR 54.95719 1.050839 6 54 56.01602  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.525499   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.62722 a  
## BRN 55.26390 ab  
## WT/BR 54.95719 abc  
## WHT 54.81510 abc  
## BL/BR 53.96176 bc  
## WT/BLK 53.50678 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7302734   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.76621 0.8141198 18 54.3608 57.30443  
## MornLow 53.61111 1.2432826 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5879086   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.76621 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7302734 24 54.68866 1.562591 2.515812  
##   
## $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 55.25686 0.3254852 3 54.88350 55.48087 55.14485 55.40620  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.58778 0.6218733 3 56.19025 57.30443 56.22945 56.26866  
## BLK:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## BRN:MornHigh 56.19447 0.8673082 3 55.45372 57.14853 55.71744 55.98117  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 55.96354 0.8186650 3 55.07951 56.69553 55.59755 56.11558  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.68023 0.4116973 3 54.36080 55.14485 54.44792 54.53503  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.91438 0.1096194 3 55.79823 56.01602 55.86356 55.92890  
## WT/BR:MornLow 54.00000 0.0000000 3 54.00000 54.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.44354  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.78654  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.56485  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.40555  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 54.83994  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.97246  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.58778 a  
## BRN:MornHigh 56.19447 ab  
## WHT:MornHigh 55.96354 abc  
## WT/BR:MornHigh 55.91438 abc  
## BL/BR:MornHigh 55.25686 abc  
## WT/BLK:MornHigh 54.68023 abcd  
## BLK:MornLow 54.66667 abcd  
## BRN:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.00000 bcd  
## WHT:MornLow 53.66667 cd  
## BL/BR:MornLow 52.66667 d  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT72 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 17.773 3.555 4.4528 0.005192 \*\*   
## THIregime 1 43.879 43.879 54.9657 1.181e-07 \*\*\*  
## Colour:THIregime 5 0.594 0.119 0.1489 0.978432   
## Residuals 24 19.159 0.798   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7982996   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.43412 1.276803 6 54 56.90896  
## BLK 56.31829 1.156105 6 55 57.66206  
## BRN 55.48750 1.511457 6 53 57.02182  
## WHT 55.76832 1.461989 6 54 57.57167  
## WT/BLK 54.00739 1.748922 6 52 56.45160  
## WT/BR 55.60850 1.509656 6 53 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.594969   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.31829 a  
## WHT 55.76832 a  
## WT/BR 55.60850 a  
## BRN 55.48750 ab  
## BL/BR 55.43412 ab  
## WT/BLK 54.00739 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7982996   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.54138 0.8234287 18 54.70927 57.66206  
## MornLow 54.33333 1.2366939 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6146813   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.54138 a  
## MornLow 54.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7982996 24 55.43736 1.611686 2.630379  
##   
## $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 56.53491 0.3271339 3 56.30226 56.90896 56.34789 56.39352  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 57.30325 0.3125267 3 57.09046 57.66206 57.12385 57.15725  
## BLK:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BRN:MornHigh 56.64167 0.6177364 3 55.92890 57.02182 56.45160 56.97430  
## BRN:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## WHT:MornHigh 56.86997 0.6076974 3 56.51694 57.57167 56.51912 56.52129  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.34812 0.9596024 3 54.70927 56.45160 54.79638 54.88350  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.55033 0.8385554 3 55.61528 57.23565 56.20767 56.80007  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.65124  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.40965  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.99806  
## BRN:MornLow 55.00000  
## WHT:MornHigh 57.04648  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.01786  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.30325 a  
## WHT:MornHigh 56.86997 ab  
## BRN:MornHigh 56.64167 ab  
## WT/BR:MornHigh 56.55033 ab  
## BL/BR:MornHigh 56.53491 ab  
## WT/BLK:MornHigh 55.34812 ab  
## BLK:MornLow 55.33333 ab  
## WHT:MornLow 54.66667 bc  
## WT/BR:MornLow 54.66667 bc  
## BL/BR:MornLow 54.33333 bc  
## BRN:MornLow 54.33333 bc  
## WT/BLK:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT73 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.182 2.436 2.0444 0.1083   
## THIregime 1 53.949 53.949 45.2691 5.852e-07 \*\*\*  
## Colour:THIregime 5 1.048 0.210 0.1759 0.9690   
## Residuals 24 28.602 1.192   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.191739   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.78490 1.644103 6 52 55.60221  
## BLK 55.58591 1.807429 6 53 57.78449  
## BRN 54.25088 1.370284 6 53 55.51074  
## WHT 54.55048 1.727599 6 52 56.67561  
## WT/BLK 54.70371 1.952751 6 52 57.49700  
## WT/BR 55.13578 1.440250 6 53 56.86976  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.948766   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.58591 a  
## WT/BR 55.13578 a  
## WT/BLK 54.70371 a  
## WHT 54.55048 a  
## BRN 54.25088 a  
## BL/BR 53.78490 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.191739   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.89278 0.8184282 18 54.99966 57.78449  
## MornLow 53.44444 1.3382263 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7510307   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.89278 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.191739 24 54.66861 1.996883 3.213853  
##   
## $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 55.23646 0.321308445 3 54.99966 55.60221 55.05358 55.10751  
## BL/BR:MornLow 52.33333 0.577350269 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 56.50514 1.139589507 3 55.59877 57.78449 55.86547 56.13217  
## BLK:MornLow 54.66667 2.081665999 3 53.00000 57.00000 53.50000 54.00000  
## BRN:MornHigh 55.50176 0.008723658 3 55.49332 55.51074 55.49728 55.50124  
## BRN:MornLow 53.00000 0.000000000 3 53.00000 53.00000 53.00000 53.00000  
## WHT:MornHigh 55.76763 0.826930137 3 55.05773 56.67561 55.31364 55.56954  
## WHT:MornLow 53.33333 1.527525232 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 56.07409 1.251370599 3 55.14485 57.49700 55.36264 55.58043  
## WT/BLK:MornLow 53.33333 1.527525232 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.27156 0.561975655 3 55.75467 56.86976 55.97246 56.19025  
## WT/BR:MornLow 54.00000 1.000000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.35486  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.95833  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.50599  
## BRN:MornLow 53.00000  
## WHT:MornHigh 56.12258  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 56.53872  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.53001  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.50514 a  
## WT/BR:MornHigh 56.27156 a  
## WT/BLK:MornHigh 56.07409 ab  
## WHT:MornHigh 55.76763 ab  
## BRN:MornHigh 55.50176 abc  
## BL/BR:MornHigh 55.23646 abc  
## BLK:MornLow 54.66667 abc  
## WT/BR:MornLow 54.00000 abc  
## WHT:MornLow 53.33333 abc  
## WT/BLK:MornLow 53.33333 abc  
## BRN:MornLow 53.00000 bc  
## BL/BR:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT74 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 20.485 4.097 8.1191 0.0001337 \*\*\*  
## THIregime 1 56.564 56.564 112.0941 1.594e-10 \*\*\*  
## Colour:THIregime 5 1.262 0.252 0.5001 0.7730607   
## Residuals 24 12.111 0.505   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5046141   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.97415 1.492227 6 54 57.49700  
## BLK 55.61739 1.466799 6 54 57.26469  
## BRN 55.14005 1.951975 6 52 57.27921  
## WHT 55.35393 1.649176 6 53 57.25307  
## WT/BLK 54.89942 1.422936 6 53 56.45160  
## WT/BR 57.20265 1.026839 6 56 58.28105  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.268086   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 57.20265 a  
## BL/BR 55.97415 ab  
## BLK 55.61739 b  
## WHT 55.35393 b  
## BRN 55.14005 b  
## WT/BLK 54.89942 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5046141   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.95142 0.7441173 18 55.66755 58.28105  
## MornLow 54.44444 1.1991282 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.488705   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.95142 a  
## MornLow 54.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5046141 24 55.69793 1.275383 2.091294  
##   
## $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 57.28163 0.3240418 3 56.90896 57.49700 57.17394 57.43892  
## BL/BR:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BLK:MornHigh 56.90145 0.3146510 3 56.71295 57.26469 56.71983 56.72671  
## BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 56.61343 0.8244006 3 55.69131 57.27921 56.28053 56.86976  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.70787 0.5477637 3 56.15758 57.25307 56.43527 56.71295  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.13217 0.4116973 3 55.66755 56.45160 55.97246 56.27737  
## WT/BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BR:MornHigh 58.07197 0.1884622 3 57.91516 58.28105 57.96743 58.01970  
## WT/BR:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.46796  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.99570  
## BLK:MornLow 54.50000  
## BRN:MornHigh 57.07448  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.98301  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 58.15038  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 58.07197 a  
## BL/BR:MornHigh 57.28163 a  
## BLK:MornHigh 56.90145 a  
## WHT:MornHigh 56.70787 ab  
## BRN:MornHigh 56.61343 ab  
## WT/BR:MornLow 56.33333 abc  
## WT/BLK:MornHigh 56.13217 abc  
## BL/BR:MornLow 54.66667 bcd  
## BLK:MornLow 54.33333 cd  
## WHT:MornLow 54.00000 d  
## BRN:MornLow 53.66667 d  
## WT/BLK:MornLow 53.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT75 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 8.696 1.739 2.7998 0.03952 \*   
## THIregime 1 49.990 49.990 80.4721 3.923e-09 \*\*\*  
## Colour:THIregime 5 0.589 0.118 0.1897 0.96362   
## Residuals 24 14.909 0.621   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6212104   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.55593 1.403251 6 53 56.15291  
## BLK 54.73250 1.589173 6 53 56.50968  
## BRN 55.36884 1.575977 6 53 57.28792  
## WHT 55.70345 1.407200 6 54 57.46215  
## WT/BLK 54.24666 1.561418 6 52 56.19025  
## WT/BR 54.79633 1.304279 6 53 56.13798  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.406982   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.70345 a  
## BRN 55.36884 ab  
## WT/BR 54.79633 ab  
## BLK 54.73250 ab  
## BL/BR 54.55593 ab  
## WT/BLK 54.24666 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6212104   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.07901 0.6223019 18 54.8835 57.46215  
## MornLow 53.72222 1.0178152 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5422336   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.07901 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6212104 24 54.90062 1.435629 2.320357  
##   
## $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 55.77852 0.3244177 3 55.58043 56.15291 55.59132 55.60221  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.13166 0.3276595 3 55.92890 56.50968 55.94266 55.95641  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.40435 0.8118521 3 55.69131 57.28792 55.96256 56.23381  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 56.74023 0.6264648 3 56.33959 57.46215 56.37926 56.41893  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.49332 0.6577164 3 54.88350 56.19025 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.92600 0.3018229 3 55.58043 56.13798 55.82000 56.05958  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.87756  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.23304  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.76086  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.94054  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.79823  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.09878  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.74023 a  
## BRN:MornHigh 56.40435 ab  
## BLK:MornHigh 56.13166 ab  
## WT/BR:MornHigh 55.92600 abc  
## BL/BR:MornHigh 55.77852 abc  
## WT/BLK:MornHigh 55.49332 abcd  
## WHT:MornLow 54.66667 abcde  
## BRN:MornLow 54.33333 bcde  
## WT/BR:MornLow 53.66667 cde  
## BL/BR:MornLow 53.33333 de  
## BLK:MornLow 53.33333 de  
## WT/BLK:MornLow 53.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT76 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.290 2.058 2.7030 0.04486 \*   
## THIregime 1 48.632 48.632 63.8740 3.212e-08 \*\*\*  
## Colour:THIregime 5 0.525 0.105 0.1379 0.98179   
## Residuals 24 18.273 0.761   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.761371   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.52015 1.546596 6 52 56.10313  
## BLK 55.92719 1.237979 6 54 57.35181  
## BRN 54.56908 1.745729 6 52 56.71295  
## WHT 55.09803 1.398616 6 53 56.71295  
## WT/BLK 54.89942 1.422936 6 53 56.45160  
## WT/BR 54.29312 1.591515 6 52 56.10313  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.557641   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.92719 a  
## WHT 55.09803 ab  
## WT/BLK 54.89942 ab  
## BRN 54.56908 ab  
## BL/BR 54.52015 ab  
## WT/BR 54.29312 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.761371   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.04677 0.6631744 18 54.95817 57.35181  
## MornLow 53.72222 1.1274936 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6002957   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.04677 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.761371 24 54.8845 1.589822 2.56882  
##   
## $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 55.70696 0.6488355 3 54.95817 56.10313 55.50887 56.05958  
## BL/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## BLK:MornHigh 56.85437 0.5024457 3 56.34706 57.35181 56.60566 56.86426  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 55.80482 0.8392762 3 55.05773 56.71295 55.35076 55.64379  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 56.19606 0.5227968 3 55.66755 56.71295 55.93761 56.20767  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.13217 0.4116973 3 55.66755 56.45160 55.97246 56.27737  
## WT/BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BR:MornHigh 55.58624 0.5619757 3 54.98804 56.10313 55.32780 55.66755  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.08135  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 57.10803  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.17837  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.46031  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.88534  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.85437 a  
## WHT:MornHigh 56.19606 ab  
## WT/BLK:MornHigh 56.13217 ab  
## BRN:MornHigh 55.80482 abc  
## BL/BR:MornHigh 55.70696 abc  
## WT/BR:MornHigh 55.58624 abc  
## BLK:MornLow 55.00000 abcd  
## WHT:MornLow 54.00000 bcd  
## WT/BLK:MornLow 53.66667 bcd  
## BL/BR:MornLow 53.33333 cd  
## BRN:MornLow 53.33333 cd  
## WT/BR:MornLow 53.00000 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 29.181 5.836 5.1173 0.00247 \*\*   
## THIregime 1 45.382 45.382 39.7921 1.605e-06 \*\*\*  
## Colour:THIregime 5 1.966 0.393 0.3447 0.88054   
## Residuals 24 27.371 1.140   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.140476   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.83036 1.698448 6 52 55.77956  
## BLK 55.64126 1.145224 6 54 56.81749  
## BRN 54.51839 1.985500 6 51 56.59415  
## WHT 54.79768 1.656144 6 52 56.64761  
## WT/BLK 53.55034 1.606813 6 51 55.40620  
## WT/BR 56.06525 1.216826 6 54 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.906392   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.06525 a  
## BLK 55.64126 ab  
## WHT 54.79768 abc  
## BRN 54.51839 abc  
## BL/BR 53.83036 bc  
## WT/BLK 53.55034 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.140476   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.85665 0.9774027 18 53.8381 57.40988  
## MornLow 53.61111 1.5769997 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7347   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.85665 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.140476 24 54.73388 1.951133 3.14397  
##   
## $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 55.32738 0.3940119 3 55.05773 55.77956 55.10129 55.14485  
## BL/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 56.61585 0.3098887 3 56.25903 56.81749 56.51503 56.77103  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 55.70345 1.1441551 3 54.41307 56.59415 55.25810 56.10313  
## BRN:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## WHT:MornHigh 55.92869 0.8283286 3 55.02289 56.64761 55.56923 56.11558  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.76734 0.8233946 3 53.83810 55.40620 54.44792 55.05773  
## WT/BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## WT/BR:MornHigh 56.79716 0.8724869 3 55.79823 57.40988 56.49080 57.18338  
## WT/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 55.46220  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.79426  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.34864  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.38160  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.23197  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.29663  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.79716 a  
## BLK:MornHigh 56.61585 a  
## WHT:MornHigh 55.92869 ab  
## BRN:MornHigh 55.70345 ab  
## WT/BR:MornLow 55.33333 abc  
## BL/BR:MornHigh 55.32738 abc  
## WT/BLK:MornHigh 54.76734 abc  
## BLK:MornLow 54.66667 abc  
## WHT:MornLow 53.66667 abc  
## BRN:MornLow 53.33333 bc  
## BL/BR:MornLow 52.33333 c  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT78 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 26.368 5.274 4.3982 0.005529 \*\*   
## THIregime 1 42.507 42.507 35.4502 3.816e-06 \*\*\*  
## Colour:THIregime 5 0.780 0.156 0.1300 0.984020   
## Residuals 24 28.777 1.199   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.199062   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.72035 1.227415 6 53 55.98698  
## BLK 55.40174 1.601409 6 53 57.35181  
## BRN 53.94061 1.776067 6 51 55.92890  
## WHT 55.31105 1.529159 6 53 57.16098  
## WT/BLK 52.94114 1.853638 6 50 55.40620  
## WT/BR 54.87153 1.188707 6 53 56.19025  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.954745   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.40174 a  
## WHT 55.31105 a  
## WT/BR 54.87153 ab  
## BL/BR 54.72035 ab  
## BRN 53.94061 ab  
## WT/BLK 52.94114 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.199062   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.61769 1.014043 18 53.05405 57.35181  
## MornLow 53.44444 1.503808 18 50.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7533346   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.61769 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.199062 24 54.53107 2.008061 3.223712  
##   
## $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 55.77403 0.3198675 3 55.40620 55.98698 55.66755 55.92890  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 56.47014 0.8083767 3 55.76384 57.35181 56.02931 56.29479  
## BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BRN:MornHigh 55.21454 0.8270121 3 54.30853 55.92890 54.85737 55.40620  
## BRN:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WHT:MornHigh 56.28877 0.8029128 3 55.58043 57.16098 55.85267 56.12491  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.21561 1.1763438 3 53.05405 55.40620 53.62031 54.18657  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 55.74305 0.5038728 3 55.19712 56.19025 55.51945 55.84178  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.95794  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.82330  
## BLK:MornLow 55.00000  
## BRN:MornHigh 55.66755  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.64295  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.79638  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.01602  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.47014 a  
## WHT:MornHigh 56.28877 a  
## BL/BR:MornHigh 55.77403 ab  
## WT/BR:MornHigh 55.74305 ab  
## BRN:MornHigh 55.21454 ab  
## BLK:MornLow 54.33333 abc  
## WHT:MornLow 54.33333 abc  
## WT/BLK:MornHigh 54.21561 abc  
## WT/BR:MornLow 54.00000 abc  
## BL/BR:MornLow 53.66667 abc  
## BRN:MornLow 52.66667 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT79 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.245 2.449 1.4278 0.2502   
## THIregime 1 49.062 49.062 28.6033 1.725e-05 \*\*\*  
## Colour:THIregime 5 0.898 0.180 0.1047 0.9902   
## Residuals 24 41.166 1.715   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.715245   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.43265 2.008011 6 52 56.97430  
## BLK 55.24417 1.540443 6 53 57.02932  
## BRN 54.89163 1.736003 6 52 56.83175  
## WHT 55.47336 1.316110 6 54 56.97430  
## WT/BLK 54.31169 2.078014 6 52 57.14853  
## WT/BR 55.98425 1.660108 6 53 57.58412  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.337934   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.98425 a  
## WHT 55.47336 a  
## BLK 55.24417 a  
## BRN 54.89163 a  
## BL/BR 54.43265 a  
## WT/BLK 54.31169 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.715245   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.22369 0.9860977 18 54.3608 57.58412  
## MornLow 53.88889 1.4907120 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9010111   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.22369 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.715245 24 55.05629 2.37879 3.855658  
##   
## $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 55.86529 0.9606539 3 55.29004 56.97430 55.31079 55.33153  
## BL/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## BLK:MornHigh 56.48833 0.5371843 3 55.95504 57.02932 56.21784 56.48064  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.11660 0.8362491 3 55.19712 56.83175 55.75902 56.32093  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.61339 0.3131159 3 56.41426 56.97430 56.43293 56.45160  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.29004 1.6094986 3 54.36080 57.14853 54.36080 54.36080  
## WT/BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.96849 0.9918045 3 55.82436 57.58412 56.66068 57.49700  
## WT/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.15291  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.75498  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.57634  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.71295  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.75467  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.54056  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.96849 a  
## WHT:MornHigh 56.61339 ab  
## BLK:MornHigh 56.48833 ab  
## BRN:MornHigh 56.11660 ab  
## BL/BR:MornHigh 55.86529 ab  
## WT/BLK:MornHigh 55.29004 ab  
## WT/BR:MornLow 55.00000 ab  
## WHT:MornLow 54.33333 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornLow 53.66667 ab  
## WT/BLK:MornLow 53.33333 ab  
## BL/BR:MornLow 53.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT80 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.204 3.241 4.3650 0.005745 \*\*   
## THIregime 1 50.369 50.369 67.8428 1.876e-08 \*\*\*  
## Colour:THIregime 5 1.009 0.202 0.2719 0.923991   
## Residuals 24 17.818 0.742   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7424359   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.72100 1.580104 6 53 56.52627  
## BLK 55.25820 1.554294 6 53 57.06142  
## BRN 55.18528 1.486044 6 53 56.93074  
## WHT 56.01007 1.316894 6 54 57.53434  
## WT/BLK 54.33378 1.667525 6 52 56.45160  
## WT/BR 56.25545 1.484466 6 54 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.53815   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.25545 a  
## WHT 56.01007 a  
## BLK 55.25820 ab  
## BRN 55.18528 ab  
## BL/BR 54.72100 ab  
## WT/BLK 54.33378 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7424359   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.47681 0.7377959 18 54.8835 58.0197  
## MornLow 54.11111 1.2313975 18 52.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5927841   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.47681 a  
## MornLow 54.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7424359 24 55.29396 1.558303 2.536676  
##   
## $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 56.10866 0.3628221 3 55.87082 56.52627 55.89986 55.92890  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.51640 0.5388571 3 55.98392 57.06142 56.24390 56.50387  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.37056 0.5533235 3 55.82436 56.93074 56.09046 56.35656  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 57.02014 0.5242165 3 56.48645 57.53434 56.76304 57.03964  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.66755 0.7840500 3 54.88350 56.45160 55.27553 55.66755  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 57.17757 0.7904767 3 56.45160 58.01970 56.75651 57.06142  
## WT/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.22759  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.78264  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.64365  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.28699  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.54056  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.17757 a  
## WHT:MornHigh 57.02014 a  
## BLK:MornHigh 56.51640 ab  
## BRN:MornHigh 56.37056 ab  
## BL/BR:MornHigh 56.10866 ab  
## WT/BLK:MornHigh 55.66755 abc  
## WT/BR:MornLow 55.33333 abcd  
## WHT:MornLow 55.00000 abcd  
## BLK:MornLow 54.00000 bcd  
## BRN:MornLow 54.00000 bcd  
## BL/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT81 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.778 5.756 5.7816 0.001221 \*\*   
## THIregime 1 40.309 40.309 40.4911 1.404e-06 \*\*\*  
## Colour:THIregime 5 0.681 0.136 0.1368 0.982120   
## Residuals 24 23.892 0.996   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9955087   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.89573 1.409872 6 52 55.33153  
## BLK 55.07857 1.384831 6 53 56.71295  
## BRN 54.14661 1.449286 6 52 55.83386  
## WHT 55.51122 1.244111 6 54 57.07884  
## WT/BLK 52.81046 1.708847 6 50 54.70927  
## WT/BR 54.90637 1.581942 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.781114   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.51122 a  
## BLK 55.07857 a  
## WT/BR 54.90637 a  
## BRN 54.14661 ab  
## BL/BR 53.89573 ab  
## WT/BLK 52.81046 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9955087   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.44965 1.010274 18 52.7927 57.07884  
## MornLow 53.33333 1.455214 18 50.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6864194   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.44965 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9955087 24 54.39149 1.834389 2.937365  
##   
## $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 55.12480 0.3228063 3 54.75283 55.33153 55.02143 55.29004  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.15714 0.5517840 3 55.60947 56.71295 55.87923 56.14898  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 55.29321 0.5540400 3 54.72669 55.83386 55.02289 55.31908  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.35577 0.6295950 3 55.92890 57.07884 55.99424 56.05958  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 53.95426 1.0209142 3 52.79270 54.70927 53.57675 54.36080  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 55.81274 0.8898418 3 54.79638 56.45160 55.49332 56.19025  
## WT/BR:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## Q75  
## BL/BR:MornHigh 55.31079  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.43097  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.57647  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.56921  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.53503  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.32093  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.35577 a  
## BLK:MornHigh 56.15714 a  
## WT/BR:MornHigh 55.81274 ab  
## BRN:MornHigh 55.29321 abc  
## BL/BR:MornHigh 55.12480 abc  
## WHT:MornLow 54.66667 abc  
## BLK:MornLow 54.00000 abcd  
## WT/BR:MornLow 54.00000 abcd  
## WT/BLK:MornHigh 53.95426 abcd  
## BRN:MornLow 53.00000 bcd  
## BL/BR:MornLow 52.66667 cd  
## WT/BLK:MornLow 51.66667 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 22.472 4.494 4.1607 0.007292 \*\*   
## THIregime 1 43.922 43.922 40.6605 1.36e-06 \*\*\*  
## Colour:THIregime 5 0.841 0.168 0.1558 0.976191   
## Residuals 24 25.925 1.080   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080215   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.84265 1.155024 6 54 57.12364  
## BLK 55.27631 2.004259 6 52 57.63455  
## BRN 54.86127 1.373213 6 53 56.24252  
## WHT 55.96890 1.061636 6 55 56.97430  
## WT/BLK 54.11598 1.945931 6 51 56.45160  
## WT/BR 53.89559 1.409655 6 52 55.31908  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.855343   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.96890 a  
## BL/BR 55.84265 a  
## BLK 55.27631 ab  
## BRN 54.86127 ab  
## WT/BLK 54.11598 ab  
## WT/BR 53.89559 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080215   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.09801 0.9536527 18 53.8381 57.63455  
## MornLow 53.88889 1.4095844 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7150264   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.09801 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.080215 24 54.99345 1.889923 3.059782  
##   
## $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 56.68529 0.45281085 3 56.21929 57.12364 56.46612 56.71295  
## BL/BR:MornLow 55.00000 1.00000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 56.55262 1.07504129 3 55.48461 57.63455 56.01166 56.53872  
## BLK:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 56.05588 0.31575697 3 55.69131 56.24252 55.96256 56.23381  
## BRN:MornLow 53.66667 0.57735027 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.93779 0.03736336 3 56.89963 56.97430 56.91954 56.93945  
## WHT:MornLow 55.00000 0.00000000 3 55.00000 55.00000 55.00000 55.00000  
## WT/BLK:MornHigh 55.23197 1.31543282 3 53.83810 56.45160 54.62215 55.40620  
## WT/BLK:MornLow 53.00000 2.00000000 3 51.00000 55.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.12452 0.32201758 3 54.75283 55.31908 55.02724 55.30166  
## WT/BR:MornLow 52.66667 0.57735027 3 52.00000 53.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.91830  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.08663  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.23816  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.95688  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.31037  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.93779 a  
## BL/BR:MornHigh 56.68529 ab  
## BLK:MornHigh 56.55262 ab  
## BRN:MornHigh 56.05588 abc  
## WT/BLK:MornHigh 55.23197 abcd  
## WT/BR:MornHigh 55.12452 abcd  
## BL/BR:MornLow 55.00000 abcd  
## WHT:MornLow 55.00000 abcd  
## BLK:MornLow 54.00000 abcd  
## BRN:MornLow 53.66667 bcd  
## WT/BLK:MornLow 53.00000 cd  
## WT/BR:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT83 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.576 2.515 1.7569 0.1601   
## THIregime 1 44.834 44.834 31.3181 9.267e-06 \*\*\*  
## Colour:THIregime 5 0.407 0.081 0.0568 0.9976   
## Residuals 24 34.358 1.432   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.431583   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.03584 1.847405 6 52 57.17031  
## BLK 55.20766 1.504780 6 53 56.94526  
## BRN 54.81283 1.957917 6 52 57.23565  
## WHT 55.43919 1.631589 6 53 57.42233  
## WT/BLK 53.59390 1.460220 6 52 55.40620  
## WT/BR 54.93977 1.270751 6 53 56.53872  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.135883   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.43919 a  
## BLK 55.20766 a  
## BL/BR 55.03584 a  
## WT/BR 54.93977 a  
## BRN 54.81283 a  
## WT/BLK 53.59390 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.431583   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95417 0.8986808 18 54.53503 57.42233  
## MornLow 53.72222 1.4061025 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.823143   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95417 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.431583 24 54.8382 2.181851 3.522441  
##   
## $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 56.07167 1.1460325 3 54.88350 57.17031 55.52236 56.16121  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 56.41533 0.5343694 3 55.87663 56.94526 56.15036 56.42409  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 55.95899 1.1441953 3 55.02605 57.23565 55.32067 55.61528  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 56.54504 0.8081623 3 55.83089 57.42233 56.10640 56.38191  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.85446 0.4798012 3 54.53503 55.40620 54.57859 54.62215  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.87953 0.6225236 3 55.30166 56.53872 55.54994 55.79823  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.66576  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.68468  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.42547  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.90212  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.01418  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.16847  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.54504 a  
## BLK:MornHigh 56.41533 a  
## BL/BR:MornHigh 56.07167 a  
## BRN:MornHigh 55.95899 a  
## WT/BR:MornHigh 55.87953 a  
## WT/BLK:MornHigh 54.85446 ab  
## WHT:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 54.00000 ab  
## WT/BR:MornLow 54.00000 ab  
## BRN:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT84 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 21.235 4.247 2.4736 0.06077 .   
## THIregime 1 40.884 40.884 23.8121 5.639e-05 \*\*\*  
## Colour:THIregime 5 0.564 0.113 0.0657 0.99668   
## Residuals 24 41.206 1.717   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.716932   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.01803 1.320841 6 53 56.52627  
## BLK 54.97683 2.308119 6 51 57.55202  
## BRN 55.59728 1.101219 6 54 56.75651  
## WHT 55.69800 1.571804 6 53 57.46215  
## WT/BLK 53.46322 1.315323 6 52 55.05773  
## WT/BR 54.30733 2.011328 6 52 56.88718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.339084   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.69800 a  
## BRN 55.59728 a  
## BL/BR 55.01803 a  
## BLK 54.97683 a  
## WT/BR 54.30733 a  
## WT/BLK 53.46322 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.716932   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.90912 1.081792 18 54.3608 57.55202  
## MornLow 53.77778 1.592466 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9014541   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.90912 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.716932 24 54.84345 2.389196 3.857554  
##   
## $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 56.03607 0.5023706 3 55.52236 56.52627 55.79097 56.05958  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.28700 1.3548483 3 54.85737 57.55202 55.65448 56.45160  
## BLK:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## BRN:MornHigh 56.52789 0.3166298 3 56.16649 56.75651 56.41359 56.66068  
## BRN:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WHT:MornHigh 56.72934 0.8075464 3 55.86356 57.46215 56.36293 56.86229  
## WHT:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WT/BLK:MornHigh 54.59311 0.4023746 3 54.36080 55.05773 54.36080 54.36080  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.28133 1.3907688 3 54.46534 56.88718 54.47841 54.49148  
## WT/BR:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.29292  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.00181  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.70859  
## BRN:MornLow 55.00000  
## WHT:MornHigh 57.16222  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.70927  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.68933  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.72934 a  
## BRN:MornHigh 56.52789 a  
## BLK:MornHigh 56.28700 a  
## BL/BR:MornHigh 56.03607 ab  
## WT/BR:MornHigh 55.28133 ab  
## BRN:MornLow 54.66667 ab  
## WHT:MornLow 54.66667 ab  
## WT/BLK:MornHigh 54.59311 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 53.66667 ab  
## WT/BR:MornLow 53.33333 ab  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT85 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.149 2.030 1.8008 0.1508   
## THIregime 1 46.991 46.991 41.6912 1.12e-06 \*\*\*  
## Colour:THIregime 5 0.789 0.158 0.1400 0.9812   
## Residuals 24 27.051 1.127   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.127112   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.38062 1.680687 6 52 56.37693  
## BLK 55.73795 1.602353 6 53 57.49700  
## BRN 54.84385 1.697098 6 52 56.73671  
## WHT 55.92269 1.236583 6 54 57.34766  
## WT/BLK 55.05157 1.763465 6 53 57.49700  
## WT/BR 54.91829 1.433422 6 53 56.36448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.89519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.92269 a  
## BLK 55.73795 a  
## WT/BLK 55.05157 a  
## WT/BR 54.91829 a  
## BRN 54.84385 a  
## BL/BR 54.38062 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.127112   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.28499 0.7665141 18 55.09258 57.497  
## MornLow 54.00000 1.2833779 18 52.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7303829   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.28499 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.127112 24 55.1425 1.925294 3.125496  
##   
## $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 55.76123 0.5860508 3 55.21019 56.37693 55.45339 55.69659  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.80924 0.8015908 3 55.92890 57.49700 56.46536 57.00181  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 56.02103 0.8424638 3 55.09258 56.73671 55.66319 56.23381  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.84539 0.5184133 3 56.31221 57.34766 56.59425 56.87629  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 56.10313 1.2071239 3 55.40620 57.49700 55.40620 55.40620  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.16992 0.3220176 3 55.79823 56.36448 56.07264 56.34706  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.03676  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.24941  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.48526  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.11198  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.45160  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.35577  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.84539 a  
## BLK:MornHigh 56.80924 a  
## WT/BR:MornHigh 56.16992 ab  
## WT/BLK:MornHigh 56.10313 abc  
## BRN:MornHigh 56.02103 abc  
## BL/BR:MornHigh 55.76123 abc  
## WHT:MornLow 55.00000 abc  
## BLK:MornLow 54.66667 abc  
## WT/BLK:MornLow 54.00000 abc  
## BRN:MornLow 53.66667 bc  
## WT/BR:MornLow 53.66667 bc  
## BL/BR:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT86 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.051 1.210 0.6163 0.6885   
## THIregime 1 52.318 52.318 26.6461 2.759e-05 \*\*\*  
## Colour:THIregime 5 0.522 0.104 0.0532 0.9980   
## Residuals 24 47.122 1.963   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.963425   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.16098 1.781737 6 52 56.90896  
## BLK 54.43809 2.673789 6 50 57.49700  
## BRN 54.88437 1.572433 6 53 56.83175  
## WHT 55.42094 1.261822 6 54 56.86976  
## WT/BLK 54.24666 1.917073 6 51 56.45160  
## WT/BR 55.08206 1.388807 6 53 56.76522  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.501361   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.42094 a  
## BL/BR 55.16098 a  
## WT/BR 55.08206 a  
## BRN 54.88437 a  
## BLK 54.43809 a  
## WT/BLK 54.24666 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.963425   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.07770 0.897554 18 54.09945 57.497  
## MornLow 53.66667 1.533930 18 50.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9639937   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.07770 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.963425 24 54.87218 2.553612 4.125177  
##   
## $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 56.32196 0.9448978 3 55.23197 56.90896 56.02846 56.82496  
## BL/BR:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## BLK:MornHigh 55.87617 1.6335835 3 54.23013 57.49700 55.06576 55.90139  
## BLK:MornLow 53.00000 3.0000000 3 50.00000 56.00000 51.50000 53.00000  
## BRN:MornHigh 56.10208 0.6321513 3 55.71982 56.83175 55.73724 55.75467  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.50854 0.3138796 3 56.30226 56.86976 56.32793 56.35359  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.49332 1.2350919 3 54.09945 56.45160 55.01418 55.92890  
## WT/BLK:MornLow 53.00000 1.7320508 3 51.00000 54.00000 52.50000 54.00000  
## WT/BR:MornHigh 56.16412 0.5562520 3 55.66755 56.76522 55.86356 56.05958  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.86696  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.69919  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.29321  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.61168  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.19025  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.41240  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.50854 a  
## BL/BR:MornHigh 56.32196 a  
## WT/BR:MornHigh 56.16412 a  
## BRN:MornHigh 56.10208 a  
## BLK:MornHigh 55.87617 a  
## WT/BLK:MornHigh 55.49332 a  
## WHT:MornLow 54.33333 a  
## BL/BR:MornLow 54.00000 a  
## WT/BR:MornLow 54.00000 a  
## BRN:MornLow 53.66667 a  
## BLK:MornLow 53.00000 a  
## WT/BLK:MornLow 53.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT87 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.049 2.810 6.0053 0.0009714 \*\*\*  
## THIregime 1 46.528 46.528 99.4415 5.192e-10 \*\*\*  
## Colour:THIregime 5 0.881 0.176 0.3767 0.8596835   
## Residuals 24 11.229 0.468   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4678922   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.43355 1.277791 6 53 55.92890  
## BLK 54.63119 1.480881 6 53 56.28654  
## BRN 55.01078 1.107533 6 54 56.05958  
## WHT 55.87571 1.203111 6 54 57.33366  
## WT/BLK 54.29022 1.628678 6 52 56.45160  
## WT/BR 53.91302 1.604757 6 52 55.92890  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.221074   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.87571 a  
## BRN 55.01078 ab  
## BLK 54.63119 b  
## BL/BR 54.43355 b  
## WT/BLK 54.29022 b  
## WT/BR 53.91302 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4678922   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.82927 0.673680 18 54.75283 57.33366  
## MornLow 53.55556 1.041618 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4705871   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.82927 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4678922 24 54.69241 1.250679 2.013763  
##   
## $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 55.53376 0.34222991 3 55.33153 55.92890 55.33620 55.34086  
## BL/BR:MornLow 53.33333 0.57735027 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.92905 0.30962087 3 55.74596 56.28654 55.75031 55.75467  
## BLK:MornLow 53.33333 0.57735027 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.02156 0.03925646 3 55.98117 56.05958 56.00255 56.02394  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.75143 0.56397670 3 56.20767 57.33366 56.46031 56.71295  
## WHT:MornLow 55.00000 1.00000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.58043 0.79843744 3 54.88350 56.45160 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.00000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.15937 0.66678879 3 54.75283 55.92890 54.77460 54.79638  
## WT/BR:MornLow 52.66667 1.15470054 3 52.00000 54.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 55.63488  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.02060  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.04176  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.02330  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.36264  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.75143 a  
## BRN:MornHigh 56.02156 a  
## BLK:MornHigh 55.92905 ab  
## WT/BLK:MornHigh 55.58043 ab  
## BL/BR:MornHigh 55.53376 ab  
## WT/BR:MornHigh 55.15937 abc  
## WHT:MornLow 55.00000 abcd  
## BRN:MornLow 54.00000 bcde  
## BL/BR:MornLow 53.33333 cde  
## BLK:MornLow 53.33333 cde  
## WT/BLK:MornLow 53.00000 de  
## WT/BR:MornLow 52.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT88 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.669 6.534 7.8364 0.0001714 \*\*\*  
## THIregime 1 37.308 37.308 44.7461 6.42e-07 \*\*\*  
## Colour:THIregime 5 0.548 0.110 0.1315 0.9836174   
## Residuals 24 20.010 0.834   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8337692   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.09651 1.7299654 6 53 57.27299  
## BLK 55.78365 1.2908021 6 54 57.08434  
## BRN 56.44403 0.9601139 6 55 57.49700  
## WHT 55.76209 1.2681450 6 54 57.04399  
## WT/BLK 53.41966 1.6605027 6 51 55.58043  
## WT/BR 54.93541 1.2755692 6 53 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.630017   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.44403 a  
## BLK 55.78365 a  
## WHT 55.76209 a  
## BL/BR 55.09651 a  
## WT/BR 54.93541 ab  
## WT/BLK 53.41966 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8337692   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.25823 1.087803 18 53.57675 57.497  
## MornLow 54.22222 1.395605 18 51.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6281885   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.25823 a  
## MornLow 54.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8337692 24 55.24023 1.65298 2.68818  
##   
## $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 56.19302 0.9353942 3 55.63851 57.27299 55.65303 55.66755  
## BL/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BLK:MornHigh 56.90063 0.2985598 3 56.55614 57.08434 56.80878 57.06142  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 57.22139 0.3979063 3 56.76522 57.49700 57.08359 57.40196  
## BRN:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WHT:MornHigh 56.85752 0.2953984 3 56.51694 57.04399 56.76429 57.01164  
## WHT:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.50599 1.0097018 3 53.57675 55.58043 53.96878 54.36080  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.87082 0.6653645 3 55.14485 56.45160 55.58043 56.01602  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.47027  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.07288  
## BLK:MornLow 55.00000  
## BRN:MornHigh 57.44948  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.02781  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.23381  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.22139 a  
## BLK:MornHigh 56.90063 ab  
## WHT:MornHigh 56.85752 ab  
## BL/BR:MornHigh 56.19302 abc  
## WT/BR:MornHigh 55.87082 abc  
## BRN:MornLow 55.66667 abc  
## BLK:MornLow 54.66667 abcd  
## WHT:MornLow 54.66667 abcd  
## WT/BLK:MornHigh 54.50599 bcd  
## BL/BR:MornLow 54.00000 cd  
## WT/BR:MornLow 54.00000 cd  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT89 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.167 3.233 1.7509 0.1614   
## THIregime 1 46.242 46.242 25.0396 4.115e-05 \*\*\*  
## Colour:THIregime 5 0.591 0.118 0.0640 0.9969   
## Residuals 24 44.322 1.847   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.846769   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.10342 1.413501 6 53 56.80007  
## BLK 54.98144 1.499390 6 53 56.48064  
## BRN 54.61620 1.633609 6 52 56.29479  
## WHT 55.98674 1.642022 6 53 57.53185  
## WT/BLK 53.78960 2.271256 6 50 56.27737  
## WT/BR 55.32277 1.860504 6 52 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.425914   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.98674 a  
## WT/BR 55.32277 a  
## BL/BR 55.10342 a  
## BLK 54.98144 a  
## BRN 54.61620 a  
## WT/BLK 53.78960 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.846769   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.10006 1.045461 18 53.05405 57.53185  
## MornLow 53.83333 1.581139 18 50.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9349176   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.10006 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.846769 24 54.9667 2.472331 4.000753  
##   
## $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 56.20684 0.5851027 3 55.63021 56.80007 55.91023 56.19025  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.29622 0.3181063 3 55.92890 56.48064 56.20401 56.47911  
## BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BRN:MornHigh 55.89907 0.6333314 3 55.16861 56.29479 55.70121 56.23381  
## BRN:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WHT:MornHigh 56.97347 0.9053441 3 55.92890 57.53185 56.69428 57.45966  
## WHT:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WT/BLK:MornHigh 54.91254 1.6673987 3 53.05405 56.27737 54.23013 55.40620  
## WT/BLK:MornLow 52.66667 2.5166115 3 50.00000 55.00000 51.50000 53.00000  
## WT/BR:MornHigh 56.31221 1.1761718 3 54.98804 57.23565 55.85050 56.71295  
## WT/BR:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.49516  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.47987  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.26430  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.49576  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.84178  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.97430  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.97347 a  
## WT/BR:MornHigh 56.31221 ab  
## BLK:MornHigh 56.29622 ab  
## BL/BR:MornHigh 56.20684 ab  
## BRN:MornHigh 55.89907 ab  
## WHT:MornLow 55.00000 ab  
## WT/BLK:MornHigh 54.91254 ab  
## WT/BR:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 53.66667 ab  
## BRN:MornLow 53.33333 ab  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RESPRT90 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.955 2.591 2.1825 0.08981 .   
## THIregime 1 44.783 44.783 37.7223 2.406e-06 \*\*\*  
## Colour:THIregime 5 0.604 0.121 0.1018 0.99082   
## Residuals 24 28.492 1.187   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.187169   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.05105 1.352754 6 53 56.60094  
## BLK 55.18494 1.796610 6 53 57.43892  
## BRN 54.81270 1.506600 6 53 56.68919  
## WHT 55.62852 1.335412 6 54 57.27299  
## WT/BLK 53.68101 1.933700 6 51 56.45160  
## WT/BR 54.66711 1.387676 6 53 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.945026   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.62852 a  
## BLK 55.18494 ab  
## BL/BR 55.05105 ab  
## BRN 54.81270 ab  
## WT/BR 54.66711 ab  
## WT/BLK 53.68101 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.187169   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95289 0.8554225 18 54.09945 57.43892  
## MornLow 53.72222 1.3197841 18 51.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7495891   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95289 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.187169 24 54.83755 1.98691 3.207684  
##   
## $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 56.10210 0.5106372 3 55.58043 56.60094 55.85267 56.12491  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.36988 0.9258800 3 55.82436 57.43892 55.83536 55.84637  
## BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BRN:MornHigh 55.95873 0.6333314 3 55.56301 56.68919 55.59350 55.62399  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.59036 0.5912035 3 56.24252 57.27299 56.24905 56.25559  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.02869 1.2513706 3 54.09945 56.45160 54.31724 54.53503  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.66755 0.6914671 3 55.14485 56.45160 55.27553 55.40620  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.36293  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.64265  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.15659  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.76429  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.49332  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.92890  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.59036 a  
## BLK:MornHigh 56.36988 a  
## BL/BR:MornHigh 56.10210 a  
## BRN:MornHigh 55.95873 a  
## WT/BR:MornHigh 55.66755 a  
## WT/BLK:MornHigh 55.02869 ab  
## WHT:MornLow 54.66667 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornLow 53.66667 ab  
## WT/BR:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"

# Pulse Rate (Sheet Two for Morning 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 80.360 16.072 6.5800 0.0005493 \*\*\*  
## THIregime 1 36.658 36.658 15.0081 0.0007240 \*\*\*  
## Colour:THIregime 5 4.138 0.828 0.3388 0.8842784   
## Residuals 24 58.622 2.443   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.442581   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.96268 2.3072604 6 51 57.49700  
## BLK 58.30078 1.2921766 6 56 59.58780  
## BRN 58.18756 0.7101177 6 57 59.02154  
## WHT 55.14796 2.4342506 6 51 57.94503  
## WT/BLK 54.72519 1.9621355 6 52 57.32277  
## WT/BR 55.73046 1.6157743 6 53 57.58412  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.789932   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.30078 a  
## BRN 58.18756 a  
## WT/BR 55.73046 ab  
## WHT 55.14796 b  
## BL/BR 54.96268 b  
## WT/BLK 54.72519 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.442581   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.18488 1.545782 18 54.62215 59.5878  
## MornLow 55.16667 2.455486 18 51.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.075206   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.18488 a  
## MornLow 55.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.442581 24 56.17577 2.782118 4.601082  
##   
## $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 56.25870 1.3915173 3 54.75283 57.49700 55.63955 56.52627  
## BL/BR:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## BLK:MornHigh 58.93488 0.7966724 3 58.04721 59.58780 58.60843 59.16964  
## BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## BRN:MornHigh 58.70845 0.3366759 3 58.35233 59.02154 58.55190 58.75148  
## BRN:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WHT:MornHigh 56.62926 1.3776450 3 55.19712 57.94503 55.97137 56.74562  
## WHT:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## WT/BLK:MornHigh 55.78371 1.3893219 3 54.62215 57.32277 55.01418 55.40620  
## WT/BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.79426 0.8935866 3 55.82436 57.58412 56.39933 56.97430  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 57.01164  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.37872  
## BLK:MornLow 58.50000  
## BRN:MornHigh 58.88651  
## BRN:MornLow 58.00000  
## WHT:MornHigh 57.34532  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.27921  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.93488 a  
## BRN:MornHigh 58.70845 a  
## BLK:MornLow 57.66667 ab  
## BRN:MornLow 57.66667 ab  
## WT/BR:MornHigh 56.79426 ab  
## WHT:MornHigh 56.62926 ab  
## BL/BR:MornHigh 56.25870 ab  
## WT/BLK:MornHigh 55.78371 ab  
## WT/BR:MornLow 54.66667 ab  
## BL/BR:MornLow 53.66667 b  
## WHT:MornLow 53.66667 b  
## WT/BLK:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT2 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 49.124 9.825 4.7009 0.0039156 \*\*   
## THIregime 1 45.083 45.083 21.5708 0.0001026 \*\*\*  
## Colour:THIregime 5 3.796 0.759 0.3633 0.8685427   
## Residuals 24 50.160 2.090   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.089981   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.44999 2.501009 6 52 58.61707  
## BLK 58.47575 1.369315 6 57 60.11050  
## BRN 56.42269 1.454770 6 54 57.88903  
## WHT 55.06525 2.137926 6 52 57.69301  
## WT/BLK 55.26936 1.583212 6 53 57.23565  
## WT/BR 56.69799 1.576043 6 54 58.54240  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.580717   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.47575 a  
## WT/BR 56.69799 ab  
## BRN 56.42269 ab  
## BL/BR 55.44999 b  
## WT/BLK 55.26936 b  
## WHT 55.06525 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.089981   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.34923 1.219986 18 55.54559 60.1105  
## MornLow 55.11111 2.138963 18 52.00000 60.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9945765   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.34923 a  
## MornLow 55.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.089981 24 56.23017 2.570998 4.256049  
##   
## $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 56.89997 1.5265089 3 55.69659 58.61707 56.04143 56.38626  
## BL/BR:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## BLK:MornHigh 58.95149 1.0042684 3 58.33913 60.11050 58.37199 58.40485  
## BLK:MornLow 58.00000 1.7320508 3 57.00000 60.00000 57.00000 57.00000  
## BRN:MornHigh 57.51205 0.6304462 3 56.78423 57.88903 57.32356 57.86289  
## BRN:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WHT:MornHigh 56.46384 1.1069618 3 55.54559 57.69301 55.84925 56.15291  
## WHT:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BLK:MornHigh 56.53872 0.6577164 3 55.92890 57.23565 56.19025 56.45160  
## WT/BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.72931 0.8279903 3 56.88718 58.54240 57.32277 57.75835  
## WT/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.50167  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.25767  
## BLK:MornLow 58.50000  
## BRN:MornHigh 57.87596  
## BRN:MornLow 56.00000  
## WHT:MornHigh 56.92296  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.84363  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 58.15038  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.95149 a  
## BLK:MornLow 58.00000 ab  
## WT/BR:MornHigh 57.72931 abc  
## BRN:MornHigh 57.51205 abc  
## BL/BR:MornHigh 56.89997 abc  
## WT/BLK:MornHigh 56.53872 abc  
## WHT:MornHigh 56.46384 abc  
## WT/BR:MornLow 55.66667 abc  
## BRN:MornLow 55.33333 abc  
## BL/BR:MornLow 54.00000 bc  
## WT/BLK:MornLow 54.00000 bc  
## WHT:MornLow 53.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT3 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 31.832 6.366 2.7670 0.0412514 \*   
## THIregime 1 46.703 46.703 20.2981 0.0001461 \*\*\*  
## Colour:THIregime 5 2.432 0.486 0.2114 0.9543580   
## Residuals 24 55.220 2.301   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.300847   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.74370 1.604041 6 54 57.57167  
## BLK 58.36871 1.980955 6 55 60.39799  
## BRN 57.03308 1.684778 6 54 58.62952  
## WHT 55.99430 2.086283 6 53 58.57725  
## WT/BLK 55.72641 1.971931 6 53 58.54240  
## WT/BR 56.96774 1.815009 6 54 59.15222  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.707778   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.36871 a  
## BRN 57.03308 a  
## WT/BR 56.96774 a  
## WHT 55.99430 a  
## BL/BR 55.74370 a  
## WT/BLK 55.72641 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.300847   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.77798 1.162745 18 56.19025 60.39799  
## MornLow 55.50000 1.977818 18 53.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.043544   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.77798 a  
## MornLow 55.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.300847 24 56.63899 2.67811 4.465595  
##   
## $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 57.15406 0.3628221 3 56.91622 57.57167 56.94526 56.97430  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 59.07075 1.4136909 3 57.58412 60.39799 58.40714 59.23016  
## BLK:MornLow 57.66667 2.5166115 3 55.00000 60.00000 56.50000 58.00000  
## BRN:MornHigh 58.06616 0.9457409 3 56.97430 58.62952 57.78449 58.59467  
## BRN:MornLow 56.00000 1.7320508 3 54.00000 57.00000 55.50000 57.00000  
## WHT:MornHigh 57.32194 1.1226138 3 56.41426 58.57725 56.69428 56.97430  
## WHT:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WT/BLK:MornHigh 57.11949 1.2513706 3 56.19025 58.54240 56.40804 56.62583  
## WT/BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.93549 1.1941764 3 56.76522 59.15222 57.32712 57.88903  
## WT/BR:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.27299  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.81407  
## BLK:MornLow 59.00000  
## BRN:MornHigh 58.61209  
## BRN:MornLow 57.00000  
## WHT:MornHigh 57.77577  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 57.58412  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 58.52062  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.07075 a  
## BRN:MornHigh 58.06616 ab  
## WT/BR:MornHigh 57.93549 ab  
## BLK:MornLow 57.66667 ab  
## WHT:MornHigh 57.32194 ab  
## BL/BR:MornHigh 57.15406 ab  
## WT/BLK:MornHigh 57.11949 ab  
## BRN:MornLow 56.00000 ab  
## WT/BR:MornLow 56.00000 ab  
## WHT:MornLow 54.66667 ab  
## BL/BR:MornLow 54.33333 b  
## WT/BLK:MornLow 54.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT4 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 90.925 18.185 11.2769 1.122e-05 \*\*\*  
## THIregime 1 38.711 38.711 24.0053 5.363e-05 \*\*\*  
## Colour:THIregime 5 5.247 1.049 0.6508 0.6637   
## Residuals 24 38.702 1.613   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.612585   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.54838 2.136080 6 53 58.24371  
## BLK 59.22716 1.477524 6 57 61.00000  
## BRN 54.98944 1.821705 6 52 57.07884  
## WHT 55.26656 1.562899 6 53 57.07884  
## WT/BLK 54.24666 1.561418 6 52 56.19025  
## WT/BR 55.94359 1.259695 6 54 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.26689   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.22716 a  
## WT/BR 55.94359 b  
## BL/BR 55.54838 b  
## WHT 55.26656 b  
## BRN 54.98944 b  
## WT/BLK 54.24666 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.612585   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.90726 1.462763 18 54.8835 60.52316  
## MornLow 54.83333 2.407097 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8736318   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.90726 a  
## MornLow 54.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.612585 24 55.8703 2.2729 3.738495  
##   
## $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 56.76342 1.2824842 3 55.98698 58.24371 56.02328 56.05958  
## BL/BR:MornLow 54.33333 2.3094011 3 53.00000 57.00000 53.00000 53.00000  
## BLK:MornHigh 59.45432 1.1414416 3 58.25201 60.52316 58.91991 59.58780  
## BLK:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## BRN:MornHigh 56.31221 0.8449868 3 55.40620 57.07884 55.92890 56.45160  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.53312 0.5423336 3 55.99424 57.07884 56.26025 56.52627  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.49332 0.6577164 3 54.88350 56.19025 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.88718 0.5440434 3 56.45160 57.49700 56.58228 56.71295  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 57.15164  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 60.05548  
## BLK:MornLow 60.00000  
## BRN:MornHigh 56.76522  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.80256  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.79823  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.10498  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.45432 a  
## BLK:MornLow 59.00000 ab  
## WT/BR:MornHigh 56.88718 abc  
## BL/BR:MornHigh 56.76342 abc  
## WHT:MornHigh 56.53312 abcd  
## BRN:MornHigh 56.31221 abcd  
## WT/BLK:MornHigh 55.49332 bcd  
## WT/BR:MornLow 55.00000 cd  
## BL/BR:MornLow 54.33333 cd  
## WHT:MornLow 54.00000 cd  
## BRN:MornLow 53.66667 cd  
## WT/BLK:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT5 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 125.471 25.094 10.315 2.268e-05 \*\*\*  
## THIregime 1 37.379 37.379 15.365 0.0006451 \*\*\*  
## Colour:THIregime 5 7.712 1.542 0.634 0.6757534   
## Residuals 24 58.386 2.433   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.432731   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.34973 2.074178 6 52 57.87036  
## BLK 60.37964 1.695015 6 59 63.00000  
## BRN 55.04514 1.728307 6 53 57.18338  
## WHT 55.63105 1.646327 6 53 57.31032  
## WT/BLK 55.24727 2.240794 6 52 58.19393  
## WT/BR 55.79435 1.673738 6 53 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.784301   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.37964 a  
## WT/BR 55.79435 b  
## WHT 55.63105 b  
## BL/BR 55.34973 b  
## WT/BLK 55.24727 b  
## BRN 55.04514 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.432731   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.26018 1.789792 18 54.3608 61.99222  
## MornLow 55.22222 2.839958 18 52.0000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.073035   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.26018 a  
## MornLow 55.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.432731 24 56.2412 2.773272 4.591794  
##   
## $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 56.69947 1.1358638 3 55.60221 57.87036 56.11402 56.62583  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 60.42595 1.3575416 3 59.58780 61.99222 59.64282 59.69784  
## BLK:MornLow 60.33333 2.3094011 3 59.00000 63.00000 59.00000 59.00000  
## BRN:MornHigh 56.42362 0.6585576 3 56.01602 57.18338 56.04374 56.07145  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.92877 0.6248421 3 56.20767 57.31032 56.73800 57.26832  
## WHT:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## WT/BLK:MornHigh 56.16121 1.9270973 3 54.36080 58.19393 55.14485 55.92890  
## WT/BLK:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.92203 0.9247507 3 55.92890 57.75835 56.50387 57.07884  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 57.24810  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 60.84503  
## BLK:MornLow 61.00000  
## BRN:MornHigh 56.62742  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.28932  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 57.06142  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 57.41860  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.42595 a  
## BLK:MornLow 60.33333 a  
## WHT:MornHigh 56.92877 ab  
## WT/BR:MornHigh 56.92203 ab  
## BL/BR:MornHigh 56.69947 ab  
## BRN:MornHigh 56.42362 ab  
## WT/BLK:MornHigh 56.16121 ab  
## WT/BR:MornLow 54.66667 b  
## WHT:MornLow 54.33333 b  
## WT/BLK:MornLow 54.33333 b  
## BL/BR:MornLow 54.00000 b  
## BRN:MornLow 53.66667 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 61.727 12.345 4.9256 0.0030477 \*\*   
## THIregime 1 48.072 48.072 19.1796 0.0002013 \*\*\*  
## Colour:THIregime 5 4.239 0.848 0.3383 0.8846352   
## Residuals 24 60.154 2.506   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.506397   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.35665 1.937976 6 53 57.78739  
## BLK 59.08413 1.582266 6 57 61.00000  
## BRN 55.89268 1.736861 6 53 57.86289  
## WHT 55.14677 1.671477 6 53 56.80007  
## WT/BLK 56.20494 1.884792 6 54 58.80375  
## WT/BR 55.91486 2.621180 6 52 59.06510  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.826143   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.08413 a  
## WT/BLK 56.20494 b  
## WT/BR 55.91486 b  
## BRN 55.89268 b  
## BL/BR 55.35665 b  
## WHT 55.14677 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.506397   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.42223 1.379304 18 55.53688 60.84228  
## MornLow 55.11111 2.348689 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.089161   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.42223 a  
## MornLow 55.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.506397 24 56.26667 2.813674 4.660799  
##   
## $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 56.71330 0.9316075 3 56.12491 57.78739 56.17625 56.22759  
## BL/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BLK:MornHigh 59.50160 1.1843764 3 58.59742 60.84228 58.83126 59.06510  
## BLK:MornLow 58.66667 2.0816660 3 57.00000 61.00000 57.50000 58.00000  
## BRN:MornHigh 57.11870 0.8360763 3 56.21401 57.86289 56.74661 57.27921  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 56.62687 0.2813342 3 56.30226 56.80007 56.54027 56.77829  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 57.40988 1.2350919 3 56.45160 58.80375 56.71295 56.97430  
## WT/BLK:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## WT/BR:MornHigh 57.16305 1.7802165 3 55.53688 59.06510 56.21203 56.88718  
## WT/BR:MornLow 54.66667 3.0550505 3 52.00000 58.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.00749  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.95369  
## BLK:MornLow 59.50000  
## BRN:MornHigh 57.57105  
## BRN:MornLow 55.50000  
## WHT:MornHigh 56.78918  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 57.88903  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 57.97614  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.50160 a  
## BLK:MornLow 58.66667 ab  
## WT/BLK:MornHigh 57.40988 abc  
## WT/BR:MornHigh 57.16305 abc  
## BRN:MornHigh 57.11870 abc  
## BL/BR:MornHigh 56.71330 abc  
## WHT:MornHigh 56.62687 abc  
## WT/BLK:MornLow 55.00000 abc  
## BRN:MornLow 54.66667 bc  
## WT/BR:MornLow 54.66667 bc  
## BL/BR:MornLow 54.00000 c  
## WHT:MornLow 53.66667 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 52.920 10.584 3.0004 0.030468 \*   
## THIregime 1 41.918 41.918 11.8827 0.002099 \*\*  
## Colour:THIregime 5 4.092 0.818 0.2320 0.944707   
## Residuals 24 84.663 3.528   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.527615   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.25753 1.517021 6 54 58.19393  
## BLK 58.46174 2.559515 6 56 62.00000  
## BRN 55.84332 1.977702 6 53 58.30481  
## WHT 55.04150 2.122093 6 52 57.67123  
## WT/BLK 54.83439 2.512066 6 52 58.54240  
## WT/BR 55.36924 1.599049 6 53 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.352816   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.46174 a  
## BL/BR 56.25753 ab  
## BRN 55.84332 ab  
## WT/BR 55.36924 ab  
## WHT 55.04150 b  
## WT/BLK 54.83439 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.527615   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.04701 1.493074 18 55.05773 61.1559  
## MornLow 54.88889 2.470744 18 52.00000 62.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.292134   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.04701 a  
## MornLow 54.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.527615 24 55.96795 3.35584 5.529375  
##   
## $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 57.18172 0.9260907 3 56.37693 58.19393 56.67561 56.97430  
## BL/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## BLK:MornHigh 58.92347 1.9334417 3 57.78739 61.15590 57.80726 57.82713  
## BLK:MornLow 58.00000 3.4641016 3 56.00000 62.00000 56.00000 56.00000  
## BRN:MornHigh 57.01997 1.1363996 3 56.14669 58.30481 56.37755 56.60841  
## BRN:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WHT:MornHigh 56.41634 1.1199735 3 55.51821 57.67123 55.78889 56.05958  
## WHT:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BLK:MornHigh 56.33544 1.9192048 3 55.05773 58.54240 55.23197 55.40620  
## WT/BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.40514 0.9163967 3 55.61528 57.40988 55.90277 56.19025  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.58412  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 59.49151  
## BLK:MornLow 59.00000  
## BRN:MornHigh 57.45661  
## BRN:MornLow 55.50000  
## WHT:MornHigh 56.86540  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.97430  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.80007  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.92347 a  
## BLK:MornLow 58.00000 ab  
## BL/BR:MornHigh 57.18172 ab  
## BRN:MornHigh 57.01997 ab  
## WHT:MornHigh 56.41634 ab  
## WT/BR:MornHigh 56.40514 ab  
## WT/BLK:MornHigh 56.33544 ab  
## BL/BR:MornLow 55.33333 ab  
## BRN:MornLow 54.66667 ab  
## WT/BR:MornLow 54.33333 ab  
## WHT:MornLow 53.66667 ab  
## WT/BLK:MornLow 53.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT8 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 65.635 13.127 2.7874 0.040162 \*   
## THIregime 1 53.042 53.042 11.2631 0.002626 \*\*  
## Colour:THIregime 5 6.625 1.325 0.2814 0.918740   
## Residuals 24 113.024 4.709   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.709336   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.46658 1.754619 6 53 57.43892  
## BLK 59.37345 3.344690 6 54 63.00000  
## BRN 57.31788 1.354232 6 55 58.68495  
## WHT 55.45842 1.748127 6 53 57.43166  
## WT/BLK 57.33684 3.086340 6 53 61.67860  
## WT/BR 56.32981 2.420173 6 53 59.37872  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.873905   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.37345 a  
## WT/BLK 57.33684 ab  
## BRN 57.31788 ab  
## WT/BR 56.32981 ab  
## BL/BR 55.46658 b  
## WHT 55.45842 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.709336   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.09433 1.736866 18 56.41426 62.01836  
## MornLow 55.66667 2.807553 18 53.00000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.492956   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.09433 a  
## MornLow 55.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.709336 24 56.8805 3.815192 6.388741  
##   
## $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 56.93316 0.4941057 3 56.45160 57.43892 56.68028 56.90896  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 59.74690 2.5590987 3 56.97430 62.01836 58.61118 60.24805  
## BLK:MornLow 59.00000 4.5825757 3 54.00000 63.00000 57.00000 60.00000  
## BRN:MornHigh 58.30243 0.5860988 3 57.62768 58.68495 58.11117 58.59467  
## BRN:MornLow 56.33333 1.1547005 3 55.00000 57.00000 56.00000 57.00000  
## WHT:MornHigh 56.91684 0.5088095 3 56.41426 57.43166 56.65944 56.90461  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 59.00702 2.4722312 3 56.80007 61.67860 57.67123 58.54240  
## WT/BLK:MornLow 55.66667 3.0550505 3 53.00000 59.00000 54.00000 55.00000  
## WT/BR:MornHigh 57.65962 1.5290237 3 56.45160 59.37872 56.80007 57.14853  
## WT/BR:MornLow 55.00000 2.6457513 3 53.00000 58.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.17394  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 61.13320  
## BLK:MornLow 61.50000  
## BRN:MornHigh 58.63981  
## BRN:MornLow 57.00000  
## WHT:MornHigh 57.16813  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 60.11050  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 58.26363  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.74690 a  
## WT/BLK:MornHigh 59.00702 a  
## BLK:MornLow 59.00000 a  
## BRN:MornHigh 58.30243 a  
## WT/BR:MornHigh 57.65962 a  
## BL/BR:MornHigh 56.93316 a  
## WHT:MornHigh 56.91684 a  
## BRN:MornLow 56.33333 a  
## WT/BLK:MornLow 55.66667 a  
## WT/BR:MornLow 55.00000 a  
## BL/BR:MornLow 54.00000 a  
## WHT:MornLow 54.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT9 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 76.821 15.364 3.7179 0.01239 \*  
## THIregime 1 31.896 31.896 7.7185 0.01044 \*  
## Colour:THIregime 5 3.624 0.725 0.1754 0.96921   
## Residuals 24 99.179 4.132   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.132459   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.32079 2.479580 6 52 58.89087  
## BLK 59.60451 2.571892 6 56 63.00000  
## BRN 55.88252 1.728887 6 53 57.84547  
## WHT 56.66205 1.850102 6 54 58.92571  
## WT/BLK 54.96445 1.923479 6 52 57.49700  
## WT/BR 55.88001 2.016246 6 53 58.41173  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.628887   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.60451 a  
## WHT 56.66205 ab  
## BL/BR 56.32079 ab  
## BRN 55.88252 b  
## WT/BR 55.88001 b  
## WT/BLK 54.96445 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 4.132459   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.49367 1.737923 18 54.3608 61.96609  
## MornLow 55.61111 2.746953 18 52.0000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.398528   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.49367 a  
## MornLow 55.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 4.132459 24 56.55239 3.594623 5.984663  
##   
## $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 57.30825 1.7641573 3 55.40620 58.89087 56.51694 57.62768  
## BL/BR:MornLow 55.33333 3.0550505 3 52.00000 58.00000 54.00000 56.00000  
## BLK:MornHigh 59.87569 1.9956524 3 57.99066 61.96609 58.83050 59.67033  
## BLK:MornLow 59.33333 3.5118846 3 56.00000 63.00000 57.50000 59.00000  
## BRN:MornHigh 57.09838 0.8392762 3 56.19025 57.84547 56.72483 57.25941  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 57.65744 1.1186954 3 56.81096 58.92571 57.02330 57.23565  
## WHT:MornLow 55.66667 2.0816660 3 54.00000 58.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.92890 1.5681000 3 54.36080 57.49700 55.14485 55.92890  
## WT/BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BR:MornHigh 57.09336 1.1887622 3 56.10313 58.41173 56.43418 56.76522  
## WT/BR:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 58.25927  
## BL/BR:MornLow 57.00000  
## BLK:MornHigh 60.81821  
## BLK:MornLow 61.00000  
## BRN:MornHigh 57.55244  
## BRN:MornLow 55.50000  
## WHT:MornHigh 58.08068  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 57.58847  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.87569 a  
## BLK:MornLow 59.33333 a  
## WHT:MornHigh 57.65744 a  
## BL/BR:MornHigh 57.30825 a  
## BRN:MornHigh 57.09838 a  
## WT/BR:MornHigh 57.09336 a  
## WT/BLK:MornHigh 55.92890 a  
## WHT:MornLow 55.66667 a  
## BL/BR:MornLow 55.33333 a  
## BRN:MornLow 54.66667 a  
## WT/BR:MornLow 54.66667 a  
## WT/BLK:MornLow 54.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT10 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 76.186 15.237 11.1550 1.224e-05 \*\*\*  
## THIregime 1 46.095 46.095 33.7462 5.458e-06 \*\*\*  
## Colour:THIregime 5 5.715 1.143 0.8368 0.5367   
## Residuals 24 32.783 1.366   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.365945   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.79728 1.657175 6 54 57.62768  
## BLK 60.26825 1.500216 6 58 62.00000  
## BRN 56.79369 1.658302 6 54 58.63744  
## WHT 56.28267 1.876693 6 53 58.11771  
## WT/BLK 56.98838 1.514728 6 55 58.54240  
## WT/BR 56.65909 1.831781 6 54 58.96056  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.086343   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.26825 a  
## WT/BLK 56.98838 b  
## BRN 56.79369 b  
## WT/BR 56.65909 b  
## WHT 56.28267 b  
## BL/BR 55.79728 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.365945   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.26312 1.298948 18 56.48894 61.73087  
## MornLow 56.00000 2.249183 18 53.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8040511   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.26312 a  
## MornLow 56.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.365945 24 57.13156 2.045693 3.440742  
##   
## $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 57.26123 0.3206131 3 57.03238 57.62768 57.07801 57.12364  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 60.53651 1.1877468 3 59.35549 61.73087 59.93932 60.52316  
## BLK:MornLow 60.00000 2.0000000 3 58.00000 62.00000 59.00000 60.00000  
## BRN:MornHigh 57.92070 0.8550247 3 56.97430 58.63744 57.56234 58.15038  
## BRN:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WHT:MornHigh 57.56535 0.9323054 3 56.48894 58.11771 57.28916 58.08939  
## WHT:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WT/BLK:MornHigh 58.31009 0.4023746 3 57.84547 58.54240 58.19393 58.54240  
## WT/BLK:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WT/BR:MornHigh 57.98485 0.8844809 3 57.23565 58.96056 57.49700 57.75835  
## WT/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 57.37566  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 61.12701  
## BLK:MornLow 61.00000  
## BRN:MornHigh 58.39391  
## BRN:MornLow 56.50000  
## WHT:MornHigh 58.10355  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 58.54240  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 58.35946  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.53651 a  
## BLK:MornLow 60.00000 a  
## WT/BLK:MornHigh 58.31009 ab  
## WT/BR:MornHigh 57.98485 ab  
## BRN:MornHigh 57.92070 ab  
## WHT:MornHigh 57.56535 abc  
## BL/BR:MornHigh 57.26123 abc  
## BRN:MornLow 55.66667 bc  
## WT/BLK:MornLow 55.66667 bc  
## WT/BR:MornLow 55.33333 bc  
## WHT:MornLow 55.00000 bc  
## BL/BR:MornLow 54.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT11 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 43.358 8.672 3.4604 0.0170162 \*   
## THIregime 1 45.933 45.933 18.3297 0.0002583 \*\*\*  
## Colour:THIregime 5 3.395 0.679 0.2710 0.9245116   
## Residuals 24 60.143 2.506   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.505956   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.69038 2.583897 6 52 59.00702  
## BLK 57.93168 1.799997 6 56 60.03210  
## BRN 54.59262 1.879891 6 52 56.66939  
## WHT 55.28445 1.580739 6 53 57.12364  
## WT/BLK 55.26936 1.583212 6 53 57.23565  
## WT/BR 56.00893 1.854329 6 53 58.28105  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.825894   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 57.93168 a  
## BL/BR 56.69038 ab  
## WT/BR 56.00893 ab  
## WHT 55.28445 ab  
## WT/BLK 55.26936 ab  
## BRN 54.59262 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.505956   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.09247 1.246094 18 55.66755 60.0321  
## MornLow 54.83333 2.176073 18 52.00000 60.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.089065   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.09247 a  
## MornLow 54.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.505956 24 55.9629 2.828697 4.660389  
##   
## $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 57.71410 1.7927592 3 55.66755 59.00702 57.06764 58.46773  
## BL/BR:MornLow 55.66667 3.2145503 3 52.00000 58.00000 54.50000 57.00000  
## BLK:MornHigh 58.53002 1.3009985 3 57.75835 60.03210 57.77898 57.79962  
## BLK:MornLow 57.33333 2.3094011 3 56.00000 60.00000 56.00000 56.00000  
## BRN:MornHigh 56.18523 0.4750632 3 55.71982 56.66939 55.94316 56.16649  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.56890 0.5453574 3 56.03344 57.12364 56.29152 56.54961  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.53872 0.6577164 3 55.92890 57.23565 56.19025 56.45160  
## WT/BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.01786 1.2419855 3 55.79823 58.28105 56.38626 56.97430  
## WT/BR:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 58.73738  
## BL/BR:MornLow 57.50000  
## BLK:MornHigh 58.91586  
## BLK:MornLow 58.00000  
## BRN:MornHigh 56.41794  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.83662  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.84363  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.62768  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.53002 a  
## BL/BR:MornHigh 57.71410 a  
## BLK:MornLow 57.33333 ab  
## WT/BR:MornHigh 57.01786 ab  
## WHT:MornHigh 56.56890 ab  
## WT/BLK:MornHigh 56.53872 ab  
## BRN:MornHigh 56.18523 ab  
## BL/BR:MornLow 55.66667 ab  
## WT/BR:MornLow 55.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BLK:MornLow 54.00000 ab  
## BRN:MornLow 53.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT12 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 52.064 10.413 7.4119 0.000251 \*\*\*  
## THIregime 1 39.330 39.330 27.9956 1.992e-05 \*\*\*  
## Colour:THIregime 5 2.493 0.499 0.3550 0.873943   
## Residuals 24 33.717 1.405   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.40487   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.59799 1.7701894 6 53 57.78739  
## BLK 59.13949 0.6650316 6 58 59.87529  
## BRN 56.40606 1.6142238 6 54 58.41173  
## WHT 56.46656 1.4958828 6 54 57.98703  
## WT/BLK 55.79144 2.0589090 6 53 58.54240  
## WT/BR 55.86985 1.5651778 6 54 57.84547  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.115862   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.13949 a  
## WHT 56.46656 b  
## BRN 56.40606 b  
## WT/BR 55.86985 b  
## WT/BLK 55.79144 b  
## BL/BR 55.59799 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.40487   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.59046 1.231314 18 55.4062 59.87529  
## MornLow 55.50000 1.917412 18 53.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8154271   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.59046 a  
## MornLow 55.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.40487 24 56.54523 2.096149 3.489422  
##   
## $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 56.86264 0.8381849 3 56.15291 57.78739 56.40026 56.64761  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 59.61230 0.3188430 3 59.25767 59.87529 59.48081 59.70396  
## BLK:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## BRN:MornHigh 57.47878 0.8536636 3 56.73671 58.41173 57.01231 57.28792  
## BRN:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WHT:MornHigh 57.59978 0.6389482 3 56.86229 57.98703 57.40615 57.95001  
## WHT:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BLK:MornHigh 56.91622 1.5713232 3 55.40620 58.54240 56.10313 56.80007  
## WT/BLK:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.07303 0.6694582 3 56.66068 57.84547 56.68682 56.71295  
## WT/BR:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.21750  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.78962  
## BLK:MornLow 59.00000  
## BRN:MornHigh 57.84982  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.96852  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 57.67123  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 57.27921  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.61230 a  
## BLK:MornLow 58.66667 ab  
## WHT:MornHigh 57.59978 abc  
## BRN:MornHigh 57.47878 abc  
## WT/BR:MornHigh 57.07303 abc  
## WT/BLK:MornHigh 56.91622 abc  
## BL/BR:MornHigh 56.86264 abc  
## BRN:MornLow 55.33333 bc  
## WHT:MornLow 55.33333 bc  
## WT/BLK:MornLow 54.66667 c  
## WT/BR:MornLow 54.66667 c  
## BL/BR:MornLow 54.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT13 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 115.092 23.0184 11.3535 1.063e-05 \*\*\*  
## THIregime 1 27.354 27.3539 13.4920 0.001198 \*\*   
## Colour:THIregime 5 3.721 0.7442 0.3671 0.866046   
## Residuals 24 48.658 2.0274   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.027419   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.13799 1.9115975 6 52 57.38084  
## BLK 59.42516 1.4975968 6 57 61.00000  
## BRN 58.13106 0.6904561 6 57 58.93443  
## WHT 56.95628 1.6351185 6 55 59.03243  
## WT/BLK 54.96445 1.9234790 6 52 57.49700  
## WT/BR 54.61515 1.7887032 6 52 56.80007  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.541797   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.42516 a  
## BRN 58.13106 a  
## WHT 56.95628 ab  
## BL/BR 55.13799 b  
## WT/BLK 54.96445 b  
## WT/BR 54.61515 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.027419   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.41003 1.773510 18 54.3608 60.93582  
## MornLow 55.66667 2.589572 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9795775   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.41003 a  
## MornLow 55.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.027419 24 56.53835 2.518423 4.191864  
##   
## $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 56.27598 1.1182287 3 55.14485 57.38084 55.72355 56.30226  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 59.85032 1.0318454 3 58.88216 60.93582 59.30757 59.73299  
## BLK:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## BRN:MornHigh 58.59546 0.4598862 3 58.07197 58.93443 58.42598 58.77999  
## BRN:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## WHT:MornHigh 57.91257 0.9698435 3 57.34766 59.03243 57.35264 57.35761  
## WHT:MornLow 56.00000 1.7320508 3 55.00000 58.00000 55.00000 55.00000  
## WT/BLK:MornHigh 55.92890 1.5681000 3 54.36080 57.49700 55.14485 55.92890  
## WT/BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BR:MornHigh 55.89696 0.8580144 3 55.09258 56.80007 55.44540 55.79823  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.84155  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 60.33441  
## BLK:MornLow 60.00000  
## BRN:MornHigh 58.85721  
## BRN:MornLow 58.00000  
## WHT:MornHigh 58.19502  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 56.29915  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.85032 a  
## BLK:MornLow 59.00000 a  
## BRN:MornHigh 58.59546 a  
## WHT:MornHigh 57.91257 ab  
## BRN:MornLow 57.66667 ab  
## BL/BR:MornHigh 56.27598 abc  
## WHT:MornLow 56.00000 abc  
## WT/BLK:MornHigh 55.92890 abc  
## WT/BR:MornHigh 55.89696 abc  
## BL/BR:MornLow 54.00000 bc  
## WT/BLK:MornLow 54.00000 bc  
## WT/BR:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT14 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 86.333 17.267 7.7040 0.0001928 \*\*\*  
## THIregime 1 33.250 33.250 14.8353 0.0007659 \*\*\*  
## Colour:THIregime 5 3.569 0.714 0.3185 0.8969422   
## Residuals 24 53.790 2.241   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.241254   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.90683 1.616844 6 55 59.00702  
## BLK 60.01979 1.172880 6 58 61.18204  
## BRN 56.21748 2.327456 6 52 58.49884  
## WHT 57.54537 1.043318 6 56 58.61209  
## WT/BLK 55.74789 1.976932 6 53 58.36817  
## WT/BR 55.32889 1.928221 6 53 57.81062  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.672482   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.01979 a  
## WHT 57.54537 ab  
## BL/BR 56.90683 b  
## BRN 56.21748 b  
## WT/BLK 55.74789 b  
## WT/BR 55.32889 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.241254   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.92208 1.566041 18 55.66755 61.18204  
## MornLow 56.00000 2.449490 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.029942   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.92208 a  
## MornLow 56.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.241254 24 56.96104 2.628256 4.407385  
##   
## $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 57.81366 1.0336487 3 57.19831 59.00702 57.21698 57.23565  
## BL/BR:MornLow 56.00000 1.7320508 3 55.00000 58.00000 55.00000 55.00000  
## BLK:MornHigh 60.37292 0.8553906 3 59.47776 61.18204 59.96836 60.45897  
## BLK:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BRN:MornHigh 57.43496 1.4477042 3 55.78635 58.49884 56.90302 58.01970  
## BRN:MornLow 55.00000 2.6457513 3 52.00000 57.00000 54.00000 56.00000  
## WHT:MornHigh 58.42407 0.2675944 3 58.11771 58.61209 58.33005 58.54240  
## WHT:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WT/BLK:MornHigh 56.82911 1.3893219 3 55.66755 58.36817 56.05958 56.45160  
## WT/BLK:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WT/BR:MornHigh 56.65778 0.9986296 3 56.05958 57.81062 56.08135 56.10313  
## WT/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 58.12134  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 60.82050  
## BLK:MornLow 60.50000  
## BRN:MornHigh 58.25927  
## BRN:MornLow 56.50000  
## WHT:MornHigh 58.57725  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 57.40988  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 56.95688  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.37292 a  
## BLK:MornLow 59.66667 a  
## WHT:MornHigh 58.42407 ab  
## BL/BR:MornHigh 57.81366 abc  
## BRN:MornHigh 57.43496 abc  
## WT/BLK:MornHigh 56.82911 abc  
## WHT:MornLow 56.66667 abc  
## WT/BR:MornHigh 56.65778 abc  
## BL/BR:MornLow 56.00000 abc  
## BRN:MornLow 55.00000 bc  
## WT/BLK:MornLow 54.66667 bc  
## WT/BR:MornLow 54.00000 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 98.001 19.6001 6.2179 0.0007844 \*\*\*  
## THIregime 1 28.744 28.7444 9.1188 0.0059212 \*\*   
## Colour:THIregime 5 1.504 0.3008 0.0954 0.9920771   
## Residuals 24 75.653 3.1522   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.152217   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.33777 1.2931005 6 54 57.57167  
## BLK 58.01023 0.8419223 6 57 58.97798  
## BRN 55.34218 3.1236658 6 52 59.00000  
## WHT 57.06907 2.2450189 6 53 58.80375  
## WT/BLK 53.46322 1.3153228 6 52 55.05773  
## WT/BR 53.80557 1.5072883 6 52 55.71982  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.169401   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.01023 a  
## WHT 57.06907 a  
## BL/BR 56.33777 ab  
## BRN 55.34218 ab  
## WT/BR 53.80557 b  
## WT/BLK 53.46322 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.152217   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.56491 1.815727 18 54.3608 58.97798  
## MornLow 54.77778 2.646986 18 52.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.221448   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.56491 a  
## MornLow 54.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.152217 24 55.67134 3.18916 5.226892  
##   
## $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 57.00887 0.7041353 3 56.21929 57.57167 56.72747 57.23565  
## BL/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BLK:MornHigh 58.68714 0.2533054 3 58.51489 58.97798 58.54171 58.56854  
## BLK:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## BRN:MornHigh 56.35102 2.2375417 3 55.02605 58.93443 55.05932 55.09258  
## BRN:MornLow 54.33333 4.0414519 3 52.00000 59.00000 52.00000 52.00000  
## WHT:MornHigh 57.80481 1.6257318 3 55.92890 58.80375 57.30534 58.68179  
## WHT:MornLow 56.33333 2.8867513 3 53.00000 58.00000 55.50000 58.00000  
## WT/BLK:MornHigh 54.59311 0.4023746 3 54.36080 55.05773 54.36080 54.36080  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 54.94448 0.6746341 3 54.49148 55.71982 54.55681 54.62215  
## WT/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 57.40366  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 58.77326  
## BLK:MornLow 57.50000  
## BRN:MornHigh 57.01350  
## BRN:MornLow 55.50000  
## WHT:MornHigh 58.74277  
## WHT:MornLow 58.00000  
## WT/BLK:MornHigh 54.70927  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.17099  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.68714 a  
## WHT:MornHigh 57.80481 ab  
## BLK:MornLow 57.33333 abc  
## BL/BR:MornHigh 57.00887 abc  
## BRN:MornHigh 56.35102 abc  
## WHT:MornLow 56.33333 abc  
## BL/BR:MornLow 55.66667 abc  
## WT/BR:MornHigh 54.94448 abc  
## WT/BLK:MornHigh 54.59311 abc  
## BRN:MornLow 54.33333 abc  
## WT/BR:MornLow 52.66667 bc  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT16 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 107.554 21.511 18.0186 1.969e-07 \*\*\*  
## THIregime 1 36.870 36.870 30.8842 1.021e-05 \*\*\*  
## Colour:THIregime 5 7.301 1.460 1.2231 0.3288   
## Residuals 24 28.651 1.194   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.19381   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.96234 1.480818 6 53 56.45160  
## BLK 59.55517 1.090730 6 58 61.00000  
## BRN 54.66398 1.678990 6 52 56.39933  
## WHT 57.27199 1.044821 6 56 58.50506  
## WT/BLK 55.16077 2.360679 6 52 58.54240  
## WT/BR 55.45780 1.303253 6 54 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.950459   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.55517 a  
## WHT 57.27199 b  
## WT/BR 55.45780 bc  
## WT/BLK 55.16077 c  
## BL/BR 54.96234 c  
## BRN 54.66398 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.19381   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.19068 1.514753 18 55.23197 60.54608  
## MornLow 55.16667 2.479326 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.751683   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.19068 a  
## MornLow 55.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.19381 24 56.17868 1.944895 3.216645  
##   
## $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 56.25801 0.3353122 3 55.87082 56.45160 56.16121 56.45160  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 59.77701 0.7023243 3 59.16964 60.54608 59.39248 59.61531  
## BLK:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## BRN:MornHigh 55.99463 0.6342669 3 55.26365 56.39933 55.79229 56.32093  
## BRN:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WHT:MornHigh 57.87731 0.5445713 3 57.53185 58.50506 57.56343 57.59501  
## WHT:MornLow 56.66667 1.1547005 3 56.00000 58.00000 56.00000 56.00000  
## WT/BLK:MornHigh 56.65487 1.7034223 3 55.23197 58.54240 55.71111 56.19025  
## WT/BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.58228 0.3457336 3 56.32093 56.97430 56.38626 56.45160  
## WT/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.45160  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 60.08070  
## BLK:MornLow 60.00000  
## BRN:MornHigh 56.36013  
## BRN:MornLow 54.00000  
## WHT:MornHigh 58.05004  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 57.36633  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.71295  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.77701 a  
## BLK:MornLow 59.33333 ab  
## WHT:MornHigh 57.87731 abc  
## WHT:MornLow 56.66667 abcd  
## WT/BLK:MornHigh 56.65487 abcd  
## WT/BR:MornHigh 56.58228 abcd  
## BL/BR:MornHigh 56.25801 bcde  
## BRN:MornHigh 55.99463 cde  
## WT/BR:MornLow 54.33333 de  
## BL/BR:MornLow 53.66667 de  
## WT/BLK:MornLow 53.66667 de  
## BRN:MornLow 53.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT17 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 87.416 17.483 6.6179 0.0005294 \*\*\*  
## THIregime 1 38.337 38.337 14.5116 0.0008517 \*\*\*  
## Colour:THIregime 5 5.804 1.161 0.4394 0.8165669   
## Residuals 24 63.403 2.642   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.64181   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 57.00829 1.657667 6 54 58.60774  
## BLK 59.52236 1.960322 6 57 62.00000  
## BRN 55.41627 1.985589 6 53 57.88903  
## WHT 58.52363 1.578351 6 56 60.24118  
## WT/BLK 56.48776 1.756730 6 54 58.80375  
## WT/BR 55.23337 2.323415 6 52 58.28105  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.901482   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.52236 a  
## WHT 58.52363 ab  
## BL/BR 57.00829 abc  
## WT/BLK 56.48776 bc  
## BRN 55.41627 c  
## WT/BR 55.23337 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.64181   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.0639 1.545829 18 55.66755 61.56244  
## MornLow 56.0000 2.612189 18 52.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.118196   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.0639 a  
## MornLow 56.0000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.64181 24 57.03195 2.849919 4.785047  
##   
## $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 58.01659 0.905359 3 56.97430 58.60774 57.72101 58.46773  
## BL/BR:MornLow 56.00000 1.732051 3 54.00000 57.00000 55.50000 57.00000  
## BLK:MornHigh 60.04473 1.337369 3 59.03897 61.56244 59.28587 59.53278  
## BLK:MornLow 59.00000 2.645751 3 57.00000 62.00000 57.50000 58.00000  
## BRN:MornHigh 56.83254 0.915944 3 56.26153 57.88903 56.30429 56.34706  
## BRN:MornLow 54.00000 1.732051 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 59.04726 1.185500 3 57.87036 60.24118 58.45031 59.03025  
## WHT:MornLow 58.00000 2.000000 3 56.00000 60.00000 57.00000 58.00000  
## WT/BLK:MornHigh 57.64219 1.176344 3 56.45160 58.80375 57.06142 57.67123  
## WT/BLK:MornLow 55.33333 1.527525 3 54.00000 57.00000 54.50000 55.00000  
## WT/BR:MornHigh 56.80007 1.341144 3 55.66755 58.28105 56.05958 56.45160  
## WT/BR:MornLow 53.66667 2.081666 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 58.53773  
## BL/BR:MornLow 57.00000  
## BLK:MornHigh 60.54761  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.11804  
## BRN:MornLow 54.50000  
## WHT:MornHigh 59.63571  
## WHT:MornLow 59.00000  
## WT/BLK:MornHigh 58.23749  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 57.36633  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.04473 a  
## WHT:MornHigh 59.04726 a  
## BLK:MornLow 59.00000 a  
## BL/BR:MornHigh 58.01659 ab  
## WHT:MornLow 58.00000 ab  
## WT/BLK:MornHigh 57.64219 ab  
## BRN:MornHigh 56.83254 ab  
## WT/BR:MornHigh 56.80007 ab  
## BL/BR:MornLow 56.00000 ab  
## WT/BLK:MornLow 55.33333 ab  
## BRN:MornLow 54.00000 b  
## WT/BR:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT18 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 104.011 20.802 12.3019 5.529e-06 \*\*\*  
## THIregime 1 46.507 46.507 27.5030 2.241e-05 \*\*\*  
## Colour:THIregime 5 8.050 1.610 0.9521 0.4661   
## Residuals 24 40.583 1.691   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.690979   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.58888 1.437509 6 55 58.21571  
## BLK 58.93186 1.617630 6 56 60.44063  
## BRN 53.62738 2.304108 6 51 56.30905  
## WHT 57.94653 1.660684 6 55 59.44841  
## WT/BLK 55.72641 1.971931 6 53 58.54240  
## WT/BR 57.33187 1.545827 6 55 59.19578  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.321337   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.93186 a  
## WHT 57.94653 ab  
## WT/BR 57.33187 ab  
## BL/BR 56.58888 b  
## WT/BLK 55.72641 bc  
## BRN 53.62738 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.690979   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.82876 1.499013 18 55.10129 60.44063  
## MornLow 55.55556 2.594615 18 51.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8946149   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.82876 a  
## MornLow 55.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.690979 24 56.69216 2.29375 3.828287  
##   
## $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 57.84443 0.3217812 3 57.64634 58.21571 57.65879 57.67123  
## BL/BR:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BLK:MornHigh 59.53038 1.0647944 3 58.35946 60.44063 59.07526 59.79107  
## BLK:MornLow 58.33333 2.0816660 3 56.00000 60.00000 57.50000 59.00000  
## BRN:MornHigh 55.58809 0.6370166 3 55.10129 56.30905 55.22761 55.35393  
## BRN:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WHT:MornHigh 58.55972 1.1972170 3 57.19831 59.44841 58.11537 59.03243  
## WHT:MornLow 57.33333 2.0816660 3 55.00000 59.00000 56.50000 58.00000  
## WT/BLK:MornHigh 57.11949 1.2513706 3 56.19025 58.54240 56.40804 56.62583  
## WT/BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BR:MornHigh 58.33042 0.8058331 3 57.60154 59.19578 57.89774 58.19393  
## WT/BR:MornLow 56.33333 1.5275252 3 55.00000 58.00000 55.50000 56.00000  
## Q75  
## BL/BR:MornHigh 57.94347  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 60.11585  
## BLK:MornLow 59.50000  
## BRN:MornHigh 55.83149  
## BRN:MornLow 52.00000  
## WHT:MornHigh 59.24042  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 57.58412  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 58.69485  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.53038 a  
## WHT:MornHigh 58.55972 ab  
## BLK:MornLow 58.33333 ab  
## WT/BR:MornHigh 58.33042 ab  
## BL/BR:MornHigh 57.84443 abc  
## WHT:MornLow 57.33333 abc  
## WT/BLK:MornHigh 57.11949 abc  
## WT/BR:MornLow 56.33333 abc  
## BRN:MornHigh 55.58809 bc  
## BL/BR:MornLow 55.33333 bcd  
## WT/BLK:MornLow 54.33333 cd  
## BRN:MornLow 51.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT19 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 164.852 32.970 13.6402 2.324e-06 \*\*\*  
## THIregime 1 22.722 22.722 9.4005 0.005302 \*\*   
## Colour:THIregime 5 5.628 1.126 0.4657 0.797885   
## Residuals 24 58.011 2.417   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.417142   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.58758 1.012480 6 55 57.90354  
## BLK 59.07107 1.538664 6 57 61.00000  
## BRN 54.65672 1.823524 6 52 56.92203  
## WHT 58.27234 2.641566 6 54 61.00000  
## WT/BLK 53.18040 1.293063 6 52 54.36080  
## WT/BR 54.33202 1.380068 6 52 55.75467  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.775366   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.07107 a  
## WHT 58.27234 a  
## BL/BR 56.58758 ab  
## BRN 54.65672 bc  
## WT/BR 54.33202 bc  
## WT/BLK 53.18040 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.417142   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.81115 2.049099 18 54.3608 60.6332  
## MornLow 55.22222 3.040038 18 52.0000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.069592   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.81115 a  
## MornLow 55.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.417142 24 56.01669 2.775451 4.577059  
##   
## $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 57.17515 0.7259843 3 56.45160 57.90354 56.81096 57.17031  
## BL/BR:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## BLK:MornHigh 59.47547 1.0463121 3 58.59742 60.63320 58.89660 59.19578  
## BLK:MornLow 58.66667 2.0816660 3 57.00000 61.00000 57.50000 58.00000  
## BRN:MornHigh 55.98011 0.8518684 3 55.26365 56.92203 55.50916 55.75467  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 58.54468 2.0547914 3 56.22759 60.14535 57.74435 59.26111  
## WHT:MornLow 58.00000 3.6055513 3 54.00000 61.00000 56.50000 59.00000  
## 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 55.33070 0.6603267 3 54.56988 55.75467 55.11872 55.66755  
## WT/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.53693  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.91449  
## BLK:MornLow 59.50000  
## BRN:MornHigh 56.33835  
## BRN:MornLow 54.00000  
## WHT:MornHigh 59.70323  
## WHT:MornLow 60.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 55.71111  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.47547 a  
## BLK:MornLow 58.66667 ab  
## WHT:MornHigh 58.54468 ab  
## WHT:MornLow 58.00000 ab  
## BL/BR:MornHigh 57.17515 abc  
## BL/BR:MornLow 56.00000 abcd  
## BRN:MornHigh 55.98011 abcd  
## WT/BR:MornHigh 55.33070 abcd  
## WT/BLK:MornHigh 54.36080 bcd  
## BRN:MornLow 53.33333 cd  
## WT/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT20 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 97.781 19.5562 7.7761 0.0001808 \*\*\*  
## THIregime 1 30.221 30.2212 12.0168 0.0020012 \*\*   
## Colour:THIregime 5 4.239 0.8477 0.3371 0.8853912   
## Residuals 24 60.358 2.5149   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.51491   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.01619 1.686396 6 54 58.19393  
## BLK 59.91846 1.514448 6 58 62.00000  
## BRN 56.39946 1.597957 6 54 58.33332  
## WHT 57.71603 2.307888 6 54 60.04081  
## WT/BLK 55.18224 1.867462 6 53 57.75835  
## WT/BR 55.26500 1.568055 6 53 57.10498  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.830938   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.91846 a  
## WHT 57.71603 ab  
## BRN 56.39946 b  
## BL/BR 56.01619 b  
## WT/BR 55.26500 b  
## WT/BLK 55.18224 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.51491   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.66579 1.642759 18 55.4062 61.43101  
## MornLow 55.83333 2.617812 18 53.0000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.091009   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.66579 a  
## MornLow 55.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.51491 24 56.74956 2.794465 4.668708  
##   
## $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 57.03238 1.0059366 3 56.45160 58.19393 56.45160 56.45160  
## BL/BR:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## BLK:MornHigh 60.17026 1.1001565 3 59.40486 61.43101 59.53989 59.67492  
## BLK:MornLow 59.66667 2.0816660 3 58.00000 62.00000 58.50000 59.00000  
## BRN:MornHigh 57.46559 0.8002893 3 56.75651 58.33332 57.03172 57.30693  
## BRN:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WHT:MornHigh 58.43205 1.6666703 3 56.71295 60.04081 57.62768 58.54240  
## WHT:MornLow 57.00000 3.0000000 3 54.00000 60.00000 55.50000 57.00000  
## WT/BLK:MornHigh 56.36448 1.2350919 3 55.40620 57.75835 55.66755 55.92890  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.53001 0.5884729 3 55.92890 57.10498 56.24252 56.55614  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.32277  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 60.55296  
## BLK:MornLow 60.50000  
## BRN:MornHigh 57.82012  
## BRN:MornLow 56.00000  
## WHT:MornHigh 59.29160  
## WHT:MornLow 58.50000  
## WT/BLK:MornHigh 56.84363  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.83056  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.17026 a  
## BLK:MornLow 59.66667 ab  
## WHT:MornHigh 58.43205 abc  
## BRN:MornHigh 57.46559 abc  
## BL/BR:MornHigh 57.03238 abc  
## WHT:MornLow 57.00000 abc  
## WT/BR:MornHigh 56.53001 abc  
## WT/BLK:MornHigh 56.36448 abc  
## BRN:MornLow 55.33333 bc  
## BL/BR:MornLow 55.00000 bc  
## WT/BLK:MornLow 54.00000 c  
## WT/BR:MornLow 54.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT21 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 36.022 7.204 3.5799 0.0146763 \*   
## THIregime 1 38.803 38.803 19.2814 0.0001954 \*\*\*  
## Colour:THIregime 5 1.083 0.217 0.1076 0.9895730   
## Residuals 24 48.299 2.012   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.012438   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.24906 1.2924017 6 54 57.56234  
## BLK 57.45238 0.9555557 6 56 58.46400  
## BRN 55.47826 2.6366894 6 52 58.62952  
## WHT 56.32209 1.5349002 6 54 58.16904  
## WT/BLK 54.33378 1.6675253 6 52 56.45160  
## WT/BR 55.06028 1.7218245 6 53 57.28792  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.532389   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 57.45238 a  
## WHT 56.32209 ab  
## BL/BR 56.24906 ab  
## BRN 55.47826 ab  
## WT/BR 55.06028 ab  
## WT/BLK 54.33378 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.012438   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.85417 1.195372 18 54.8835 58.62952  
## MornLow 54.77778 1.895988 18 52.0000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9759516   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.85417 a  
## MornLow 54.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.012438 24 55.81597 2.541574 4.176348  
##   
## $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 57.16478 0.5716389 3 56.50968 57.56234 56.96600 57.42233  
## BL/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BLK:MornHigh 58.23810 0.3119681 3 57.88215 58.46400 58.12516 58.36817  
## BLK:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## BRN:MornHigh 56.62319 1.7647661 3 55.31116 58.62952 55.62003 55.92890  
## BRN:MornLow 54.33333 3.2145503 3 52.00000 58.00000 52.50000 53.00000  
## WHT:MornHigh 57.31084 0.7896604 3 56.61494 58.16904 56.88174 57.14853  
## WHT:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.66755 0.7840500 3 54.88350 56.45160 55.27553 55.66755  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.12056 1.0193767 3 55.40620 57.28792 55.53688 55.66755  
## WT/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 57.49233  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 58.41608  
## BLK:MornLow 57.00000  
## BRN:MornHigh 57.27921  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.65879  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.47774  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.23810 a  
## WHT:MornHigh 57.31084 ab  
## BL/BR:MornHigh 57.16478 abc  
## BLK:MornLow 56.66667 abc  
## BRN:MornHigh 56.62319 abc  
## WT/BR:MornHigh 56.12056 abc  
## WT/BLK:MornHigh 55.66755 abc  
## BL/BR:MornLow 55.33333 abc  
## WHT:MornLow 55.33333 abc  
## BRN:MornLow 54.33333 abc  
## WT/BR:MornLow 54.00000 bc  
## WT/BLK:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT22 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 39.071 7.814 2.7095 0.0444778 \*   
## THIregime 1 44.238 44.238 15.3394 0.0006504 \*\*\*  
## Colour:THIregime 5 2.151 0.430 0.1492 0.9783391   
## Residuals 24 69.215 2.884   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.883956   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.93950 1.625366 6 55 58.99976  
## BLK 58.65971 1.012702 6 57 59.86291  
## BRN 56.46902 1.665287 6 54 58.54240  
## WHT 56.23611 2.334593 6 53 59.09777  
## WT/BLK 56.05279 2.949844 6 51 59.58780  
## WT/BR 55.29404 1.590076 6 53 57.14853  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.031541   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.65971 a  
## BL/BR 56.93950 ab  
## BRN 56.46902 ab  
## WHT 56.23611 ab  
## WT/BLK 56.05279 ab  
## WT/BR 55.29404 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.883956   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.71706 1.370627 18 54.8835 59.86291  
## MornLow 55.50000 2.148871 18 51.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.168319   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.71706 a  
## MornLow 55.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.883956 24 56.60853 2.999939 4.999536  
##   
## $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 57.87900 0.9780363 3 57.19831 58.99976 57.31862 57.43892  
## BL/BR:MornLow 56.00000 1.7320508 3 55.00000 58.00000 55.00000 55.00000  
## BLK:MornHigh 59.31942 0.5081976 3 58.85602 59.86291 59.04768 59.23933  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 57.60471 0.8545526 3 56.86976 58.54240 57.13586 57.40196  
## BRN:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WHT:MornHigh 57.47221 1.4289618 3 56.41426 59.09777 56.65944 56.90461  
## WHT:MornLow 55.00000 2.6457513 3 53.00000 58.00000 53.50000 54.00000  
## WT/BLK:MornHigh 57.43892 2.3783541 3 54.88350 59.58780 56.36448 57.84547  
## WT/BLK:MornLow 54.66667 3.2145503 3 51.00000 57.00000 53.50000 56.00000  
## WT/BR:MornHigh 56.58808 0.5451815 3 56.05958 57.14853 56.30786 56.55614  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 58.21934  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.55112  
## BLK:MornLow 58.50000  
## BRN:MornHigh 57.97218  
## BRN:MornLow 56.00000  
## WHT:MornHigh 58.00119  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 58.71663  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 56.85234  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.31942 a  
## BLK:MornLow 58.00000 ab  
## BL/BR:MornHigh 57.87900 ab  
## BRN:MornHigh 57.60471 ab  
## WHT:MornHigh 57.47221 ab  
## WT/BLK:MornHigh 57.43892 ab  
## WT/BR:MornHigh 56.58808 ab  
## BL/BR:MornLow 56.00000 ab  
## BRN:MornLow 55.33333 ab  
## WHT:MornLow 55.00000 ab  
## WT/BLK:MornLow 54.66667 ab  
## WT/BR:MornLow 54.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT23 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 90.827 18.165 7.1828 0.0003099 \*\*\*  
## THIregime 1 34.864 34.864 13.7858 0.0010847 \*\*   
## Colour:THIregime 5 4.714 0.943 0.3728 0.8622328   
## Residuals 24 60.696 2.529   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.529004   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.88607 1.758159 6 53 56.89963  
## BLK 59.40680 0.835525 6 58 60.35809  
## BRN 55.85058 1.984632 6 53 58.30481  
## WHT 57.16231 2.699420 6 53 60.04516  
## WT/BLK 54.81230 1.341788 6 53 56.27737  
## WT/BR 57.11989 1.799928 6 54 58.85602  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.83886   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.40680 a  
## WHT 57.16231 ab  
## WT/BR 57.11989 ab  
## BRN 55.85058 b  
## BL/BR 54.88607 b  
## WT/BLK 54.81230 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.529004   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.52376 1.605005 18 55.4062 60.35809  
## MornLow 55.55556 2.571844 18 53.0000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.094062   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.52376 a  
## MornLow 55.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.529004 24 56.53966 2.812688 4.681772  
##   
## $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 56.43881 0.4018615 3 56.16121 56.89963 56.20840 56.25559  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 59.81359 0.4988071 3 59.37872 60.35809 59.54134 59.70396  
## BLK:MornLow 59.00000 1.0000000 3 58.00000 60.00000 58.50000 59.00000  
## BRN:MornHigh 57.03449 1.1439585 3 56.08571 58.30481 56.39933 56.71295  
## BRN:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WHT:MornHigh 57.99128 1.9550531 3 56.15291 60.04516 56.96434 57.77577  
## WHT:MornLow 56.33333 3.5118846 3 53.00000 60.00000 54.50000 56.00000  
## WT/BLK:MornHigh 55.95794 0.4798012 3 55.40620 56.27737 55.79823 56.19025  
## WT/BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.90645 1.3820284 3 56.32093 58.85602 57.43166 58.54240  
## WT/BR:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## Q75  
## BL/BR:MornHigh 56.57761  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 60.03103  
## BLK:MornLow 59.50000  
## BRN:MornHigh 57.50888  
## BRN:MornLow 55.50000  
## WHT:MornHigh 58.91047  
## WHT:MornLow 58.00000  
## WT/BLK:MornHigh 56.23381  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 58.69921  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.81359 a  
## BLK:MornLow 59.00000 ab  
## WHT:MornHigh 57.99128 abc  
## WT/BR:MornHigh 57.90645 abc  
## BRN:MornHigh 57.03449 abc  
## BL/BR:MornHigh 56.43881 abc  
## WHT:MornLow 56.33333 abc  
## WT/BR:MornLow 56.33333 abc  
## WT/BLK:MornHigh 55.95794 abc  
## BRN:MornLow 54.66667 bc  
## WT/BLK:MornLow 53.66667 c  
## BL/BR:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT24 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 99.470 19.894 11.3362 1.076e-05 \*\*\*  
## THIregime 1 34.436 34.436 19.6228 0.0001771 \*\*\*  
## Colour:THIregime 5 4.751 0.950 0.5415 0.7429959   
## Residuals 24 42.118 1.755   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.754909   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.78547 1.939705 6 52 57.17031  
## BLK 57.55344 1.052235 6 56 58.62493  
## BRN 54.99736 1.681534 6 53 57.07884  
## WHT 58.42417 2.227166 6 55 61.00000  
## WT/BLK 53.78960 1.318560 6 52 55.23197  
## WT/BR 56.98486 1.365623 6 55 58.80375  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.364811   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 58.42417 a  
## BLK 57.55344 a  
## WT/BR 56.98486 ab  
## BRN 54.99736 bc  
## BL/BR 54.78547 bc  
## WT/BLK 53.78960 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.754909   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.06719 1.619016 18 54.3608 60.45897  
## MornLow 55.11111 2.446820 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9113691   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.06719 a  
## MornLow 55.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.754909 24 56.08915 2.361829 3.899983  
##   
## $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 56.23761 0.8641107 3 55.46428 57.17031 55.77126 56.07824  
## BL/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BLK:MornHigh 58.44020 0.2749365 3 58.12424 58.62493 58.34784 58.57144  
## BLK:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## BRN:MornHigh 56.32805 0.6506348 3 55.92890 57.07884 55.95266 55.97642  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 58.84835 1.6914205 3 57.08631 60.45897 58.04303 58.99976  
## WHT:MornLow 58.00000 3.0000000 3 55.00000 61.00000 56.50000 58.00000  
## WT/BLK:MornHigh 54.91254 0.4798012 3 54.36080 55.23197 54.75283 55.14485  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 57.63639 1.0273859 3 56.86976 58.80375 57.05271 57.23565  
## WT/BR:MornLow 56.33333 1.5275252 3 55.00000 58.00000 55.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.62428  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 58.59819  
## BLK:MornLow 57.00000  
## BRN:MornHigh 56.52763  
## BRN:MornLow 54.00000  
## WHT:MornHigh 59.72936  
## WHT:MornLow 59.50000  
## WT/BLK:MornHigh 55.18841  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 58.01970  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 58.84835 a  
## BLK:MornHigh 58.44020 ab  
## WHT:MornLow 58.00000 ab  
## WT/BR:MornHigh 57.63639 ab  
## BLK:MornLow 56.66667 abc  
## WT/BR:MornLow 56.33333 abcd  
## BRN:MornHigh 56.32805 abcd  
## BL/BR:MornHigh 56.23761 abcd  
## WT/BLK:MornHigh 54.91254 bcd  
## BRN:MornLow 53.66667 cd  
## BL/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT25 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 111.033 22.207 19.0961 1.151e-07 \*\*\*  
## THIregime 1 41.354 41.354 35.5611 3.729e-06 \*\*\*  
## Colour:THIregime 5 7.457 1.491 1.2824 0.304   
## Residuals 24 27.909 1.163   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.162892   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.82972 1.6877062 6 53 56.62583  
## BLK 60.17202 0.7656222 6 59 61.00000  
## BRN 56.11387 1.4153316 6 54 57.75835  
## WHT 56.90344 1.6012493 6 54 58.41173  
## WT/BLK 57.22764 1.5432308 6 55 59.06510  
## WT/BR 55.18400 2.2272682 6 52 57.93258  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.925036   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.17202 a  
## WT/BLK 57.22764 b  
## WHT 56.90344 bc  
## BRN 56.11387 bcd  
## WT/BR 55.18400 cd  
## BL/BR 54.82972 d  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.162892   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.81023 1.502930 18 55.9289 60.88079  
## MornLow 55.66667 2.520504 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7418853   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.81023 a  
## MornLow 55.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.162892 24 56.73845 1.900607 3.174718  
##   
## $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 56.32611 0.2645955 3 56.12491 56.62583 56.17625 56.22759  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 60.34403 0.6137378 3 59.67492 60.88079 60.07565 60.47639  
## BLK:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## BRN:MornHigh 57.22773 0.5346235 3 56.68919 57.75835 56.96242 57.23565  
## BRN:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WHT:MornHigh 57.80689 0.9804944 3 56.67561 58.41173 57.50447 58.33332  
## WHT:MornLow 56.00000 1.7320508 3 54.00000 57.00000 55.50000 57.00000  
## WT/BLK:MornHigh 58.45528 0.6577164 3 57.75835 59.06510 58.15038 58.54240  
## WT/BLK:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WT/BR:MornHigh 56.70133 1.0777615 3 55.92890 57.93258 56.08571 56.24252  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.42671  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 60.67859  
## BLK:MornLow 60.50000  
## BRN:MornHigh 57.49700  
## BRN:MornLow 55.50000  
## WHT:MornHigh 58.37252  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 58.80375  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 57.08755  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.34403 a  
## BLK:MornLow 60.00000 a  
## WT/BLK:MornHigh 58.45528 ab  
## WHT:MornHigh 57.80689 abc  
## BRN:MornHigh 57.22773 abc  
## WT/BR:MornHigh 56.70133 bcd  
## BL/BR:MornHigh 56.32611 bcde  
## WHT:MornLow 56.00000 bcde  
## WT/BLK:MornLow 56.00000 bcde  
## BRN:MornLow 55.00000 cde  
## WT/BR:MornLow 53.66667 de  
## BL/BR:MornLow 53.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT26 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.751 3.750 1.5068 0.2248968   
## THIregime 1 46.993 46.993 18.8821 0.0002195 \*\*\*  
## Colour:THIregime 5 2.332 0.466 0.1874 0.9645321   
## Residuals 24 59.730 2.489   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.488769   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.94113 1.457440 6 54 57.42233  
## BLK 57.29965 1.137139 6 56 58.62493  
## BRN 57.24410 1.818929 6 54 59.15222  
## WHT 56.48362 2.206711 6 53 59.06510  
## WT/BLK 56.92273 2.390819 6 53 59.58780  
## WT/BR 55.29725 2.121294 6 52 57.70608  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.816187   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 57.29965 a  
## BRN 57.24410 a  
## WT/BLK 56.92273 a  
## WHT 56.48362 a  
## BL/BR 55.94113 a  
## WT/BR 55.29725 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.488769   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.67394 1.151362 18 55.4062 59.5878  
## MornLow 55.38889 1.851514 18 52.0000 58.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.085324   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.67394 a  
## MornLow 55.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.488769 24 56.53141 2.790631 4.64438  
##   
## $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 57.21560 0.3228063 3 56.84363 57.42233 57.11223 57.38084  
## BL/BR:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BLK:MornHigh 58.26597 0.3131534 3 58.04874 58.62493 58.08649 58.12424  
## BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## BRN:MornHigh 58.15486 1.2039297 3 56.81749 59.15222 57.65619 58.49488  
## BRN:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## WHT:MornHigh 57.63390 1.3679010 3 56.33959 59.06510 56.91830 57.49700  
## WHT:MornLow 55.33333 2.5166115 3 53.00000 58.00000 54.00000 55.00000  
## WT/BLK:MornHigh 57.84547 2.1761736 3 55.40620 59.58780 56.97430 58.54240  
## WT/BLK:MornLow 56.00000 2.6457513 3 53.00000 58.00000 55.00000 57.00000  
## WT/BR:MornHigh 56.92784 0.9695163 3 55.84178 57.70608 56.53872 57.23565  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.40159  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 58.37459  
## BLK:MornLow 56.50000  
## BRN:MornHigh 58.82355  
## BRN:MornLow 57.50000  
## WHT:MornHigh 58.28105  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 59.06510  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 57.47087  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.26597 a  
## BRN:MornHigh 58.15486 a  
## WT/BLK:MornHigh 57.84547 a  
## WHT:MornHigh 57.63390 a  
## BL/BR:MornHigh 57.21560 a  
## WT/BR:MornHigh 56.92784 a  
## BLK:MornLow 56.33333 a  
## BRN:MornLow 56.33333 a  
## WT/BLK:MornLow 56.00000 a  
## WHT:MornLow 55.33333 a  
## BL/BR:MornLow 54.66667 a  
## WT/BR:MornLow 53.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT27 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 31.033 6.207 1.5686 0.206826   
## THIregime 1 44.177 44.177 11.1651 0.002722 \*\*  
## Colour:THIregime 5 1.688 0.338 0.0853 0.993880   
## Residuals 24 94.960 3.957   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.956661   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.48050 1.962686 6 53 58.54240  
## BLK 58.33730 2.633087 6 54 61.00000  
## BRN 56.00409 1.835483 6 53 58.07197  
## WHT 55.94151 2.168660 6 52 57.95436  
## WT/BLK 55.37795 2.322074 6 52 58.28105  
## WT/BR 56.50519 1.978775 6 53 58.54240  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.550861   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.33730 a  
## WT/BR 56.50519 a  
## BL/BR 56.48050 a  
## BRN 56.00409 a  
## WHT 55.94151 a  
## WT/BLK 55.37795 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.956661   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.54885 1.448749 18 54.3608 60.84228  
## MornLow 55.33333 2.326320 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.368458   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.54885 a  
## MornLow 55.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.956661 24 56.44109 3.524269 5.855984  
##   
## $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 57.62768 1.1614648 3 56.32093 58.54240 57.17031 58.01970  
## BL/BR:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BLK:MornHigh 59.00794 1.9105695 3 57.02932 60.84228 58.09077 59.15222  
## BLK:MornLow 57.66667 3.5118846 3 54.00000 61.00000 56.00000 58.00000  
## BRN:MornHigh 57.34151 0.8503374 3 56.40804 58.07197 56.97628 57.54452  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 57.21636 1.2444620 3 55.77956 57.95436 56.84736 57.91516  
## WHT:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WT/BLK:MornHigh 56.42256 1.9680142 3 54.36080 58.28105 55.49332 56.62583  
## WT/BLK:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## WT/BR:MornHigh 57.67704 1.1557770 3 56.36448 58.54240 57.24436 58.12424  
## WT/BR:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 58.28105  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.99725  
## BLK:MornLow 59.50000  
## BRN:MornHigh 57.80824  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.93476  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 57.45344  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 58.33332  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.00794 a  
## WT/BR:MornHigh 57.67704 a  
## BLK:MornLow 57.66667 a  
## BL/BR:MornHigh 57.62768 a  
## BRN:MornHigh 57.34151 a  
## WHT:MornHigh 57.21636 a  
## WT/BLK:MornHigh 56.42256 a  
## BL/BR:MornLow 55.33333 a  
## WT/BR:MornLow 55.33333 a  
## BRN:MornLow 54.66667 a  
## WHT:MornLow 54.66667 a  
## WT/BLK:MornLow 54.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT28 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 69.611 13.922 5.4166 0.0017900 \*\*   
## THIregime 1 38.104 38.104 14.8248 0.0007685 \*\*\*  
## Colour:THIregime 5 3.874 0.775 0.3014 0.9071571   
## Residuals 24 61.687 2.570   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.570294   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.73158 2.1652364 6 51 57.09046  
## BLK 58.11195 0.6580447 6 57 58.82989  
## BRN 54.54519 1.7246725 6 52 56.66068  
## WHT 56.10497 2.4652865 6 53 59.00000  
## WT/BLK 54.74727 1.9858484 6 52 57.49700  
## WT/BR 53.93189 1.6174162 6 52 55.92890  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.86194   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.11195 a  
## WHT 56.10497 ab  
## WT/BLK 54.74727 b  
## BL/BR 54.73158 b  
## BRN 54.54519 b  
## WT/BR 53.93189 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.570294   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.39095 1.478723 18 54.29546 58.85602  
## MornLow 54.33333 2.400980 18 51.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.102957   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.39095 a  
## MornLow 54.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.570294 24 55.36214 2.895866 4.719835  
##   
## $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 55.79650 1.4089558 3 54.29546 57.09046 55.14952 56.00357  
## BL/BR:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## BLK:MornHigh 58.55723 0.3929413 3 58.10682 58.82989 58.42090 58.73497  
## BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BRN:MornHigh 55.75704 0.8349430 3 55.01418 56.66068 55.30522 55.59627  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 56.87660 1.7534240 3 55.51821 58.85602 55.88690 56.25559  
## WHT:MornLow 55.33333 3.2145503 3 53.00000 59.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.16121 1.2361156 3 55.05773 57.49700 55.49332 55.92890  
## WT/BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.19712 0.6358920 3 54.77896 55.92890 54.83123 54.88350  
## WT/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.54701  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 58.78243  
## BLK:MornLow 58.00000  
## BRN:MornHigh 56.12848  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.55580  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.40620  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.55723 a  
## BLK:MornLow 57.66667 ab  
## WHT:MornHigh 56.87660 abc  
## WT/BLK:MornHigh 56.16121 abc  
## BL/BR:MornHigh 55.79650 abc  
## BRN:MornHigh 55.75704 abc  
## WHT:MornLow 55.33333 abc  
## WT/BR:MornHigh 55.19712 abc  
## BL/BR:MornLow 53.66667 bc  
## BRN:MornLow 53.33333 bc  
## WT/BLK:MornLow 53.33333 bc  
## WT/BR:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT29 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 37.234 7.447 4.6869 0.003978 \*\*   
## THIregime 1 42.164 42.164 26.5374 2.833e-05 \*\*\*  
## Colour:THIregime 5 1.854 0.371 0.2334 0.944037   
## Residuals 24 38.133 1.589   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.588857   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.15017 1.837390 6 52 56.45160  
## BLK 56.69152 1.196705 6 55 57.91516  
## BRN 55.38336 1.596213 6 53 57.36633  
## WHT 57.04615 1.704152 6 54 58.64694  
## WT/BLK 54.72519 1.962135 6 52 57.32277  
## WT/BR 55.49701 1.523168 6 53 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.25015   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WHT 57.04615 a  
## BLK 56.69152 ab  
## WT/BR 55.49701 abc  
## BRN 55.38336 abc  
## WT/BLK 54.72519 bc  
## BL/BR 54.15017 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.588857   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.66446 1.156083 18 54.62215 58.64694  
## MornLow 54.50000 1.790498 18 52.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8671804   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.66446 a  
## MornLow 54.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.588857 24 55.58223 2.267809 3.710888  
##   
## $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 55.63367 0.7101676 3 55.17389 56.45160 55.22471 55.27553  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 57.71637 0.3097726 3 57.35945 57.91516 57.61698 57.87451  
## BLK:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## BRN:MornHigh 56.43338 0.8536636 3 55.69131 57.36633 55.96691 56.24252  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 57.75897 1.1843433 3 56.41426 58.64694 57.31499 58.21571  
## WHT:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## WT/BLK:MornHigh 55.78371 1.3893219 3 54.62215 57.32277 55.01418 55.40620  
## WT/BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.66068 0.6358920 3 55.92890 57.07884 56.45160 56.97430  
## WT/BR:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 55.86356  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 57.89483  
## BLK:MornLow 56.00000  
## BRN:MornHigh 56.80442  
## BRN:MornLow 55.00000  
## WHT:MornHigh 58.43133  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.02657  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WHT:MornHigh 57.75897 a  
## BLK:MornHigh 57.71637 a  
## WT/BR:MornHigh 56.66068 ab  
## BRN:MornHigh 56.43338 ab  
## WHT:MornLow 56.33333 abc  
## WT/BLK:MornHigh 55.78371 abc  
## BLK:MornLow 55.66667 abc  
## BL/BR:MornHigh 55.63367 abc  
## BRN:MornLow 54.33333 abc  
## WT/BR:MornLow 54.33333 abc  
## WT/BLK:MornLow 53.66667 bc  
## BL/BR:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT30 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 45.842 9.168 7.7098 0.0001918 \*\*\*  
## THIregime 1 44.730 44.730 37.6140 2.459e-06 \*\*\*  
## Colour:THIregime 5 3.034 0.607 0.5103 0.7657076   
## Residuals 24 28.541 1.189   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.189193   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.06950 2.149653 6 52 57.75835  
## BLK 58.19489 1.246901 6 56 59.50940  
## BRN 55.03643 1.559015 6 53 56.60841  
## WHT 55.53782 1.558166 6 53 57.11369  
## WT/BLK 55.13868 1.486916 6 53 56.97430  
## WT/BR 56.37742 1.419816 6 54 57.84547  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.946683   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.19489 a  
## WT/BR 56.37742 ab  
## WHT 55.53782 b  
## WT/BLK 55.13868 b  
## BL/BR 55.06950 b  
## BRN 55.03643 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.189193   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.00713 1.092906 18 55.4062 59.5094  
## MornLow 54.77778 1.832888 18 52.0000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7502279   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.00713 a  
## MornLow 54.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.189193 24 55.89246 1.95107 3.210418  
##   
## $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 56.47234 1.1468767 3 55.55554 57.75835 55.82934 56.10313  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 58.72310 0.8464810 3 57.82713 59.50940 58.32996 58.83279  
## BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## BRN:MornHigh 56.40619 0.3379784 3 56.01602 56.60841 56.30509 56.59415  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.74230 0.6197004 3 56.02691 57.11369 56.55661 57.08631  
## WHT:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## WT/BLK:MornHigh 56.27737 0.7984374 3 55.40620 56.97430 55.92890 56.45160  
## WT/BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.42150 0.6603267 3 56.66068 57.84547 57.20952 57.75835  
## WT/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.93074  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.17109  
## BLK:MornLow 58.50000  
## BRN:MornHigh 56.60128  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.10000  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.80191  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.72310 a  
## BLK:MornLow 57.66667 ab  
## WT/BR:MornHigh 57.42150 abc  
## WHT:MornHigh 56.74230 abcd  
## BL/BR:MornHigh 56.47234 abcd  
## BRN:MornHigh 56.40619 abcd  
## WT/BLK:MornHigh 56.27737 abcd  
## WT/BR:MornLow 55.33333 bcd  
## WHT:MornLow 54.33333 cd  
## WT/BLK:MornLow 54.00000 d  
## BL/BR:MornLow 53.66667 d  
## BRN:MornLow 53.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT31 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 70.298 14.060 6.0212 0.0009559 \*\*\*  
## THIregime 1 41.951 41.951 17.9659 0.0002879 \*\*\*  
## Colour:THIregime 5 4.937 0.987 0.4228 0.8281530   
## Residuals 24 56.041 2.335   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.335028   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.63092 1.546041 6 54 58.42624  
## BLK 59.38361 1.966782 6 57 62.00000  
## BRN 55.13279 1.950906 6 52 57.39246  
## WHT 56.68575 1.561621 6 54 58.43786  
## WT/BLK 55.48715 2.288561 6 52 58.54240  
## WT/BR 55.82339 1.686706 6 53 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.727817   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.38361 a  
## WHT 56.68575 ab  
## BL/BR 56.63092 b  
## WT/BR 55.82339 b  
## WT/BLK 55.48715 b  
## BRN 55.13279 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.335028   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.60343 1.431399 18 55.4062 61.46952  
## MornLow 55.44444 2.381849 18 52.0000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.051267   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.60343 a  
## MornLow 55.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.335028 24 56.52394 2.703421 4.498642  
##   
## $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 57.59518 0.9235259 3 56.60094 58.42624 57.17965 57.75835  
## BL/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BLK:MornHigh 59.76723 1.4930179 3 58.67995 61.46952 58.91608 59.15222  
## BLK:MornLow 59.00000 2.6457513 3 57.00000 62.00000 57.50000 58.00000  
## BRN:MornHigh 56.59891 0.8562903 3 55.69131 57.39246 56.20213 56.71295  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 57.70484 0.8048106 3 56.84363 58.43786 57.33832 57.83302  
## WHT:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BLK:MornHigh 56.97430 1.5681000 3 55.40620 58.54240 56.19025 56.97430  
## WT/BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.98011 0.8747022 3 56.03344 57.75835 56.59099 57.14853  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 58.09230  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 60.31087  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.05271  
## BRN:MornLow 54.50000  
## WHT:MornHigh 58.13544  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 57.75835  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 57.45344  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.76723 a  
## BLK:MornLow 59.00000 ab  
## WHT:MornHigh 57.70484 abc  
## BL/BR:MornHigh 57.59518 abc  
## WT/BR:MornHigh 56.98011 abc  
## WT/BLK:MornHigh 56.97430 abc  
## BRN:MornHigh 56.59891 abc  
## BL/BR:MornLow 55.66667 abc  
## WHT:MornLow 55.66667 abc  
## WT/BR:MornLow 54.66667 bc  
## WT/BLK:MornLow 54.00000 c  
## BRN:MornLow 53.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT32 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 141.137 28.2274 16.1482 5.32e-07 \*\*\*  
## THIregime 1 27.706 27.7063 15.8501 0.0005525 \*\*\*  
## Colour:THIregime 5 7.181 1.4361 0.8216 0.5464997   
## Residuals 24 41.953 1.7480   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.748024   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.49829 1.7850573 6 53 57.72931  
## BLK 59.47152 1.5323157 6 57 61.00000  
## BRN 54.59297 1.7669256 6 52 56.76522  
## WHT 57.47879 0.8780942 6 56 58.39306  
## WT/BLK 54.05095 1.9396028 6 51 56.45160  
## WT/BR 54.17116 1.4759164 6 52 55.92890  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.360168   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.47152 a  
## WHT 57.47879 ab  
## BL/BR 55.49829 bc  
## BRN 54.59297 c  
## WT/BR 54.17116 c  
## WT/BLK 54.05095 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.748024   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.75456 1.786714 18 54.18657 60.49565  
## MornLow 55.00000 2.828427 18 51.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9095798   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.75456 a  
## MornLow 55.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.748024 24 55.87728 2.366129 3.892326  
##   
## $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 56.32991 1.2481783 3 55.33153 57.72931 55.63021 55.92890  
## BL/BR:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## BLK:MornHigh 59.60971 1.2162889 3 58.22297 60.49565 59.16674 60.11050  
## BLK:MornLow 59.33333 2.0816660 3 57.00000 61.00000 58.50000 60.00000  
## BRN:MornHigh 55.85261 0.8436096 3 55.10129 56.76522 55.39630 55.69131  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 57.95758 0.4898036 3 57.42731 58.39306 57.73984 58.05237  
## WHT:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## WT/BLK:MornHigh 55.43524 1.1502479 3 54.18657 56.45160 54.92706 55.66755  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.34231 0.5753219 3 54.77896 55.92890 55.04902 55.31908  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.82911  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 60.30307  
## BLK:MornLow 60.50000  
## BRN:MornHigh 56.22826  
## BRN:MornLow 54.00000  
## WHT:MornHigh 58.22271  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.62399  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.60971 a  
## BLK:MornLow 59.33333 a  
## WHT:MornHigh 57.95758 ab  
## WHT:MornLow 57.00000 abc  
## BL/BR:MornHigh 56.32991 abcd  
## BRN:MornHigh 55.85261 abcd  
## WT/BLK:MornHigh 55.43524 bcd  
## WT/BR:MornHigh 55.34231 bcd  
## BL/BR:MornLow 54.66667 bcd  
## BRN:MornLow 53.33333 cd  
## WT/BR:MornLow 53.00000 d  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT33 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 84.065 16.813 5.3494 0.0019228 \*\*   
## THIregime 1 51.289 51.289 16.3188 0.0004766 \*\*\*  
## Colour:THIregime 5 6.116 1.223 0.3892 0.8512827   
## Residuals 24 75.431 3.143   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.142954   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.12142 2.7370903 6 52 59.51313  
## BLK 59.98278 0.9023307 6 59 61.01835  
## BRN 56.03603 1.8628927 6 53 58.17651  
## WHT 55.21631 2.2545131 6 52 57.98703  
## WT/BLK 56.33562 2.1054196 6 53 59.06510  
## WT/BR 57.13617 2.2968124 6 53 59.45713  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.164741   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.98278 a  
## WT/BR 57.13617 ab  
## WT/BLK 56.33562 b  
## BL/BR 56.12142 b  
## BRN 56.03603 b  
## WHT 55.21631 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.142954   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.99833 1.559298 18 55.9289 61.01835  
## MornLow 55.61111 2.703786 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.219652   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.99833 a  
## MornLow 55.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.142954 24 56.80472 3.120934 5.219206  
##   
## $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 57.57617 1.7455480 3 56.12491 59.51313 56.60768 57.09046  
## BL/BR:MornLow 54.66667 3.0550505 3 52.00000 58.00000 53.00000 54.00000  
## BLK:MornHigh 60.29890 0.6343364 3 59.82011 61.01835 59.93917 60.05823  
## BLK:MornLow 59.66667 1.1547005 3 59.00000 61.00000 59.00000 59.00000  
## BRN:MornHigh 57.40540 0.8468250 3 56.49912 58.17651 57.01984 57.54056  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 56.76595 1.0814762 3 55.92890 57.98703 56.15540 56.38191  
## WHT:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BLK:MornHigh 57.67123 1.3154328 3 56.45160 59.06510 56.97430 57.49700  
## WT/BLK:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## WT/BR:MornHigh 58.27234 1.5217514 3 56.55614 59.45713 57.67995 58.80375  
## WT/BR:MornLow 56.00000 2.6457513 3 53.00000 58.00000 55.00000 57.00000  
## Q75  
## BL/BR:MornHigh 58.30179  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 60.53829  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.85853  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.18447  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 58.28105  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 59.13044  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.29890 a  
## BLK:MornLow 59.66667 ab  
## WT/BR:MornHigh 58.27234 abc  
## WT/BLK:MornHigh 57.67123 abc  
## BL/BR:MornHigh 57.57617 abc  
## BRN:MornHigh 57.40540 abc  
## WHT:MornHigh 56.76595 abc  
## WT/BR:MornLow 56.00000 abc  
## WT/BLK:MornLow 55.00000 bc  
## BL/BR:MornLow 54.66667 bc  
## BRN:MornLow 54.66667 bc  
## WHT:MornLow 53.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT34 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 131.337 26.2675 10.9379 1.431e-05 \*\*\*  
## THIregime 1 30.141 30.1408 12.5508 0.001657 \*\*   
## Colour:THIregime 5 5.633 1.1265 0.4691 0.795425   
## Residuals 24 57.636 2.4015   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.401512   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.91567 1.757274 6 52 56.91622  
## BLK 60.38397 1.528789 6 58 62.00000  
## BRN 56.03414 1.678192 6 53 57.63955  
## WHT 56.63996 1.830657 6 54 58.84109  
## WT/BLK 54.76874 1.499957 6 53 56.80007  
## WT/BR 55.41425 2.199833 6 52 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.766378   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.38397 a  
## WHT 56.63996 b  
## BRN 56.03414 b  
## WT/BR 55.41425 b  
## BL/BR 54.91567 b  
## WT/BLK 54.76874 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.401512   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.27447 1.817594 18 55.01418 61.32096  
## MornLow 55.44444 2.853733 18 52.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.066128   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.27447 a  
## MornLow 55.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.401512 24 56.35946 2.749639 4.562237  
##   
## $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 56.16467 0.8406457 3 55.25686 56.91622 55.78889 56.32093  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 60.43461 1.2255448 3 59.03606 61.32096 59.99144 60.94682  
## BLK:MornLow 60.33333 2.0816660 3 58.00000 62.00000 59.50000 61.00000  
## BRN:MornHigh 57.06828 0.9124045 3 56.01602 57.63955 56.78264 57.54927  
## BRN:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WHT:MornHigh 57.61326 1.0968202 3 56.73037 58.84109 56.99935 57.26832  
## WHT:MornLow 55.66667 2.0816660 3 54.00000 58.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.87082 0.8047493 3 55.40620 56.80007 55.40620 55.40620  
## WT/BLK:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.49516 1.5032359 3 55.01418 58.01970 55.73289 56.45160  
## WT/BR:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.61857  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 61.13389  
## BLK:MornLow 61.50000  
## BRN:MornHigh 57.59441  
## BRN:MornLow 56.00000  
## WHT:MornHigh 58.05470  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 56.10313  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.23565  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.43461 a  
## BLK:MornLow 60.33333 ab  
## WHT:MornHigh 57.61326 abc  
## BRN:MornHigh 57.06828 abc  
## WT/BR:MornHigh 56.49516 abc  
## BL/BR:MornHigh 56.16467 abc  
## WT/BLK:MornHigh 55.87082 bc  
## WHT:MornLow 55.66667 c  
## BRN:MornLow 55.00000 c  
## WT/BR:MornLow 54.33333 c  
## BL/BR:MornLow 53.66667 c  
## WT/BLK:MornLow 53.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT35 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 67.130 13.426 9.8927 3.130e-05 \*\*\*  
## THIregime 1 35.175 35.175 25.9182 3.301e-05 \*\*\*  
## Colour:THIregime 5 2.087 0.417 0.3075 0.9035   
## Residuals 24 32.572 1.357   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.357167   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.01861 1.6666389 6 53 57.62768  
## BLK 58.48492 0.9060262 6 57 59.50527  
## BRN 55.76307 1.6347272 6 53 57.62768  
## WHT 55.54290 1.7212818 6 53 57.66034  
## WT/BLK 53.83316 1.5612098 6 52 55.92890  
## WT/BR 55.62157 1.5151837 6 53 57.39246  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.079629   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.48492 a  
## BL/BR 56.01861 b  
## BRN 55.76307 bc  
## WT/BR 55.62157 bc  
## WHT 55.54290 bc  
## WT/BLK 53.83316 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.357167   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.86585 1.372238 18 54.3608 59.50527  
## MornLow 54.88889 2.025975 18 52.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8014635   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.86585 a  
## MornLow 54.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.357167 24 55.87737 2.084878 3.429668  
##   
## $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 57.03722 0.9118781 3 55.98698 57.62768 56.74199 57.49700  
## BL/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## BLK:MornHigh 58.96983 0.5888786 3 58.33913 59.50527 58.70211 59.06510  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 56.85946 0.8609461 3 55.92890 57.62768 56.47536 57.02182  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 56.75246 0.8273759 3 56.04091 57.66034 56.29852 56.55614  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.99966 0.8233946 3 54.36080 55.92890 54.53503 54.70927  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.57647 0.8189121 3 55.75467 57.39246 56.16847 56.58228  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 57.56234  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 59.28518  
## BLK:MornLow 58.50000  
## BRN:MornHigh 57.32475  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.10824  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.98737  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.96983 a  
## BLK:MornLow 58.00000 ab  
## BL/BR:MornHigh 57.03722 abc  
## BRN:MornHigh 56.85946 abc  
## WHT:MornHigh 56.75246 abc  
## WT/BR:MornHigh 56.57647 abc  
## BL/BR:MornLow 55.00000 bcd  
## WT/BLK:MornHigh 54.99966 bcd  
## BRN:MornLow 54.66667 bcd  
## WT/BR:MornLow 54.66667 bcd  
## WHT:MornLow 54.33333 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT36 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 63.284 12.657 9.9476 3.000e-05 \*\*\*  
## THIregime 1 41.140 41.140 32.3340 7.404e-06 \*\*\*  
## Colour:THIregime 5 4.637 0.927 0.7289 0.6087   
## Residuals 24 30.536 1.272   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.272338   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.12612 1.434824 6 54 57.84547  
## BLK 58.79841 1.203307 6 57 60.16552  
## BRN 54.57810 1.881325 6 52 56.76522  
## WHT 57.10522 1.396126 6 55 58.83642  
## WT/BLK 55.59574 1.806278 6 53 58.01970  
## WT/BR 55.87711 1.733417 6 53 57.88903  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.013587   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.79841 a  
## WHT 57.10522 ab  
## BL/BR 56.12612 bc  
## WT/BR 55.87711 bc  
## WT/BLK 55.59574 bc  
## BRN 54.57810 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.272338   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.41579 1.208934 18 55.53688 60.16552  
## MornLow 55.27778 2.080881 18 52.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7760116   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.41579 a  
## MornLow 55.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.272338 24 56.34678 2.001852 3.320753  
##   
## $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 57.25224 0.5851027 3 56.67561 57.84547 56.95563 57.23565  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 59.26348 0.7985324 3 58.64694 60.16552 58.81246 58.97798  
## BLK:MornLow 58.33333 1.5275252 3 57.00000 60.00000 57.50000 58.00000  
## BRN:MornHigh 56.15620 0.6142372 3 55.53688 56.76522 55.85168 56.16649  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 57.87710 0.8672804 3 57.14853 58.83642 57.39744 57.64634  
## WHT:MornLow 56.33333 1.5275252 3 55.00000 58.00000 55.50000 56.00000  
## WT/BLK:MornHigh 56.85814 1.0209142 3 56.10313 58.01970 56.27737 56.45160  
## WT/BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.08755 0.8848669 3 56.13798 57.88903 56.68682 57.23565  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 57.54056  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 59.57175  
## BLK:MornLow 59.00000  
## BRN:MornHigh 56.46586  
## BRN:MornLow 53.50000  
## WHT:MornHigh 58.24138  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 57.23565  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 57.56234  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.26348 a  
## BLK:MornLow 58.33333 a  
## WHT:MornHigh 57.87710 ab  
## BL/BR:MornHigh 57.25224 abc  
## WT/BR:MornHigh 57.08755 abc  
## WT/BLK:MornHigh 56.85814 abc  
## WHT:MornLow 56.33333 abc  
## BRN:MornHigh 56.15620 abcd  
## BL/BR:MornLow 55.00000 bcd  
## WT/BR:MornLow 54.66667 bcd  
## WT/BLK:MornLow 54.33333 cd  
## BRN:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT37 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 96.216 19.243 12.148 6.131e-06 \*\*\*  
## THIregime 1 32.521 32.521 20.531 0.0001369 \*\*\*  
## Colour:THIregime 5 3.001 0.600 0.379 0.8581445   
## Residuals 24 38.016 1.584   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.584018   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.59586 2.0420243 6 51 56.80007  
## BLK 58.83516 0.6913354 6 58 59.69784  
## BRN 55.15492 1.7775077 6 52 56.86976  
## WHT 57.61237 0.6732835 6 57 58.31372  
## WT/BLK 54.48592 1.3387490 6 53 56.10313  
## WT/BR 55.35181 2.1575102 6 52 57.93258  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.246721   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.83516 a  
## WHT 57.61237 a  
## WT/BR 55.35181 b  
## BRN 55.15492 b  
## BL/BR 54.59586 b  
## WT/BLK 54.48592 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.584018   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.95646 1.577221 18 54.58481 59.69784  
## MornLow 55.05556 2.363254 18 51.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8658589   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.95646 a  
## MornLow 55.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.584018 24 56.00601 2.247219 3.705233  
##   
## $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 55.85838 1.14430789 3 54.58481 56.80007 55.38753 56.19025  
## BL/BR:MornLow 53.33333 2.08166600 3 51.00000 55.00000 52.50000 54.00000  
## BLK:MornHigh 59.33700 0.32561452 3 59.06510 59.69784 59.15657 59.24805  
## BLK:MornLow 58.33333 0.57735027 3 58.00000 59.00000 58.00000 58.00000  
## BRN:MornHigh 56.30984 0.94727091 3 55.21613 56.86976 56.02988 56.84363  
## BRN:MornLow 54.00000 1.73205081 3 52.00000 55.00000 53.50000 55.00000  
## WHT:MornHigh 58.22474 0.09107319 3 58.13171 58.31372 58.18024 58.22878  
## WHT:MornLow 57.00000 0.00000000 3 57.00000 57.00000 57.00000 57.00000  
## WT/BLK:MornHigh 55.63851 0.40237465 3 55.40620 56.10313 55.40620 55.40620  
## WT/BLK:MornLow 53.33333 0.57735027 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.37029 1.48050497 3 54.98804 57.93258 55.58915 56.19025  
## WT/BR:MornLow 54.33333 2.51661148 3 52.00000 57.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.49516  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.47294  
## BLK:MornLow 58.50000  
## BRN:MornHigh 56.85669  
## BRN:MornLow 55.00000  
## WHT:MornHigh 58.27125  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 55.75467  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.06142  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.33700 a  
## BLK:MornLow 58.33333 a  
## WHT:MornHigh 58.22474 a  
## WHT:MornLow 57.00000 ab  
## WT/BR:MornHigh 56.37029 ab  
## BRN:MornHigh 56.30984 ab  
## BL/BR:MornHigh 55.85838 ab  
## WT/BLK:MornHigh 55.63851 ab  
## WT/BR:MornLow 54.33333 b  
## BRN:MornLow 54.00000 b  
## BL/BR:MornLow 53.33333 b  
## WT/BLK:MornLow 53.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT38 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 120.457 24.0915 9.5848 3.98e-05 \*\*\*  
## THIregime 1 25.632 25.6318 10.1976 0.003903 \*\*   
## Colour:THIregime 5 1.402 0.2804 0.1116 0.988681   
## Residuals 24 60.324 2.5135   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.513516   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.01561 2.2222730 6 52 57.72931  
## BLK 59.13006 0.9928758 6 58 60.39799  
## BRN 56.73913 1.6407002 6 54 58.49013  
## WHT 57.19254 1.4431686 6 55 58.96056  
## WT/BLK 53.61537 2.2987037 6 50 56.19025  
## WT/BR 54.70341 1.2201028 6 53 56.01602  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.830154   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.13006 a  
## WHT 57.19254 ab  
## BRN 56.73913 ab  
## BL/BR 55.01561 bc  
## WT/BR 54.70341 bc  
## WT/BLK 53.61537 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.513516   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.90982 1.986314 18 52.27 60.39799  
## MornLow 55.22222 2.602161 18 50.00 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.090707   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.90982 a  
## MornLow 55.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.513516 24 56.06602 2.827751 4.667414  
##   
## $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 56.03123 1.5006096 3 54.88350 57.72931 55.18219 55.48087  
## BL/BR:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## BLK:MornHigh 59.59345 0.6978326 3 59.15222 60.39799 59.19119 59.23016  
## BLK:MornLow 58.66667 1.1547005 3 58.00000 60.00000 58.00000 58.00000  
## BRN:MornHigh 57.47826 1.0444187 3 56.40408 58.49013 56.97232 57.54056  
## BRN:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WHT:MornHigh 58.05175 0.8116635 3 57.39899 58.96056 57.59734 57.79569  
## WHT:MornLow 56.33333 1.5275252 3 55.00000 58.00000 55.50000 56.00000  
## WT/BLK:MornHigh 54.56407 2.0436859 3 52.27000 56.19025 53.75098 55.23197  
## WT/BLK:MornLow 52.66667 2.5166115 3 50.00000 55.00000 51.50000 53.00000  
## WT/BR:MornHigh 55.74015 0.4047254 3 55.27553 56.01602 55.60221 55.92890  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.60509  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.81407  
## BLK:MornLow 59.00000  
## BRN:MornHigh 58.01534  
## BRN:MornLow 57.00000  
## WHT:MornHigh 58.37812  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 55.71111  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.97246  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.59345 a  
## BLK:MornLow 58.66667 ab  
## WHT:MornHigh 58.05175 abc  
## BRN:MornHigh 57.47826 abc  
## WHT:MornLow 56.33333 abcd  
## BL/BR:MornHigh 56.03123 abcd  
## BRN:MornLow 56.00000 abcd  
## WT/BR:MornHigh 55.74015 abcd  
## WT/BLK:MornHigh 54.56407 bcd  
## BL/BR:MornLow 54.00000 bcd  
## WT/BR:MornLow 53.66667 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT39 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 137.605 27.5210 13.4583 2.606e-06 \*\*\*  
## THIregime 1 28.322 28.3222 13.8500 0.001061 \*\*   
## Colour:THIregime 5 3.992 0.7985 0.3905 0.850404   
## Residuals 24 49.078 2.0449   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.044917   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.59862 1.446549 6 53 56.21929  
## BLK 59.26850 1.485009 6 57 61.00000  
## BRN 55.69430 1.869251 6 53 57.96743  
## WHT 56.28600 1.523411 6 54 58.18304  
## WT/BLK 52.81046 1.540923 6 51 54.88350  
## WT/BR 56.33065 1.947164 6 53 58.15038  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.552743   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.26850 a  
## WT/BR 56.33065 b  
## WHT 56.28600 b  
## BRN 55.69430 b  
## BL/BR 54.59862 bc  
## WT/BLK 52.81046 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.044917   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.71840 1.905583 18 53.3154 60.60569  
## MornLow 54.94444 2.754082 18 51.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9837957   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.71840 a  
## MornLow 54.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.044917 24 55.83142 2.561293 4.209915  
##   
## $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 55.86391 0.3083343 3 55.66755 56.21929 55.68622 55.70489  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 59.53701 1.1387908 3 58.33913 60.60569 59.00267 59.66621  
## BLK:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## BRN:MornHigh 56.72193 1.1107881 3 55.83386 57.96743 56.09917 56.36448  
## BRN:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WHT:MornHigh 57.23866 0.8636673 3 56.48894 58.18304 56.76646 57.04399  
## WHT:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WT/BLK:MornHigh 53.95426 0.8233946 3 53.31540 54.88350 53.48963 53.66387  
## WT/BLK:MornLow 51.66667 1.1547005 3 51.00000 53.00000 51.00000 51.00000  
## WT/BR:MornHigh 56.99463 1.3500648 3 55.51074 58.15038 56.41675 57.32277  
## WT/BR:MornLow 55.66667 2.5166115 3 53.00000 58.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 55.96209  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 60.13595  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.16596  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.61352  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 54.27368  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 57.73657  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.53701 a  
## BLK:MornLow 59.00000 a  
## WHT:MornHigh 57.23866 ab  
## WT/BR:MornHigh 56.99463 ab  
## BRN:MornHigh 56.72193 ab  
## BL/BR:MornHigh 55.86391 abc  
## WT/BR:MornLow 55.66667 abc  
## WHT:MornLow 55.33333 abc  
## BRN:MornLow 54.66667 bc  
## WT/BLK:MornHigh 53.95426 bc  
## BL/BR:MornLow 53.33333 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT40 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 59.405 11.881 5.3405 0.0019412 \*\*   
## THIregime 1 41.415 41.415 18.6161 0.0002373 \*\*\*  
## Colour:THIregime 5 2.806 0.561 0.2523 0.9345012   
## Residuals 24 53.393 2.225   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.224702   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.31232 1.5481583 6 54 58.21571  
## BLK 58.75159 0.8241866 6 58 59.56167  
## BRN 58.03079 1.3227882 6 56 59.53553  
## WHT 56.62928 2.0615430 6 53 58.83642  
## WT/BLK 55.63930 2.3858061 6 52 58.80375  
## WT/BR 55.07220 2.1806047 6 52 57.88903  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.662595   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.75159 a  
## BRN 58.03079 ab  
## WHT 56.62928 abc  
## BL/BR 56.31232 abc  
## WT/BLK 55.63930 bc  
## WT/BR 55.07220 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.224702   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.81183 1.405967 18 55.4062 59.56167  
## MornLow 55.66667 2.196253 18 52.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.026131   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.81183 a  
## MornLow 55.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.224702 24 56.73925 2.628768 4.39108  
##   
## $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 57.29131 0.8851008 3 56.45160 58.21571 56.82911 57.20661  
## BL/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## BLK:MornHigh 59.50318 0.0595572 3 59.44261 59.56167 59.47394 59.50527  
## BLK:MornLow 58.00000 0.0000000 3 58.00000 58.00000 58.00000 58.00000  
## BRN:MornHigh 58.72825 0.7627229 3 58.01970 59.53553 58.32461 58.62952  
## BRN:MornLow 57.33333 1.5275252 3 56.00000 59.00000 56.50000 57.00000  
## WHT:MornHigh 57.92522 1.1194455 3 56.67561 58.83642 57.46962 58.26363  
## WHT:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## WT/BLK:MornHigh 56.94526 1.6673987 3 55.58043 58.80375 56.01602 56.45160  
## WT/BLK:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.47774 1.2758057 3 55.40620 57.88903 55.77209 56.13798  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 57.71116  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 59.53347  
## BLK:MornLow 58.00000  
## BRN:MornHigh 59.08252  
## BRN:MornLow 58.00000  
## WHT:MornHigh 58.55002  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 57.62768  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 57.01350  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.50318 a  
## BRN:MornHigh 58.72825 a  
## BLK:MornLow 58.00000 ab  
## WHT:MornHigh 57.92522 ab  
## BRN:MornLow 57.33333 ab  
## BL/BR:MornHigh 57.29131 ab  
## WT/BLK:MornHigh 56.94526 ab  
## WT/BR:MornHigh 56.47774 ab  
## BL/BR:MornLow 55.33333 ab  
## WHT:MornLow 55.33333 ab  
## WT/BLK:MornLow 54.33333 b  
## WT/BR:MornLow 53.66667 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 73.783 14.757 7.8085 0.0001757 \*\*\*  
## THIregime 1 32.502 32.502 17.1984 0.0003631 \*\*\*  
## Colour:THIregime 5 1.812 0.362 0.1917 0.9627884   
## Residuals 24 45.355 1.890   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.889812   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.72939 1.9127442 6 53 58.13586  
## BLK 59.12087 0.6656397 6 58 59.84915  
## BRN 56.34943 2.0039848 6 54 58.82751  
## WHT 56.71992 1.8919575 6 54 59.03025  
## WT/BLK 54.44236 1.6784132 6 52 56.62583  
## WT/BR 55.67239 1.1914654 6 54 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.454022   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.12087 a  
## WHT 56.71992 ab  
## BRN 56.34943 b  
## BL/BR 55.72939 b  
## WT/BR 55.67239 b  
## WT/BLK 54.44236 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.889812   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.28923 1.508265 18 54.62215 59.84915  
## MornLow 55.38889 2.199970 18 52.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.94575   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.28923 a  
## MornLow 55.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.889812 24 56.33906 2.440055 4.047107  
##   
## $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 56.79212 1.1937307 3 55.85423 58.13586 56.12025 56.38626  
## BL/BR:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## BLK:MornHigh 59.57506 0.3942948 3 59.12318 59.84915 59.43802 59.75286  
## BLK:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## BRN:MornHigh 57.36553 1.2685337 3 56.55614 58.82751 56.63455 56.71295  
## BRN:MornLow 55.33333 2.3094011 3 54.00000 58.00000 54.00000 54.00000  
## WHT:MornHigh 57.77318 1.1346249 3 56.82496 59.03025 57.14464 57.46433  
## WHT:MornLow 55.66667 2.0816660 3 54.00000 58.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.55139 1.0097018 3 54.62215 56.62583 55.01418 55.40620  
## WT/BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.67810 0.4257145 3 56.19025 56.97430 56.53001 56.86976  
## WT/BR:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 57.26106  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 59.80101  
## BLK:MornLow 59.00000  
## BRN:MornHigh 57.77023  
## BRN:MornLow 56.00000  
## WHT:MornHigh 58.24729  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 56.01602  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.92203  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.57506 a  
## BLK:MornLow 58.66667 ab  
## WHT:MornHigh 57.77318 ab  
## BRN:MornHigh 57.36553 abc  
## BL/BR:MornHigh 56.79212 abc  
## WT/BR:MornHigh 56.67810 abc  
## WHT:MornLow 55.66667 abc  
## WT/BLK:MornHigh 55.55139 abc  
## BRN:MornLow 55.33333 bc  
## BL/BR:MornLow 54.66667 bc  
## WT/BR:MornLow 54.66667 bc  
## WT/BLK:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT42 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 116.419 23.284 14.7557 1.180e-06 \*\*\*  
## THIregime 1 39.344 39.344 24.9339 4.227e-05 \*\*\*  
## Colour:THIregime 5 8.769 1.754 1.1114 0.3806   
## Residuals 24 37.871 1.578   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.577951   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.36909 2.080639 6 52 57.78739  
## BLK 60.66073 1.142379 6 59 62.00000  
## BRN 56.17749 1.792351 6 53 57.92466  
## WHT 56.15532 1.456285 6 54 57.85636  
## WT/BLK 56.72703 1.701107 6 54 58.89087  
## WT/BR 55.51619 1.826384 6 53 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.242415   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.66073 a  
## WT/BLK 56.72703 b  
## BRN 56.17749 b  
## WHT 56.15532 b  
## WT/BR 55.51619 b  
## BL/BR 55.36909 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.577951   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.81306 1.561433 18 55.60221 61.52179  
## MornLow 55.72222 2.674620 18 52.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8641991   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.81306 a  
## MornLow 55.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.577951 24 56.76764 2.212819 3.69813  
##   
## $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 56.73819 1.0951693 3 55.60221 57.78739 56.21358 56.82496  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 60.65480 0.9639157 3 59.61684 61.52179 60.22131 60.82577  
## BLK:MornLow 60.66667 1.5275252 3 59.00000 62.00000 60.00000 61.00000  
## BRN:MornHigh 57.35497 0.9337458 3 56.27737 57.92466 57.07013 57.86289  
## BRN:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WHT:MornHigh 57.31063 0.5455682 3 56.76522 57.85636 57.03777 57.31032  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 57.78739 1.2361156 3 56.45160 58.89087 57.23565 58.01970  
## WT/BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BR:MornHigh 57.03238 0.6653645 3 56.45160 57.75835 56.66939 56.88718  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.30617  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 61.17378  
## BLK:MornLow 61.50000  
## BRN:MornHigh 57.89378  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.58334  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 58.45528  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 57.32277  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornLow 60.66667 a  
## BLK:MornHigh 60.65480 a  
## WT/BLK:MornHigh 57.78739 ab  
## BRN:MornHigh 57.35497 abc  
## WHT:MornHigh 57.31063 abc  
## WT/BR:MornHigh 57.03238 abc  
## BL/BR:MornHigh 56.73819 bc  
## WT/BLK:MornLow 55.66667 bc  
## BRN:MornLow 55.00000 bc  
## WHT:MornLow 55.00000 bc  
## BL/BR:MornLow 54.00000 c  
## WT/BR:MornLow 54.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT43 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 57.403 11.481 5.1973 0.0022644 \*\*   
## THIregime 1 44.990 44.990 20.3669 0.0001433 \*\*\*  
## Colour:THIregime 5 2.359 0.472 0.2136 0.9533528   
## Residuals 24 53.015 2.209   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.208965   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.82632 2.733675 6 51 58.77471  
## BLK 59.65436 1.615777 6 57 61.37598  
## BRN 56.89941 1.585616 6 55 58.85602  
## WHT 57.46675 1.493442 6 55 58.96709  
## WT/BLK 56.20494 1.884792 6 54 58.80375  
## WT/BR 57.98899 1.300815 6 56 59.58780  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.653161   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.65436 a  
## WT/BR 57.98899 ab  
## WHT 57.46675 ab  
## BRN 56.89941 b  
## WT/BLK 56.20494 b  
## BL/BR 55.82632 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.208965   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.45804 1.364822 18 55.55554 61.37598  
## MornLow 56.22222 2.184317 18 51.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.022496   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.45804 a  
## MornLow 56.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.208965 24 57.34013 2.592005 4.375522  
##   
## $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 57.31931 1.6315876 3 55.55554 58.77471 56.59161 57.62768  
## BL/BR:MornLow 54.33333 3.0550505 3 51.00000 57.00000 53.00000 55.00000  
## BLK:MornHigh 60.30873 1.1145674 3 59.15222 61.37598 59.77510 60.39799  
## BLK:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## BRN:MornHigh 58.13216 0.6269940 3 57.75835 58.85602 57.77023 57.78211  
## BRN:MornLow 55.66667 1.1547005 3 55.00000 57.00000 55.00000 55.00000  
## WHT:MornHigh 58.60017 0.6234506 3 57.88031 58.96709 58.41670 58.95309  
## WHT:MornLow 56.33333 1.1547005 3 55.00000 57.00000 56.00000 57.00000  
## WT/BLK:MornHigh 57.40988 1.2350919 3 56.45160 58.80375 56.71295 56.97430  
## WT/BLK:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## WT/BR:MornHigh 58.97798 0.5440434 3 58.54240 59.58780 58.67308 58.80375  
## WT/BR:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## Q75  
## BL/BR:MornHigh 58.20119  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 60.88698  
## BLK:MornLow 60.00000  
## BRN:MornHigh 58.31906  
## BRN:MornLow 56.00000  
## WHT:MornHigh 58.96009  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 57.88903  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 59.19578  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.30873 a  
## BLK:MornLow 59.00000 ab  
## WT/BR:MornHigh 58.97798 ab  
## WHT:MornHigh 58.60017 abc  
## BRN:MornHigh 58.13216 abc  
## WT/BLK:MornHigh 57.40988 abc  
## BL/BR:MornHigh 57.31931 abc  
## WT/BR:MornLow 57.00000 abc  
## WHT:MornLow 56.33333 abc  
## BRN:MornLow 55.66667 bc  
## WT/BLK:MornLow 55.00000 bc  
## BL/BR:MornLow 54.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT44 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 102.256 20.451 17.7524 2.258e-07 \*\*\*  
## THIregime 1 57.423 57.423 49.8456 2.677e-07 \*\*\*  
## Colour:THIregime 5 8.027 1.605 1.3936 0.262   
## Residuals 24 27.649 1.152   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.152025   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.69832 1.862086 6 53 56.52627  
## BLK 58.68819 1.182528 6 57 60.03210  
## BRN 53.49274 2.050585 6 51 55.61528  
## WHT 55.19049 1.803579 6 53 57.46433  
## WT/BLK 56.94482 1.470218 6 55 58.54240  
## WT/BR 56.56327 2.033408 6 53 58.80375  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.91602   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.68819 a  
## WT/BLK 56.94482 ab  
## WT/BR 56.56327 bc  
## WHT 55.19049 bcd  
## BL/BR 54.69832 cd  
## BRN 53.49274 d  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.152025   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.19261 1.453829 18 54.83994 60.0321  
## MornLow 54.66667 2.449490 18 51.00000 60.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7384106   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.19261 a  
## MornLow 54.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.152025 24 55.92964 1.919061 3.159849  
##   
## $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 56.39663 0.1247761 3 56.27737 56.52627 56.33181 56.38626  
## BL/BR:MornLow 53.00000 0.0000000 3 53.00000 53.00000 53.00000 53.00000  
## BLK:MornHigh 59.04304 0.8859101 3 58.32232 60.03210 58.54851 58.77471  
## BLK:MornLow 58.33333 1.5275252 3 57.00000 60.00000 57.50000 58.00000  
## BRN:MornHigh 55.31882 0.4186220 3 54.83994 55.61528 55.17059 55.50124  
## BRN:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WHT:MornHigh 56.38097 0.9383344 3 55.82436 57.46433 55.83929 55.85423  
## WHT:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BLK:MornHigh 58.22297 0.4116973 3 57.75835 58.54240 58.06326 58.36817  
## WT/BLK:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WT/BR:MornHigh 57.79320 1.2105142 3 56.45160 58.80375 57.28792 58.12424  
## WT/BR:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.45627  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 59.40340  
## BLK:MornLow 59.00000  
## BRN:MornHigh 55.55826  
## BRN:MornLow 52.00000  
## WHT:MornHigh 56.65928  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 58.45528  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 58.46400  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.04304 a  
## BLK:MornLow 58.33333 ab  
## WT/BLK:MornHigh 58.22297 ab  
## WT/BR:MornHigh 57.79320 ab  
## BL/BR:MornHigh 56.39663 abc  
## WHT:MornHigh 56.38097 abc  
## WT/BLK:MornLow 55.66667 bcd  
## WT/BR:MornLow 55.33333 bcd  
## BRN:MornHigh 55.31882 bcd  
## WHT:MornLow 54.00000 cde  
## BL/BR:MornLow 53.00000 de  
## BRN:MornLow 51.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT45 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 104.564 20.913 13.6582 2.298e-06 \*\*\*  
## THIregime 1 33.883 33.883 22.1292 8.811e-05 \*\*\*  
## Colour:THIregime 5 6.286 1.257 0.8211 0.5468   
## Residuals 24 36.748 1.531   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.531152   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.95828 2.203176 6 52 58.13586  
## BLK 59.46767 1.510902 6 57 61.00000  
## BRN 54.46590 1.606102 6 53 55.98117  
## WHT 55.99840 1.303372 6 54 57.49700  
## WT/BLK 54.29022 1.628678 6 52 56.45160  
## WT/BR 55.64044 1.147041 6 54 56.88718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.208911   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.46767 a  
## WHT 55.99840 b  
## BL/BR 55.95828 b  
## WT/BR 55.64044 b  
## BRN 54.46590 b  
## WT/BLK 54.29022 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.531152   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.94031 1.526195 18 54.8835 60.60707  
## MornLow 55.00000 2.520504 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8512874   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.94031 a  
## MornLow 55.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.531152 24 55.97015 2.210816 3.642878  
##   
## $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 56.91657 1.54273562 3 55.18219 58.13586 56.30692 57.43166  
## BL/BR:MornLow 55.00000 2.64575131 3 52.00000 57.00000 54.00000 56.00000  
## BLK:MornHigh 59.60201 1.14873359 3 58.34983 60.60707 59.09949 59.84915  
## BLK:MornLow 59.33333 2.08166600 3 57.00000 61.00000 58.50000 60.00000  
## BRN:MornHigh 55.93180 0.04798012 3 55.88534 55.98117 55.90712 55.92890  
## BRN:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## WHT:MornHigh 56.99681 0.50647841 3 56.48427 57.49700 56.74671 57.00915  
## WHT:MornLow 55.00000 1.00000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.58043 0.79843744 3 54.88350 56.45160 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.00000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.61422 0.33347975 3 56.24252 56.88718 56.47774 56.71295  
## WT/BR:MornLow 54.66667 0.57735027 3 54.00000 55.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 57.78376  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 60.22811  
## BLK:MornLow 60.50000  
## BRN:MornHigh 55.95504  
## BRN:MornLow 53.00000  
## WHT:MornHigh 57.25307  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.80007  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.60201 a  
## BLK:MornLow 59.33333 ab  
## WHT:MornHigh 56.99681 abc  
## BL/BR:MornHigh 56.91657 abc  
## WT/BR:MornHigh 56.61422 abcd  
## BRN:MornHigh 55.93180 bcd  
## WT/BLK:MornHigh 55.58043 cd  
## BL/BR:MornLow 55.00000 cd  
## WHT:MornLow 55.00000 cd  
## WT/BR:MornLow 54.66667 cd  
## BRN:MornLow 53.00000 d  
## WT/BLK:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT46 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 113.191 22.638 12.274 5.634e-06 \*\*\*  
## THIregime 1 38.416 38.416 20.828 0.0001259 \*\*\*  
## Colour:THIregime 5 8.060 1.612 0.874 0.5131273   
## Residuals 24 44.266 1.844   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.844426   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.70043 1.867435 6 52 57.04897  
## BLK 59.68906 1.111989 6 58 61.00000  
## BRN 55.19386 1.945554 6 52 57.49700  
## WHT 54.70698 1.559512 6 53 56.41893  
## WT/BLK 55.29083 1.998538 6 52 57.67123  
## WT/BR 54.95024 1.792543 6 52 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.424375   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.68906 a  
## WT/BLK 55.29083 b  
## BRN 55.19386 b  
## WT/BR 54.95024 b  
## WHT 54.70698 b  
## BL/BR 54.70043 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.844426   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.78824 1.607092 18 54.3608 60.5548  
## MornLow 54.72222 2.674620 18 52.0000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9343245   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.78824 a  
## MornLow 54.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.844426 24 55.75523 2.435819 3.998215  
##   
## $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 56.06753 0.8820965 3 55.34086 57.04897 55.57680 55.81274  
## BL/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BLK:MornHigh 59.71144 0.8697490 3 58.81751 60.55480 59.28977 59.76203  
## BLK:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BRN:MornHigh 56.38771 1.0895273 3 55.31908 57.49700 55.83307 56.34706  
## BRN:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WHT:MornHigh 56.08063 0.2934967 3 55.89405 56.41893 55.91148 55.92890  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.24833 1.7034223 3 54.36080 57.67123 55.53688 56.71295  
## WT/BLK:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WT/BR:MornHigh 56.23381 0.8700770 3 55.27553 56.97430 55.86356 56.45160  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.43086  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 60.15841  
## BLK:MornLow 60.50000  
## BRN:MornHigh 56.92203  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.17392  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 57.19209  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 56.71295  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.71144 a  
## BLK:MornLow 59.66667 a  
## BRN:MornHigh 56.38771 ab  
## WT/BLK:MornHigh 56.24833 ab  
## WT/BR:MornHigh 56.23381 ab  
## WHT:MornHigh 56.08063 ab  
## BL/BR:MornHigh 56.06753 ab  
## WT/BLK:MornLow 54.33333 b  
## BRN:MornLow 54.00000 b  
## WT/BR:MornLow 53.66667 b  
## BL/BR:MornLow 53.33333 b  
## WHT:MornLow 53.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT47 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 89.346 17.869 6.969 0.0003786 \*\*\*  
## THIregime 1 34.440 34.440 13.432 0.0012229 \*\*   
## Colour:THIregime 5 6.140 1.228 0.479 0.7883513   
## Residuals 24 61.539 2.564   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.564111   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.34605 1.644436 6 52 56.25559  
## BLK 58.75291 2.233743 6 56 62.00000  
## BRN 54.56763 1.414705 6 53 56.16649  
## WHT 55.10384 1.732425 6 52 56.76522  
## WT/BLK 54.07243 1.423379 6 52 55.92890  
## WT/BR 55.35907 2.387761 6 51 57.36633  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.858496   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.75291 a  
## WT/BR 55.35907 b  
## WHT 55.10384 b  
## BRN 54.56763 b  
## BL/BR 54.34605 b  
## WT/BLK 54.07243 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.564111   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.34508 1.548191 18 54.3608 60.76388  
## MornLow 54.38889 2.615314 18 51.0000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.101629   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.34508 a  
## MornLow 54.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.564111 24 55.36699 2.892128 4.714155  
##   
## $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 55.69209 0.5699958 3 55.11581 56.25559 55.41035 55.70489  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 58.83916 1.7658922 3 57.29373 60.76388 57.87680 58.45987  
## BLK:MornLow 58.66667 3.0550505 3 56.00000 62.00000 57.00000 58.00000  
## BRN:MornHigh 55.80192 0.3157570 3 55.61528 56.16649 55.61964 55.62399  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.20767 0.9208030 3 55.14485 56.76522 55.92890 56.71295  
## WHT:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## WT/BLK:MornHigh 55.14485 0.7840500 3 54.36080 55.92890 54.75283 55.14485  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.38481 1.6624529 3 54.46534 57.36633 55.89405 57.32277  
## WT/BR:MornLow 54.33333 2.8867513 3 51.00000 56.00000 53.50000 56.00000  
## Q75  
## BL/BR:MornHigh 55.98024  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 59.61187  
## BLK:MornLow 60.00000  
## BRN:MornHigh 55.89524  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.73909  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.53688  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.34455  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.83916 a  
## BLK:MornLow 58.66667 ab  
## WT/BR:MornHigh 56.38481 abc  
## WHT:MornHigh 56.20767 abc  
## BRN:MornHigh 55.80192 abc  
## BL/BR:MornHigh 55.69209 abc  
## WT/BLK:MornHigh 55.14485 abc  
## WT/BR:MornLow 54.33333 abc  
## WHT:MornLow 54.00000 bc  
## BRN:MornLow 53.33333 c  
## BL/BR:MornLow 53.00000 c  
## WT/BLK:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT48 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 92.125 18.425 9.7374 3.531e-05 \*\*\*  
## THIregime 1 53.640 53.640 28.3479 1.832e-05 \*\*\*  
## Colour:THIregime 5 8.644 1.729 0.9136 0.4888   
## Residuals 24 45.413 1.892   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.89219   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.44714 1.473401 6 54 57.95436  
## BLK 58.63790 1.538513 6 56 60.00000  
## BRN 55.41046 2.117827 6 52 57.96743  
## WHT 53.51611 2.535021 6 50 56.71295  
## WT/BLK 56.72703 1.701107 6 54 58.89087  
## WT/BR 54.91860 1.787741 6 53 56.86976  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.455566   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.63790 a  
## WT/BLK 56.72703 ab  
## BL/BR 56.44714 ab  
## BRN 55.41046 bc  
## WT/BR 54.91860 bc  
## WHT 53.51611 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.89219   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.16353 1.426028 18 54.3608 59.92756  
## MornLow 54.72222 2.562296 18 50.0000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9463449   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.16353 a  
## MornLow 54.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.89219 24 55.94287 2.458882 4.049653  
##   
## $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 57.56095 0.6100991 3 56.85814 57.95436 57.36425 57.87036  
## BL/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BLK:MornHigh 58.94247 1.1427755 3 57.68957 59.92756 58.44993 59.21029  
## BLK:MornLow 58.33333 2.0816660 3 56.00000 60.00000 57.50000 59.00000  
## BRN:MornHigh 56.82092 1.1156968 3 55.73883 57.96743 56.24767 56.75651  
## BRN:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WHT:MornHigh 55.36555 1.2129360 3 54.36080 56.71295 54.69184 55.02289  
## WHT:MornLow 51.66667 2.0816660 3 50.00000 54.00000 50.50000 51.00000  
## WT/BLK:MornHigh 57.78739 1.2361156 3 56.45160 58.89087 57.23565 58.01970  
## WT/BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BR:MornHigh 56.50387 0.3427573 3 56.19025 56.86976 56.32093 56.45160  
## WT/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 57.91236  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 59.56892  
## BLK:MornLow 59.50000  
## BRN:MornHigh 57.36197  
## BRN:MornLow 55.00000  
## WHT:MornHigh 55.86792  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 58.45528  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 56.66068  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.94247 a  
## BLK:MornLow 58.33333 a  
## WT/BLK:MornHigh 57.78739 ab  
## BL/BR:MornHigh 57.56095 ab  
## BRN:MornHigh 56.82092 abc  
## WT/BR:MornHigh 56.50387 abc  
## WT/BLK:MornLow 55.66667 abcd  
## WHT:MornHigh 55.36555 abcd  
## BL/BR:MornLow 55.33333 abcd  
## BRN:MornLow 54.00000 bcd  
## WT/BR:MornLow 53.33333 cd  
## WHT:MornLow 51.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT49 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 83.402 16.680 9.5244 4.174e-05 \*\*\*  
## THIregime 1 38.026 38.026 21.7127 9.866e-05 \*\*\*  
## Colour:THIregime 5 5.384 1.077 0.6148 0.6896   
## Residuals 24 42.032 1.751   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.751342   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.54569 1.8486467 6 52 56.75029  
## BLK 59.30090 0.8087791 6 58 60.13801  
## BRN 56.29307 1.8455709 6 53 58.23749  
## WHT 56.42657 1.4570492 6 54 57.88903  
## WT/BLK 54.98654 1.8913788 6 52 57.49700  
## WT/BR 56.61378 1.9774829 6 53 58.36817  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.362406   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.30090 a  
## WT/BR 56.61378 b  
## WHT 56.42657 b  
## BRN 56.29307 b  
## WT/BLK 54.98654 b  
## BL/BR 54.54569 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.751342   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.38885 1.431129 18 55.14485 60.13801  
## MornLow 55.33333 2.376354 18 52.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9104424   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.38885 a  
## MornLow 55.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.751342 24 56.36109 2.348043 3.896017  
##   
## $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 56.09138 0.6134054 3 55.53688 56.75029 55.76193 55.98698  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 59.60181 0.6030569 3 58.94894 60.13801 59.33371 59.71848  
## BLK:MornLow 59.00000 1.0000000 3 58.00000 60.00000 58.50000 59.00000  
## BRN:MornHigh 57.25281 1.1910941 3 55.92890 58.23749 56.76047 57.59204  
## BRN:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## WHT:MornHigh 57.51982 0.6233913 3 56.80007 57.88903 57.33521 57.87036  
## WHT:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BLK:MornHigh 56.30641 1.1763438 3 55.14485 57.49700 55.71111 56.27737  
## WT/BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BR:MornHigh 57.56089 1.3235236 3 56.03344 58.36817 57.15725 58.28105  
## WT/BR:MornLow 55.66667 2.3094011 3 53.00000 57.00000 55.00000 57.00000  
## Q75  
## BL/BR:MornHigh 56.36863  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 59.92824  
## BLK:MornLow 59.50000  
## BRN:MornHigh 57.91476  
## BRN:MornLow 56.50000  
## WHT:MornHigh 57.87969  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 56.88718  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 58.32461  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.60181 a  
## BLK:MornLow 59.00000 ab  
## WT/BR:MornHigh 57.56089 abc  
## WHT:MornHigh 57.51982 abc  
## BRN:MornHigh 57.25281 abc  
## WT/BLK:MornHigh 56.30641 abcd  
## BL/BR:MornHigh 56.09138 abcd  
## WT/BR:MornLow 55.66667 bcd  
## BRN:MornLow 55.33333 bcd  
## WHT:MornLow 55.33333 bcd  
## WT/BLK:MornLow 53.66667 cd  
## BL/BR:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT50 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 50.209 10.042 6.9358 0.0003906 \*\*\*  
## THIregime 1 39.660 39.660 27.3928 2.301e-05 \*\*\*  
## Colour:THIregime 5 3.566 0.713 0.4926 0.7785231   
## Residuals 24 34.748 1.448   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.447836   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.59799 1.770189 6 53 57.78739  
## BLK 58.21277 1.270648 6 56 59.56167  
## BRN 54.54629 1.845670 6 52 56.71295  
## WHT 56.86383 1.178863 6 55 58.20638  
## WT/BLK 55.29083 1.998538 6 52 57.67123  
## WT/BR 56.11928 1.433997 6 54 57.81062  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.147973   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.21277 a  
## WHT 56.86383 ab  
## WT/BR 56.11928 abc  
## BL/BR 55.59799 bc  
## WT/BLK 55.29083 bc  
## BRN 54.54629 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.447836   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.15477 1.226636 18 54.3608 59.56167  
## MornLow 55.05556 1.924218 18 52.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8278024   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.15477 a  
## MornLow 55.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.447836 24 56.10516 2.144652 3.542379  
##   
## $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 56.86264 0.8381849 3 56.15291 57.78739 56.40026 56.64761  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 58.75887 0.8990849 3 57.78739 59.56167 58.35747 58.92755  
## BLK:MornLow 57.66667 1.5275252 3 56.00000 59.00000 57.00000 58.00000  
## BRN:MornHigh 56.09257 0.5858613 3 55.54875 56.71295 55.78239 56.01602  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 57.72765 0.4855004 3 57.23565 58.20638 57.48829 57.74093  
## WHT:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WT/BLK:MornHigh 56.24833 1.7034223 3 54.36080 57.67123 55.53688 56.71295  
## WT/BLK:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WT/BR:MornHigh 57.23855 0.6184874 3 56.58228 57.81062 56.95252 57.32277  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 57.21750  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.24461  
## BLK:MornLow 58.50000  
## BRN:MornHigh 56.36448  
## BRN:MornLow 53.50000  
## WHT:MornHigh 57.97365  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 57.19209  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 57.56669  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.75887 a  
## WHT:MornHigh 57.72765 ab  
## BLK:MornLow 57.66667 ab  
## WT/BR:MornHigh 57.23855 ab  
## BL/BR:MornHigh 56.86264 ab  
## WT/BLK:MornHigh 56.24833 abc  
## BRN:MornHigh 56.09257 abc  
## WHT:MornLow 56.00000 abc  
## WT/BR:MornLow 55.00000 bc  
## BL/BR:MornLow 54.33333 bc  
## WT/BLK:MornLow 54.33333 bc  
## BRN:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT51 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 137.482 27.496 22.2128 2.747e-08 \*\*\*  
## THIregime 1 33.119 33.119 26.7549 2.687e-05 \*\*\*  
## Colour:THIregime 5 8.342 1.668 1.3478 0.2786   
## Residuals 24 29.709 1.238   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.237866   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.42657 1.621226 6 54 58.39306  
## BLK 60.60151 1.115586 6 59 62.00000  
## BRN 54.81380 1.817084 6 52 56.64167  
## WHT 56.04969 1.847078 6 53 58.21571  
## WT/BLK 54.81230 1.341788 6 53 56.27737  
## WT/BR 56.05104 1.359118 6 54 57.70608  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.986122   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.60151 a  
## BL/BR 56.42657 b  
## WT/BR 56.05104 b  
## WHT 56.04969 b  
## BRN 54.81380 b  
## WT/BLK 54.81230 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.237866   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.4183 1.663329 18 55.4062 61.39112  
## MornLow 55.5000 2.749331 18 52.0000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7654271   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.4183 a  
## MornLow 55.5000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.237866 24 56.45915 1.970618 3.275459  
##   
## $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 57.51982 0.8075112 3 56.80007 58.39306 57.08320 57.36633  
## BL/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## BLK:MornHigh 60.53635 0.8747915 3 59.64282 61.39112 60.10897 60.57512  
## BLK:MornLow 60.66667 1.5275252 3 59.00000 62.00000 60.00000 61.00000  
## BRN:MornHigh 56.29426 0.5880690 3 55.61528 56.64167 56.12056 56.62583  
## BRN:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WHT:MornHigh 57.09937 1.1062135 3 56.00357 58.21571 56.54121 57.07884  
## WHT:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## WT/BLK:MornHigh 55.95794 0.4798012 3 55.40620 56.27737 55.79823 56.19025  
## WT/BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BR:MornHigh 57.10207 0.5513414 3 56.62583 57.70608 56.80007 56.97430  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 57.87969  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 60.98312  
## BLK:MornLow 61.50000  
## BRN:MornHigh 56.63375  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.64728  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 56.23381  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.34019  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornLow 60.66667 a  
## BLK:MornHigh 60.53635 a  
## BL/BR:MornHigh 57.51982 ab  
## WT/BR:MornHigh 57.10207 b  
## WHT:MornHigh 57.09937 b  
## BRN:MornHigh 56.29426 bc  
## WT/BLK:MornHigh 55.95794 bc  
## BL/BR:MornLow 55.33333 bc  
## WHT:MornLow 55.00000 bc  
## WT/BR:MornLow 55.00000 bc  
## WT/BLK:MornLow 53.66667 c  
## BRN:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT52 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 109.425 21.885 15.5304 7.526e-07 \*\*\*  
## THIregime 1 48.544 48.544 34.4483 4.703e-06 \*\*\*  
## Colour:THIregime 5 8.620 1.724 1.2234 0.3287   
## Residuals 24 33.820 1.409   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.409176   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.62326 2.4397244 6 51 57.49700  
## BLK 59.72441 0.9586004 6 58 60.58093  
## BRN 56.25497 1.9925064 6 53 58.58992  
## WHT 56.26017 1.5562482 6 54 58.05237  
## WT/BLK 56.00924 1.9104551 6 53 58.54240  
## WT/BR 58.76196 1.1330206 6 57 60.28473  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.119102   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.72441 a  
## WT/BR 58.76196 a  
## WHT 56.26017 b  
## BRN 56.25497 b  
## WT/BLK 56.00924 b  
## BL/BR 54.62326 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.409176   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.10022 1.509848 18 55.46428 60.58093  
## MornLow 55.77778 2.579456 18 51.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8166757   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.10022 a  
## MornLow 55.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.409176 24 56.939 2.08484 3.494765  
##   
## $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 56.57986 1.0307868 3 55.46428 57.49700 56.12128 56.77829  
## BL/BR:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## BLK:MornHigh 60.11549 0.7107205 3 59.29741 60.58093 59.88277 60.46814  
## BLK:MornLow 59.33333 1.1547005 3 58.00000 60.00000 59.00000 60.00000  
## BRN:MornHigh 57.50994 1.0956151 3 56.39933 58.58992 56.96994 57.54056  
## BRN:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## WHT:MornHigh 57.52033 0.5391707 3 56.97430 58.05237 57.25432 57.53434  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 57.35181 1.1763438 3 56.19025 58.54240 56.75651 57.32277  
## WT/BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WT/BR:MornHigh 59.52391 0.6838150 3 58.96056 60.28473 59.14351 59.32645  
## WT/BR:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## Q75  
## BL/BR:MornHigh 57.13764  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 60.52453  
## BLK:MornLow 60.00000  
## BRN:MornHigh 58.06524  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.79335  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 57.93258  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 59.80559  
## WT/BR:MornLow 58.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.11549 a  
## WT/BR:MornHigh 59.52391 ab  
## BLK:MornLow 59.33333 ab  
## WT/BR:MornLow 58.00000 abc  
## WHT:MornHigh 57.52033 abc  
## BRN:MornHigh 57.50994 abc  
## WT/BLK:MornHigh 57.35181 abc  
## BL/BR:MornHigh 56.57986 bc  
## BRN:MornLow 55.00000 cd  
## WHT:MornLow 55.00000 cd  
## WT/BLK:MornLow 54.66667 cd  
## BL/BR:MornLow 52.66667 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 50.447 10.089 3.8707 0.0102980 \*   
## THIregime 1 48.302 48.302 18.5303 0.0002434 \*\*\*  
## Colour:THIregime 5 3.520 0.704 0.2701 0.9250080   
## Residuals 24 62.559 2.607   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.606634   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.05205 2.2593288 6 51 57.27299  
## BLK 58.57728 0.9484996 6 57 59.61684  
## BRN 55.55997 1.7374171 6 53 57.70608  
## WHT 56.60890 2.0939879 6 53 58.86909  
## WT/BLK 56.50985 2.3063286 6 53 59.58780  
## WT/BR 55.30856 2.0370097 6 52 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.882101   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.57728 a  
## WHT 56.60890 ab  
## WT/BLK 56.50985 ab  
## BRN 55.55997 b  
## WT/BR 55.30856 b  
## BL/BR 55.05205 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.606634   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.42776 1.387942 18 54.94884 59.61684  
## MornLow 55.11111 2.219933 18 51.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.110726   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.42776 a  
## MornLow 55.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.606634 24 56.26943 2.869244 4.753084  
##   
## $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 56.43743 1.2923822 3 54.94884 57.27299 56.01965 57.09046  
## BL/BR:MornLow 53.66667 2.3094011 3 51.00000 55.00000 53.00000 55.00000  
## BLK:MornHigh 59.15456 0.4993716 3 58.62493 59.61684 58.92342 59.22191  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 56.78660 0.8362491 3 56.07145 57.70608 56.32686 56.58228  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 57.55114 1.4018591 3 56.07824 58.86909 56.89216 57.70608  
## WHT:MornLow 55.66667 2.5166115 3 53.00000 58.00000 54.50000 56.00000  
## WT/BLK:MornHigh 58.01970 1.5681000 3 56.45160 59.58780 57.23565 58.01970  
## WT/BLK:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## WT/BR:MornHigh 56.61712 1.1119923 3 55.53688 57.75835 56.04651 56.55614  
## WT/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.18172  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.41937  
## BLK:MornLow 58.50000  
## BRN:MornHigh 57.14418  
## BRN:MornLow 55.00000  
## WHT:MornHigh 58.28758  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 58.80375  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 57.15725  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.15456 a  
## WT/BLK:MornHigh 58.01970 ab  
## BLK:MornLow 58.00000 ab  
## WHT:MornHigh 57.55114 ab  
## BRN:MornHigh 56.78660 ab  
## WT/BR:MornHigh 56.61712 ab  
## BL/BR:MornHigh 56.43743 ab  
## WHT:MornLow 55.66667 ab  
## WT/BLK:MornLow 55.00000 ab  
## BRN:MornLow 54.33333 b  
## WT/BR:MornLow 54.00000 b  
## BL/BR:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT54 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 53.070 10.614 3.8882 0.010083 \*   
## THIregime 1 51.399 51.399 18.8285 0.000223 \*\*\*  
## Colour:THIregime 5 5.307 1.061 0.3888 0.851530   
## Residuals 24 65.516 2.730   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.729834   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.30216 1.834195 6 53 57.10498  
## BLK 59.18470 1.918215 6 56 61.05136  
## BRN 56.30565 2.032659 6 53 58.69921  
## WHT 57.01410 1.821865 6 54 59.09995  
## WT/BLK 57.74973 1.718183 6 55 59.93627  
## WT/BR 56.61294 2.645269 6 52 59.45713  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.949425   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.18470 a  
## WT/BLK 57.74973 ab  
## WHT 57.01410 ab  
## WT/BR 56.61294 ab  
## BRN 56.30565 ab  
## BL/BR 55.30216 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.729834   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.22309 1.358916 18 56.36448 61.05136  
## MornLow 55.83333 2.332633 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.136672   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.22309 a  
## MornLow 55.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.729834 24 57.02821 2.897199 4.864112  
##   
## $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 56.93766 0.2298192 3 56.67561 57.10498 56.85400 57.03238  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 59.70273 1.4354314 3 58.19393 61.05136 59.02842 59.86291  
## BLK:MornLow 58.66667 2.5166115 3 56.00000 61.00000 57.50000 59.00000  
## BRN:MornHigh 57.61131 1.1022973 3 56.49516 58.69921 57.06736 57.63955  
## BRN:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## WHT:MornHigh 58.02820 1.1012595 3 56.89963 59.09995 57.49233 58.08504  
## WHT:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WT/BLK:MornHigh 58.83279 1.2361156 3 57.49700 59.93627 58.28105 59.06510  
## WT/BLK:MornLow 56.66667 1.5275252 3 55.00000 58.00000 56.00000 57.00000  
## WT/BR:MornHigh 58.22588 1.6397924 3 56.36448 59.45713 57.61025 58.85602  
## WT/BR:MornLow 55.00000 2.6457513 3 52.00000 57.00000 54.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.06868  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 60.45713  
## BLK:MornLow 60.00000  
## BRN:MornHigh 58.16938  
## BRN:MornLow 56.00000  
## WHT:MornHigh 58.59249  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 59.50068  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 59.15657  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.70273 a  
## WT/BLK:MornHigh 58.83279 a  
## BLK:MornLow 58.66667 a  
## WT/BR:MornHigh 58.22588 ab  
## WHT:MornHigh 58.02820 ab  
## BRN:MornHigh 57.61131 ab  
## BL/BR:MornHigh 56.93766 ab  
## WT/BLK:MornLow 56.66667 ab  
## WHT:MornLow 56.00000 ab  
## BRN:MornLow 55.00000 ab  
## WT/BR:MornLow 55.00000 ab  
## BL/BR:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT55 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 104.338 20.868 8.2306 0.0001214 \*\*\*  
## THIregime 1 49.031 49.031 19.3389 0.0001922 \*\*\*  
## Colour:THIregime 5 9.109 1.822 0.7186 0.6158319   
## Residuals 24 60.849 2.535   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.535362   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.81883 1.960330 6 52 57.14853  
## BLK 59.78094 1.826143 6 57 62.00000  
## BRN 56.35748 1.404213 6 54 57.80191  
## WHT 55.34149 2.402987 6 52 58.29847  
## WT/BLK 57.44543 2.264318 6 54 60.63320  
## WT/BR 55.25805 1.935659 6 53 57.60154  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.842426   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.78094 a  
## WT/BLK 57.44543 ab  
## BRN 56.35748 b  
## WHT 55.34149 b  
## WT/BR 55.25805 b  
## BL/BR 54.81883 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.535362   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.66741 1.650228 18 55.53688 61.26044  
## MornLow 55.33333 2.743977 18 52.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.095436   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.66741 a  
## MornLow 55.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.535362 24 56.50037 2.81818 4.687653  
##   
## $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 56.30433 0.8085654 3 55.53688 57.14853 55.88223 56.22759  
## BL/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BLK:MornHigh 59.89520 1.4016012 3 58.45987 61.26044 59.21259 59.96531  
## BLK:MornLow 59.66667 2.5166115 3 57.00000 62.00000 58.50000 60.00000  
## BRN:MornHigh 57.38164 0.6704791 3 56.60841 57.80191 57.17150 57.73459  
## BRN:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WHT:MornHigh 56.68298 1.4272673 3 55.59288 58.29847 55.87523 56.15758  
## WHT:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## WT/BLK:MornHigh 58.89087 1.5968749 3 57.49700 60.63320 58.01970 58.54240  
## WT/BLK:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WT/BR:MornHigh 56.84943 0.6603842 3 56.36448 57.60154 56.47338 56.58228  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.68806  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 60.61287  
## BLK:MornLow 61.00000  
## BRN:MornHigh 57.76825  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.22803  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 59.58780  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 57.09191  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.89520 a  
## BLK:MornLow 59.66667 a  
## WT/BLK:MornHigh 58.89087 a  
## BRN:MornHigh 57.38164 ab  
## WT/BR:MornHigh 56.84943 ab  
## WHT:MornHigh 56.68298 ab  
## BL/BR:MornHigh 56.30433 ab  
## WT/BLK:MornLow 56.00000 ab  
## BRN:MornLow 55.33333 ab  
## WHT:MornLow 54.00000 b  
## WT/BR:MornLow 53.66667 b  
## BL/BR:MornLow 53.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT56 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 38.043 7.609 5.5806 0.001505 \*\*   
## THIregime 1 52.244 52.244 38.3192 2.138e-06 \*\*\*  
## Colour:THIregime 5 3.221 0.644 0.4726 0.792935   
## Residuals 24 32.721 1.363   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.363381   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.45967 2.042585 6 53 58.09437  
## BLK 58.25918 0.761220 6 57 59.03759  
## BRN 55.90707 1.593583 6 54 57.87715  
## WHT 55.86114 1.372714 6 54 57.23565  
## WT/BLK 57.22764 1.902290 6 55 59.84915  
## WT/BR 55.51329 2.200705 6 52 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.084384   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.25918 a  
## WT/BLK 57.22764 ab  
## BRN 55.90707 b  
## WHT 55.86114 b  
## WT/BR 55.51329 b  
## BL/BR 55.45967 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.363381   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.57599 1.070604 18 55.82436 59.84915  
## MornLow 55.16667 1.790498 18 52.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8032962   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.57599 a  
## MornLow 55.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.363381 24 56.37133 2.071335 3.437511  
##   
## $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 56.91933 1.0190683 3 56.27737 58.09437 56.33181 56.38626  
## BL/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BLK:MornHigh 58.85169 0.2491925 3 58.56854 59.03759 58.75874 58.94894  
## BLK:MornLow 57.66667 0.5773503 3 57.00000 58.00000 57.50000 58.00000  
## BRN:MornHigh 57.14748 0.6321513 3 56.76522 57.87715 56.78264 56.80007  
## BRN:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WHT:MornHigh 57.05561 0.3118404 3 56.69553 57.23565 56.96559 57.23565  
## WHT:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WT/BLK:MornHigh 58.45528 1.2350919 3 57.49700 59.84915 57.75835 58.01970  
## WT/BLK:MornLow 56.00000 1.7320508 3 55.00000 58.00000 55.00000 55.00000  
## WT/BR:MornHigh 57.02657 1.1125041 3 55.82436 58.01970 56.53001 57.23565  
## WT/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.24032  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 58.99327  
## BLK:MornLow 58.00000  
## BRN:MornHigh 57.33861  
## BRN:MornLow 55.00000  
## WHT:MornHigh 57.23565  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 58.93443  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 57.62768  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.85169 a  
## WT/BLK:MornHigh 58.45528 a  
## BLK:MornLow 57.66667 ab  
## BRN:MornHigh 57.14748 abc  
## WHT:MornHigh 57.05561 abc  
## WT/BR:MornHigh 57.02657 abc  
## BL/BR:MornHigh 56.91933 abc  
## WT/BLK:MornLow 56.00000 abc  
## BRN:MornLow 54.66667 bc  
## WHT:MornLow 54.66667 bc  
## BL/BR:MornLow 54.00000 c  
## WT/BR:MornLow 54.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT57 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 95.949 19.190 12.976 3.545e-06 \*\*\*  
## THIregime 1 45.282 45.282 30.620 1.084e-05 \*\*\*  
## Colour:THIregime 5 6.699 1.340 0.906 0.4935   
## Residuals 24 35.492 1.479   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.478839   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.62075 1.789186 6 52 56.80007  
## BLK 58.65191 1.131765 6 57 60.00000  
## BRN 54.91051 2.028185 6 52 57.44473  
## WHT 56.24596 1.292184 6 54 57.53185  
## WT/BLK 56.90126 1.783061 6 54 58.89087  
## WT/BR 53.73214 2.012449 6 51 55.84178  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.170849   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.65191 a  
## WT/BLK 56.90126 ab  
## WHT 56.24596 bc  
## BRN 54.91051 bcd  
## BL/BR 54.62075 cd  
## WT/BR 53.73214 d  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.478839   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.96529 1.465860 18 55.14485 59.76203  
## MornLow 54.72222 2.444816 18 51.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8366187   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.96529 a  
## MornLow 54.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.478839 24 55.84375 2.177639 3.580106  
##   
## $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 55.90816 0.8350684 3 55.14485 56.80007 55.46220 55.77956  
## BL/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BLK:MornHigh 58.97049 0.7512747 3 58.26729 59.76203 58.57472 58.88216  
## BLK:MornLow 58.33333 1.5275252 3 57.00000 60.00000 57.50000 58.00000  
## BRN:MornHigh 56.15435 1.1441551 3 55.26365 57.44473 55.50916 55.75467  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 57.15859 0.5850963 3 56.48427 57.53185 56.97197 57.45966  
## WHT:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BLK:MornHigh 58.13586 1.0209142 3 56.97430 58.89087 57.75835 58.54240  
## WT/BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BR:MornHigh 55.46428 0.3520778 3 55.14485 55.84178 55.27553 55.40620  
## WT/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 56.28981  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 59.32209  
## BLK:MornLow 59.00000  
## BRN:MornHigh 56.59970  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.49576  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 58.71663  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 55.62399  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.97049 a  
## BLK:MornLow 58.33333 ab  
## WT/BLK:MornHigh 58.13586 ab  
## WHT:MornHigh 57.15859 abc  
## BRN:MornHigh 56.15435 abcd  
## BL/BR:MornHigh 55.90816 abcd  
## WT/BLK:MornLow 55.66667 abcd  
## WT/BR:MornHigh 55.46428 abcde  
## WHT:MornLow 55.33333 bcde  
## BRN:MornLow 53.66667 cde  
## BL/BR:MornLow 53.33333 de  
## WT/BR:MornLow 52.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT58 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 62.602 12.520 8.8897 6.968e-05 \*\*\*  
## THIregime 1 44.030 44.030 31.2616 9.385e-06 \*\*\*  
## Colour:THIregime 5 4.091 0.818 0.5809 0.7142   
## Residuals 24 33.802 1.408   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.408421   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.93209 2.0497261 6 52 57.49700  
## BLK 58.41627 0.8633054 6 57 59.45713  
## BRN 55.41438 1.6198229 6 53 57.40196  
## WHT 55.47922 1.6689988 6 53 57.52967  
## WT/BLK 55.87856 1.6021706 6 54 58.01970  
## WT/BR 54.18163 1.8605134 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.118534   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.41627 a  
## WT/BLK 55.87856 b  
## WHT 55.47922 b  
## BRN 55.41438 b  
## BL/BR 54.93209 b  
## WT/BR 54.18163 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.408421   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.82294 1.241858 18 55.23197 59.45713  
## MornLow 54.61111 2.090283 18 52.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.816457   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.82294 a  
## MornLow 54.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.408421 24 55.71702 2.129994 3.49383  
##   
## $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 56.19751 1.1688604 3 55.23197 57.49700 55.54776 55.86356  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 58.83253 0.5860081 3 58.29481 59.45713 58.52024 58.74567  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 56.49542 0.8486817 3 55.71982 57.40196 56.04215 56.36448  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 56.62511 0.8314975 3 55.89405 57.52967 56.17283 56.45160  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 57.09046 0.8233946 3 56.45160 58.01970 56.62583 56.80007  
## WT/BLK:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BR:MornHigh 55.69659 0.6596368 3 55.23197 56.45160 55.31908 55.40620  
## WT/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.68028  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.10140  
## BLK:MornLow 58.50000  
## BRN:MornHigh 56.88322  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.99063  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 57.40988  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 55.92890  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.83253 a  
## BLK:MornLow 58.00000 ab  
## WT/BLK:MornHigh 57.09046 abc  
## WHT:MornHigh 56.62511 abc  
## BRN:MornHigh 56.49542 abc  
## BL/BR:MornHigh 56.19751 abc  
## WT/BR:MornHigh 55.69659 abcd  
## WT/BLK:MornLow 54.66667 bcd  
## BRN:MornLow 54.33333 cd  
## WHT:MornLow 54.33333 cd  
## BL/BR:MornLow 53.66667 cd  
## WT/BR:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT59 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 63.330 12.666 7.6590 0.0002007 \*\*\*  
## THIregime 1 54.468 54.468 32.9364 6.495e-06 \*\*\*  
## Colour:THIregime 5 4.900 0.980 0.5926 0.7057404   
## Residuals 24 39.690 1.654   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.653744   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.10563 1.923295 6 52 57.20661  
## BLK 58.52193 1.556570 6 56 60.18891  
## BRN 56.08707 2.255833 6 52 58.32461  
## WHT 55.35357 1.645574 6 53 57.23565  
## WT/BLK 57.59758 1.455719 6 56 59.32645  
## WT/BR 55.04782 1.942635 6 53 57.36633  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.295638   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.52193 a  
## WT/BLK 57.59758 ab  
## BRN 56.08707 bc  
## WHT 55.35357 bc  
## BL/BR 55.10563 c  
## WT/BR 55.04782 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.653744   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.51565 1.305531 18 55.51074 60.18891  
## MornLow 55.05556 2.154946 18 52.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8847106   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.51565 a  
## MornLow 55.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.653744 24 56.2856 2.28474 3.785904  
##   
## $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 56.54459 0.8381387 3 55.60221 57.20661 56.21358 56.82496  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 59.04386 1.1135752 3 57.96468 60.18891 58.47133 58.97798  
## BLK:MornLow 58.00000 2.0000000 3 56.00000 60.00000 57.00000 58.00000  
## BRN:MornHigh 57.17414 1.4753943 3 55.51074 58.32461 56.59891 57.68707  
## BRN:MornLow 55.00000 2.6457513 3 52.00000 57.00000 54.00000 56.00000  
## WHT:MornHigh 56.70714 0.5227968 3 56.19025 57.23565 56.44289 56.69553  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 58.86183 0.4116973 3 58.54240 59.32645 58.62952 58.71663  
## WT/BLK:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## WT/BR:MornHigh 56.76232 0.5317924 3 56.36448 57.36633 56.46031 56.55614  
## WT/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 57.01578  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.58344  
## BLK:MornLow 59.00000  
## BRN:MornHigh 58.00584  
## BRN:MornLow 56.50000  
## WHT:MornHigh 56.96559  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 59.02154  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 56.96123  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.04386 a  
## WT/BLK:MornHigh 58.86183 a  
## BLK:MornLow 58.00000 ab  
## BRN:MornHigh 57.17414 abc  
## WT/BR:MornHigh 56.76232 abcd  
## WHT:MornHigh 56.70714 abcd  
## BL/BR:MornHigh 56.54459 abcd  
## WT/BLK:MornLow 56.33333 abcd  
## BRN:MornLow 55.00000 bcd  
## WHT:MornLow 54.00000 cd  
## BL/BR:MornLow 53.66667 cd  
## WT/BR:MornLow 53.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT60 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 153.696 30.739 12.491 4.873e-06 \*\*\*  
## THIregime 1 41.811 41.811 16.990 0.0003871 \*\*\*  
## Colour:THIregime 5 12.181 2.436 0.990 0.4445100   
## Residuals 24 59.062 2.461   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.4609   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.41023 2.106696 6 52 57.90354  
## BLK 61.13615 1.152173 6 60 63.00000  
## BRN 54.87174 2.020791 6 52 57.39246  
## WHT 55.85497 2.553562 6 52 58.83642  
## WT/BLK 56.61844 1.669227 6 54 58.54240  
## WT/BR 56.24124 1.858584 6 53 58.10682  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.800375   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 61.13615 a  
## WT/BLK 56.61844 b  
## WT/BR 56.24124 b  
## WHT 55.85497 b  
## BL/BR 55.41023 b  
## BRN 54.87174 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.4609   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.76648 1.793128 18 55.58043 61.99222  
## MornLow 55.61111 3.164860 18 52.00000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.07923   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.76648 a  
## MornLow 55.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.4609 24 56.6888 2.767259 4.618303  
##   
## $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 56.82046 1.0626216 3 55.77956 57.90354 56.27892 56.77829  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 60.93897 0.9320867 3 60.22054 61.99222 60.41235 60.60416  
## BLK:MornLow 61.33333 1.5275252 3 60.00000 63.00000 60.50000 61.00000  
## BRN:MornHigh 56.41015 0.8806462 3 55.69131 57.39246 55.91900 56.14669  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 57.04327 1.6529345 3 55.58043 58.83642 56.14669 56.71295  
## WHT:MornLow 54.66667 3.0550505 3 52.00000 58.00000 53.00000 54.00000  
## WT/BLK:MornHigh 57.90354 0.8233946 3 56.97430 58.54240 57.58412 58.19393  
## WT/BLK:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BR:MornHigh 57.48248 1.0068792 3 56.32093 58.10682 57.17031 58.01970  
## WT/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 57.34092  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 61.29819  
## BLK:MornLow 62.00000  
## BRN:MornHigh 56.76958  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.77468  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 58.36817  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 58.06326  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornLow 61.33333 a  
## BLK:MornHigh 60.93897 ab  
## WT/BLK:MornHigh 57.90354 abc  
## WT/BR:MornHigh 57.48248 abc  
## WHT:MornHigh 57.04327 abc  
## BL/BR:MornHigh 56.82046 abc  
## BRN:MornHigh 56.41015 bc  
## WT/BLK:MornLow 55.33333 c  
## WT/BR:MornLow 55.00000 c  
## WHT:MornLow 54.66667 c  
## BL/BR:MornLow 54.00000 c  
## BRN:MornLow 53.33333 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 91.105 18.221 8.1303 0.0001324 \*\*\*  
## THIregime 1 37.067 37.067 16.5394 0.0004449 \*\*\*  
## Colour:THIregime 5 7.220 1.444 0.6443 0.6683388   
## Residuals 24 53.787 2.241   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.241132   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.83996 1.352542 6 53 56.21929  
## BLK 59.07560 1.938831 6 57 62.00000  
## BRN 55.92128 1.251074 6 54 57.45344  
## WHT 54.63086 1.644498 6 52 56.28826  
## WT/BLK 55.18224 1.867462 6 53 57.75835  
## WT/BR 54.43832 2.503868 6 50 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.672409   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.07560 a  
## BRN 55.92128 b  
## WT/BLK 55.18224 b  
## BL/BR 54.83996 b  
## WHT 54.63086 b  
## WT/BR 54.43832 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.241132   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.69609 1.497296 18 54.09945 60.89455  
## MornLow 54.66667 2.589572 18 50.00000 62.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.029914   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.69609 a  
## MornLow 54.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.241132 24 55.68138 2.688585 4.407265  
##   
## $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 56.01325 0.3320372 3 55.63021 56.21929 55.91023 56.19025  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 59.15120 1.5428927 3 57.96162 60.89455 58.27952 58.59742  
## BLK:MornLow 59.00000 2.6457513 3 57.00000 62.00000 57.50000 58.00000  
## BRN:MornHigh 56.84257 0.6055334 3 56.24252 57.45344 56.53713 56.83175  
## BRN:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WHT:MornHigh 55.92838 0.6139149 3 55.21952 56.28826 55.74844 56.27737  
## WHT:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BLK:MornHigh 56.36448 1.2350919 3 55.40620 57.75835 55.66755 55.92890  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 55.87663 1.5707113 3 54.09945 57.07884 55.27553 56.45160  
## WT/BR:MornLow 53.00000 2.6457513 3 50.00000 55.00000 52.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.20477  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 59.74599  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.14259  
## BRN:MornLow 55.50000  
## WHT:MornHigh 56.28281  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 56.84363  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.76522  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.15120 a  
## BLK:MornLow 59.00000 a  
## BRN:MornHigh 56.84257 ab  
## WT/BLK:MornHigh 56.36448 ab  
## BL/BR:MornHigh 56.01325 ab  
## WHT:MornHigh 55.92838 ab  
## WT/BR:MornHigh 55.87663 ab  
## BRN:MornLow 55.00000 ab  
## WT/BLK:MornLow 54.00000 b  
## BL/BR:MornLow 53.66667 b  
## WHT:MornLow 53.33333 b  
## WT/BR:MornLow 53.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT62 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 141.971 28.394 16.7647 3.799e-07 \*\*\*  
## THIregime 1 32.017 32.017 18.9038 0.0002181 \*\*\*  
## Colour:THIregime 5 9.008 1.802 1.0637 0.4047078   
## Residuals 24 40.649 1.694   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.693696   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.32135 1.861023 6 53 57.90354  
## BLK 59.63877 1.658551 6 57 61.00000  
## BRN 54.89242 1.579336 6 53 56.84363  
## WHT 54.63164 1.482455 6 53 56.30226  
## WT/BLK 54.72519 1.704189 6 52 56.71295  
## WT/BR 53.44901 1.588824 6 52 55.01418  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.323202   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.63877 a  
## BL/BR 56.32135 b  
## BRN 54.89242 bc  
## WT/BLK 54.72519 bc  
## WHT 54.63164 bc  
## WT/BR 53.44901 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.693696   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.55279 1.742686 18 54.3608 60.45026  
## MornLow 54.66667 2.869720 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8953334   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.55279 a  
## MornLow 54.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.693696 24 55.60973 2.340275 3.831362  
##   
## $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 56.97603 1.4280637 3 55.33153 57.90354 56.51227 57.69301  
## BL/BR:MornLow 55.66667 2.3094011 3 53.00000 57.00000 55.00000 57.00000  
## BLK:MornHigh 59.61088 1.2414950 3 58.18476 60.45026 59.19119 60.19762  
## BLK:MornLow 59.66667 2.3094011 3 57.00000 61.00000 59.00000 61.00000  
## BRN:MornHigh 56.11818 0.6284732 3 55.73883 56.84363 55.75546 55.77209  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 55.92994 0.3226224 3 55.73289 56.30226 55.74378 55.75467  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 55.78371 1.2513706 3 54.36080 56.71295 55.31908 56.27737  
## WT/BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BR:MornHigh 54.89802 0.1096194 3 54.79638 55.01418 54.83994 54.88350  
## WT/BR:MornLow 52.00000 0.0000000 3 52.00000 52.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 57.79828  
## BL/BR:MornLow 57.00000  
## BLK:MornHigh 60.32394  
## BLK:MornLow 61.00000  
## BRN:MornHigh 56.30786  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.02846  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 56.49516  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 54.94884  
## WT/BR:MornLow 52.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornLow 59.66667 a  
## BLK:MornHigh 59.61088 ab  
## BL/BR:MornHigh 56.97603 abc  
## BRN:MornHigh 56.11818 abc  
## WHT:MornHigh 55.92994 abc  
## WT/BLK:MornHigh 55.78371 bcd  
## BL/BR:MornLow 55.66667 cd  
## WT/BR:MornHigh 54.89802 cd  
## BRN:MornLow 53.66667 cd  
## WT/BLK:MornLow 53.66667 cd  
## WHT:MornLow 53.33333 cd  
## WT/BR:MornLow 52.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT63 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 54.200 10.840 6.2281 0.0007765 \*\*\*  
## THIregime 1 58.775 58.775 33.7690 5.431e-06 \*\*\*  
## Colour:THIregime 5 4.056 0.811 0.4660 0.7976141   
## Residuals 24 41.772 1.741   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.74051   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.22914 1.9749581 6 53 58.54240  
## BLK 57.93649 0.7818666 6 57 58.90004  
## BRN 55.08210 2.3778861 6 51 57.75835  
## WHT 54.25220 1.9249681 6 52 56.55614  
## WT/BLK 56.90126 1.6228348 6 55 59.06510  
## WT/BR 55.26531 2.1012976 6 52 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.35509   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 57.93649 a  
## WT/BLK 56.90126 ab  
## BL/BR 56.22914 abc  
## WT/BR 55.26531 bc  
## BRN 55.08210 bc  
## WHT 54.25220 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.74051   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.22217 1.237361 18 55.09258 59.0651  
## MornLow 54.66667 2.086370 18 51.00000 58.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9076227   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.22217 a  
## MornLow 54.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.74051 24 55.94442 2.358205 3.883951  
##   
## $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 57.45828 1.1039871 3 56.33544 58.54240 56.91622 57.49700  
## BL/BR:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## BLK:MornHigh 58.53965 0.3218026 3 58.28105 58.90004 58.35946 58.43786  
## BLK:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## BRN:MornHigh 56.49753 1.3387174 3 55.09258 57.75835 55.86713 56.64167  
## BRN:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## WHT:MornHigh 55.83774 0.6234172 3 55.43887 56.55614 55.47854 55.51821  
## WHT:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BLK:MornHigh 58.13586 0.8233946 3 57.49700 59.06510 57.67123 57.84547  
## WT/BLK:MornLow 55.66667 1.1547005 3 55.00000 57.00000 55.00000 55.00000  
## WT/BR:MornHigh 56.86395 1.0189795 3 55.75467 57.75835 56.41675 57.07884  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 58.01970  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 58.66895  
## BLK:MornLow 57.50000  
## BRN:MornHigh 57.20001  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.03717  
## WHT:MornLow 53.00000  
## WT/BLK:MornHigh 58.45528  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 57.41860  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.53965 a  
## WT/BLK:MornHigh 58.13586 a  
## BL/BR:MornHigh 57.45828 ab  
## BLK:MornLow 57.33333 ab  
## WT/BR:MornHigh 56.86395 ab  
## BRN:MornHigh 56.49753 abc  
## WHT:MornHigh 55.83774 abc  
## WT/BLK:MornLow 55.66667 abc  
## BL/BR:MornLow 55.00000 abc  
## BRN:MornLow 53.66667 bc  
## WT/BR:MornLow 53.66667 bc  
## WHT:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT64 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 60.486 12.097 6.5195 0.0005825 \*\*\*  
## THIregime 1 52.207 52.207 28.1359 1.927e-05 \*\*\*  
## Colour:THIregime 5 5.616 1.123 0.6053 0.6964733   
## Residuals 24 44.533 1.856   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.855537   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.38939 2.0639437 6 52 56.84363  
## BLK 58.45325 0.8626318 6 57 59.35549  
## BRN 55.32057 1.9108667 6 53 57.73459  
## WHT 55.81955 1.9592428 6 53 58.22878  
## WT/BLK 57.09697 2.0159382 6 54 59.58780  
## WT/BR 56.14572 1.9781766 6 53 58.54240  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.431666   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.45325 a  
## WT/BLK 57.09697 ab  
## WT/BR 56.14572 abc  
## WHT 55.81955 bc  
## BRN 55.32057 bc  
## BL/BR 54.38939 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.855537   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.40849 1.297843 18 55.63851 59.5878  
## MornLow 55.00000 2.196253 18 52.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9371344   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.40849 a  
## MornLow 55.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.855537 24 56.20424 2.423627 4.010239  
##   
## $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 56.11212 0.6426169 3 55.63851 56.84363 55.74637 55.85423  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 58.90651 0.4939817 3 58.37734 59.35549 58.68202 58.98670  
## BLK:MornLow 58.00000 1.0000000 3 57.00000 59.00000 57.50000 58.00000  
## BRN:MornHigh 56.64114 0.9469922 3 56.08571 57.73459 56.09442 56.10313  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 56.97243 1.1295257 3 56.04091 58.22878 56.34426 56.64761  
## WHT:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WT/BLK:MornHigh 58.19393 1.5968749 3 56.45160 59.58780 57.49700 58.54240  
## WT/BLK:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## WT/BR:MornHigh 57.62477 0.9417200 3 56.66068 58.54240 57.16596 57.67123  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.34893  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 59.17109  
## BLK:MornLow 58.50000  
## BRN:MornHigh 56.91886  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.43820  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 59.06510  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 58.10682  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.90651 a  
## WT/BLK:MornHigh 58.19393 ab  
## BLK:MornLow 58.00000 abc  
## WT/BR:MornHigh 57.62477 abc  
## WHT:MornHigh 56.97243 abc  
## BRN:MornHigh 56.64114 abcd  
## BL/BR:MornHigh 56.11212 abcd  
## WT/BLK:MornLow 56.00000 abcd  
## WHT:MornLow 54.66667 bcd  
## WT/BR:MornLow 54.66667 bcd  
## BRN:MornLow 54.00000 cd  
## BL/BR:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT65 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 81.516 16.303 10.1335 2.602e-05 \*\*\*  
## THIregime 1 68.754 68.754 42.7355 9.234e-07 \*\*\*  
## Colour:THIregime 5 5.139 1.028 0.6388 0.6723   
## Residuals 24 38.612 1.609   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.608834   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.87299 1.873417 6 53 57.75835  
## BLK 58.60026 1.406351 6 56 59.79688  
## BRN 55.84732 2.469248 6 52 58.85602  
## WHT 54.92213 2.050108 6 52 57.36633  
## WT/BLK 58.94666 1.664508 6 57 61.15590  
## WT/BR 56.10247 1.985643 6 54 58.22878  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.264252   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 58.94666 a  
## BLK 58.60026 a  
## WT/BR 56.10247 b  
## BL/BR 55.87299 b  
## BRN 55.84732 b  
## WHT 54.92213 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.608834   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.09728 1.480586 18 55.85423 61.1559  
## MornLow 55.33333 2.275186 18 52.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.872615   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.09728 a  
## MornLow 55.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.608834 24 56.7153 2.23643 3.734144  
##   
## $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 57.41265 0.5738071 3 56.75029 57.75835 57.23980 57.72931  
## BL/BR:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## BLK:MornHigh 59.20051 0.9293177 3 58.12974 59.79688 58.90233 59.67492  
## BLK:MornLow 58.00000 1.7320508 3 56.00000 59.00000 57.50000 59.00000  
## BRN:MornHigh 57.36131 1.4258854 3 56.01602 58.85602 56.61395 57.21189  
## BRN:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## WHT:MornHigh 56.51092 0.7753856 3 55.85423 57.36633 56.08322 56.31221  
## WHT:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 60.22666 0.8233946 3 59.58780 61.15590 59.76203 59.93627  
## WT/BLK:MornLow 57.66667 1.1547005 3 57.00000 59.00000 57.00000 57.00000  
## WT/BR:MornHigh 57.87160 0.3662010 3 57.49700 58.22878 57.69301 57.88903  
## WT/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.74383  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.73590  
## BLK:MornLow 59.00000  
## BRN:MornHigh 58.03396  
## BRN:MornLow 55.50000  
## WHT:MornHigh 56.83927  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 60.54608  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 58.05890  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 60.22666 a  
## BLK:MornHigh 59.20051 a  
## BLK:MornLow 58.00000 ab  
## WT/BR:MornHigh 57.87160 ab  
## WT/BLK:MornLow 57.66667 ab  
## BL/BR:MornHigh 57.41265 ab  
## BRN:MornHigh 57.36131 ab  
## WHT:MornHigh 56.51092 abc  
## BL/BR:MornLow 54.33333 bc  
## BRN:MornLow 54.33333 bc  
## WT/BR:MornLow 54.33333 bc  
## WHT:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT66 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 115.625 23.125 10.9230 1.447e-05 \*\*\*  
## THIregime 1 46.349 46.349 21.8927 9.394e-05 \*\*\*  
## Colour:THIregime 5 10.580 2.116 0.9995 0.4392   
## Residuals 24 50.810 2.117   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.11708   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.98511 1.865427 6 53 57.12364  
## BLK 59.73040 1.113329 6 58 61.00000  
## BRN 54.30847 2.106129 6 51 56.58228  
## WHT 55.03030 2.111315 6 52 57.62768  
## WT/BLK 56.26997 2.252014 6 53 59.23933  
## WT/BR 56.81705 1.692174 6 54 58.80375  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.597394   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.73040 a  
## WT/BR 56.81705 b  
## WT/BLK 56.26997 b  
## WHT 55.03030 b  
## BL/BR 54.98511 b  
## BRN 54.30847 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.11708   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.32488 1.610089 18 55.02605 60.6332  
## MornLow 55.05556 2.796473 18 51.00000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.001004   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.32488 a  
## MornLow 55.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.11708 24 56.19022 2.589452 4.283553  
##   
## $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 56.63690 0.4255174 3 56.33544 57.12364 56.39352 56.45160  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 59.79413 0.8678906 3 58.90004 60.63320 59.37459 59.84915  
## BLK:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BRN:MornHigh 55.95028 0.8182343 3 55.02605 56.58228 55.63429 56.24252  
## BRN:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WHT:MornHigh 56.39394 1.1100848 3 55.47589 57.62768 55.77707 56.07824  
## WHT:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BLK:MornHigh 57.20661 1.9270973 3 55.40620 59.23933 56.19025 56.97430  
## WT/BLK:MornLow 55.33333 2.5166115 3 53.00000 58.00000 54.00000 55.00000  
## WT/BR:MornHigh 57.96743 0.9247507 3 56.97430 58.80375 57.54927 58.12424  
## WT/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.78762  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 60.24118  
## BLK:MornLow 60.50000  
## BRN:MornHigh 56.41240  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.85296  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 58.10682  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 58.46400  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.79413 a  
## BLK:MornLow 59.66667 a  
## WT/BR:MornHigh 57.96743 ab  
## WT/BLK:MornHigh 57.20661 abc  
## BL/BR:MornHigh 56.63690 abcd  
## WHT:MornHigh 56.39394 abcd  
## BRN:MornHigh 55.95028 abcd  
## WT/BR:MornLow 55.66667 abcd  
## WT/BLK:MornLow 55.33333 bcd  
## WHT:MornLow 53.66667 cd  
## BL/BR:MornLow 53.33333 cd  
## BRN:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT67 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 153.722 30.744 13.5782 2.416e-06 \*\*\*  
## THIregime 1 41.541 41.541 18.3463 0.000257 \*\*\*  
## Colour:THIregime 5 12.446 2.489 1.0994 0.386538   
## Residuals 24 54.342 2.264   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.264253   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.73004 1.880005 6 53 58.01970  
## BLK 60.84587 1.470777 6 59 63.00000  
## BRN 54.59988 2.255531 6 51 57.23565  
## WHT 55.30695 1.601345 6 53 57.14853  
## WT/BLK 55.72641 1.971931 6 53 58.54240  
## WT/BR 57.23605 2.104282 6 54 59.76203  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.686159   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.84587 a  
## WT/BR 57.23605 b  
## BL/BR 55.73004 b  
## WT/BLK 55.72641 b  
## WHT 55.30695 b  
## BRN 54.59988 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.264253   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.6484 1.782446 18 55.19712 61.91382  
## MornLow 55.5000 3.129556 18 51.00000 63.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.035213   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.6484 a  
## MornLow 55.5000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.264253 24 56.5742 2.65977 4.429941  
##   
## $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 57.12675 0.8064176 3 56.45160 58.01970 56.68028 56.90896  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 60.69174 1.1561539 3 59.61531 61.91382 60.08070 60.54608  
## BLK:MornLow 61.00000 2.0000000 3 59.00000 63.00000 60.00000 61.00000  
## BRN:MornHigh 56.19975 1.0196720 3 55.19712 57.23565 55.68181 56.16649  
## BRN:MornLow 53.00000 2.0000000 3 51.00000 55.00000 52.00000 53.00000  
## WHT:MornHigh 56.61391 0.5351460 3 56.07824 57.14853 56.34659 56.61494  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 57.11949 1.2513706 3 56.19025 58.54240 56.40804 56.62583  
## WT/BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BR:MornHigh 58.13876 1.5139346 3 56.76522 59.76203 57.32712 57.88903  
## WT/BR:MornLow 56.33333 2.5166115 3 54.00000 59.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.46433  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 61.22995  
## BLK:MornLow 62.00000  
## BRN:MornHigh 56.70107  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.88174  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 57.58412  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 58.82553  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornLow 61.00000 a  
## BLK:MornHigh 60.69174 ab  
## WT/BR:MornHigh 58.13876 abc  
## BL/BR:MornHigh 57.12675 abcd  
## WT/BLK:MornHigh 57.11949 abcd  
## WHT:MornHigh 56.61391 abcd  
## WT/BR:MornLow 56.33333 bcd  
## BRN:MornHigh 56.19975 cd  
## BL/BR:MornLow 54.33333 cd  
## WT/BLK:MornLow 54.33333 cd  
## WHT:MornLow 54.00000 cd  
## BRN:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT68 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 34.957 6.991 2.5223 0.05696 .   
## THIregime 1 64.063 64.063 23.1122 6.775e-05 \*\*\*  
## Colour:THIregime 5 2.766 0.553 0.1996 0.95950   
## Residuals 24 66.524 2.772   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.771822   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.57985 2.148666 6 53 58.76641  
## BLK 58.22176 2.278959 6 54 60.02797  
## BRN 55.39480 1.944092 6 53 57.39246  
## WHT 56.84811 1.699357 6 54 58.77108  
## WT/BLK 58.20678 2.009910 6 55 60.63320  
## WT/BR 57.41930 2.480553 6 53 59.84915  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.972021   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.22176 a  
## WT/BLK 58.20678 a  
## WT/BR 57.41930 a  
## WHT 56.84811 a  
## BL/BR 56.57985 a  
## BRN 55.39480 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.771822   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.44576 1.263419 18 56.66939 60.6332  
## MornLow 55.77778 2.129776 18 53.00000 59.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.14538   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.44576 a  
## MornLow 55.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.771822 24 57.11177 2.915124 4.901377  
##   
## $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 58.15971 1.0266897 3 56.97430 58.76641 57.85636 58.73841  
## BL/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## BLK:MornHigh 59.11019 1.5109244 3 57.36633 60.02797 58.65130 59.93627  
## BLK:MornLow 57.33333 2.8867513 3 54.00000 59.00000 56.50000 59.00000  
## BRN:MornHigh 57.12293 0.3950939 3 56.66939 57.39246 56.98816 57.30693  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 58.02955 0.8359301 3 57.12364 58.77108 57.65879 58.19393  
## WHT:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BLK:MornHigh 59.41357 1.3154328 3 58.01970 60.63320 58.80375 59.58780  
## WT/BLK:MornLow 57.00000 2.0000000 3 55.00000 59.00000 56.00000 57.00000  
## WT/BR:MornHigh 58.83860 1.5295861 3 57.07884 59.84915 58.33332 59.58780  
## WT/BR:MornLow 56.00000 2.6457513 3 53.00000 58.00000 55.00000 57.00000  
## Q75  
## BL/BR:MornHigh 58.75241  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 59.98212  
## BLK:MornLow 59.00000  
## BRN:MornHigh 57.34969  
## BRN:MornLow 54.00000  
## WHT:MornHigh 58.48251  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 60.11050  
## WT/BLK:MornLow 58.00000  
## WT/BR:MornHigh 59.71848  
## WT/BR:MornLow 57.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.41357 a  
## BLK:MornHigh 59.11019 a  
## WT/BR:MornHigh 58.83860 a  
## BL/BR:MornHigh 58.15971 ab  
## WHT:MornHigh 58.02955 ab  
## BLK:MornLow 57.33333 ab  
## BRN:MornHigh 57.12293 ab  
## WT/BLK:MornLow 57.00000 ab  
## WT/BR:MornLow 56.00000 ab  
## WHT:MornLow 55.66667 ab  
## BL/BR:MornLow 55.00000 ab  
## BRN:MornLow 53.66667 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 79.720 15.944 5.0100 0.0027770 \*\*   
## THIregime 1 45.024 45.024 14.1478 0.0009608 \*\*\*  
## Colour:THIregime 5 6.561 1.312 0.4123 0.8354482   
## Residuals 24 76.378 3.182   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.182418   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.48871 2.046305 6 53 58.01970  
## BLK 60.19935 1.489598 6 58 62.00000  
## BRN 56.20653 2.322247 6 52 58.54240  
## WHT 56.79107 2.619215 6 52 59.16311  
## WT/BLK 57.03194 1.891530 6 54 59.32645  
## WT/BR 56.65909 1.831781 6 54 58.96056  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.184548   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.19935 a  
## WT/BLK 57.03194 ab  
## WHT 56.79107 b  
## WT/BR 56.65909 b  
## BRN 56.20653 b  
## BL/BR 55.48871 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 3.182418   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.18112 1.528453 18 55.77209 61.6002  
## MornLow 55.94444 2.689243 18 52.00000 62.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.227286   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.18112 a  
## MornLow 55.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 3.182418 24 57.06278 3.126264 5.251871  
##   
## $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 56.97741 0.9053590 3 56.38626 58.01970 56.45627 56.52627  
## BL/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BLK:MornHigh 60.39870 1.1950041 3 59.21029 61.60020 59.79795 60.38561  
## BLK:MornLow 60.00000 2.0000000 3 58.00000 62.00000 59.00000 60.00000  
## BRN:MornHigh 57.41305 1.4542919 3 55.77209 58.54240 56.84838 57.92466  
## BRN:MornLow 55.00000 2.6457513 3 52.00000 57.00000 54.00000 56.00000  
## WHT:MornHigh 57.91547 1.7391211 3 55.92890 59.16311 57.29165 58.65441  
## WHT:MornLow 55.66667 3.2145503 3 52.00000 58.00000 54.50000 57.00000  
## WT/BLK:MornHigh 58.39721 1.0097018 3 57.32277 59.32645 57.93258 58.54240  
## WT/BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BR:MornHigh 57.98485 0.8844809 3 57.23565 58.96056 57.49700 57.75835  
## WT/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 57.27299  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 60.99290  
## BLK:MornLow 61.00000  
## BRN:MornHigh 58.23353  
## BRN:MornLow 56.50000  
## WHT:MornHigh 58.90876  
## WHT:MornLow 57.50000  
## WT/BLK:MornHigh 58.93443  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 58.35946  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.39870 a  
## BLK:MornLow 60.00000 ab  
## WT/BLK:MornHigh 58.39721 abc  
## WT/BR:MornHigh 57.98485 abc  
## WHT:MornHigh 57.91547 abc  
## BRN:MornHigh 57.41305 abc  
## BL/BR:MornHigh 56.97741 abc  
## WHT:MornLow 55.66667 abc  
## WT/BLK:MornLow 55.66667 abc  
## WT/BR:MornLow 55.33333 abc  
## BRN:MornLow 55.00000 bc  
## BL/BR:MornLow 54.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT70 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 132.293 26.459 33.9167 3.985e-10 \*\*\*  
## THIregime 1 40.455 40.455 51.8580 1.927e-07 \*\*\*  
## Colour:THIregime 5 9.483 1.897 2.4313 0.0643 .   
## Residuals 24 18.723 0.780   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7801071   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.83233 1.1447208 6 55 58.09437  
## BLK 60.00665 0.7460743 6 59 61.00000  
## BRN 54.76681 1.9135199 6 52 57.06142  
## WHT 54.74815 1.7585155 6 52 56.56361  
## WT/BLK 55.35648 1.6893558 6 53 57.49700  
## WT/BR 54.64999 1.5024128 6 53 56.34706  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.57669   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 60.00665 a  
## BL/BR 56.83233 b  
## WT/BLK 55.35648 bc  
## BRN 54.76681 c  
## WHT 54.74815 c  
## WT/BR 54.64999 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.7801071   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.12014 1.543470 18 55.44105 60.55067  
## MornLow 55.00000 2.656845 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.607637   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.12014 a  
## MornLow 55.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7801071 24 56.06007 1.575519 2.600235  
##   
## $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 57.66467 0.4445585 3 57.20661 58.09437 57.44981 57.69301  
## BL/BR:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## BLK:MornHigh 60.01330 0.6256473 3 59.32645 60.55067 59.74461 60.16277  
## BLK:MornLow 60.00000 1.0000000 3 59.00000 61.00000 59.50000 60.00000  
## BRN:MornHigh 56.20028 0.8099497 3 55.45372 57.06142 55.76971 56.08571  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 56.16297 0.6264648 3 55.44105 56.56361 55.96266 56.48427  
## WHT:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BLK:MornHigh 56.71295 0.7840500 3 55.92890 57.49700 56.32093 56.71295  
## WT/BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BR:MornHigh 55.96665 0.3301634 3 55.75467 56.34706 55.77645 55.79823  
## WT/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 57.89369  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 60.35672  
## BLK:MornLow 60.50000  
## BRN:MornHigh 56.57356  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.52394  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 57.10498  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.07264  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.01330 a  
## BLK:MornLow 60.00000 a  
## BL/BR:MornHigh 57.66467 ab  
## WT/BLK:MornHigh 56.71295 b  
## BRN:MornHigh 56.20028 bc  
## WHT:MornHigh 56.16297 bc  
## BL/BR:MornLow 56.00000 bc  
## WT/BR:MornHigh 55.96665 bc  
## WT/BLK:MornLow 54.00000 cd  
## BRN:MornLow 53.33333 d  
## WHT:MornLow 53.33333 d  
## WT/BR:MornLow 53.33333 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 55.045 11.009 4.0079 0.0087373 \*\*   
## THIregime 1 58.003 58.003 21.1165 0.0001162 \*\*\*  
## Colour:THIregime 5 4.494 0.899 0.3272 0.8915509   
## Residuals 24 65.924 2.747   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.746816   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.33821 2.411171 6 52 58.71663  
## BLK 58.90432 1.038724 6 57 59.90142  
## BRN 56.53924 2.570099 6 52 59.23933  
## WHT 55.75260 1.899121 6 53 58.05237  
## WT/BLK 58.33746 1.649118 6 56 60.37185  
## WT/BR 55.74414 2.420704 6 52 58.64694  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.958584   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.90432 a  
## WT/BLK 58.33746 ab  
## BRN 56.53924 ab  
## BL/BR 56.33821 ab  
## WHT 55.75260 b  
## WT/BR 55.74414 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.746816   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 58.20533 1.402987 18 55.9289 60.37185  
## MornLow 55.66667 2.326320 18 52.0000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.140202   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 58.20533 a  
## MornLow 55.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.746816 24 56.936 2.910904 4.879218  
##   
## $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 57.67642 1.4703574 3 55.99424 58.71663 57.15631 58.31839  
## BL/BR:MornLow 55.00000 2.6457513 3 52.00000 57.00000 54.00000 56.00000  
## BLK:MornHigh 59.47531 0.6212490 3 58.76248 59.90142 59.26226 59.76203  
## BLK:MornLow 58.33333 1.1547005 3 57.00000 59.00000 58.00000 59.00000  
## BRN:MornHigh 57.74515 1.6785523 3 55.92890 59.23933 56.99806 58.06722  
## BRN:MornLow 55.33333 3.0550505 3 52.00000 58.00000 54.00000 56.00000  
## WHT:MornHigh 57.17187 0.8002222 3 56.48894 58.05237 56.73162 56.97430  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## 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 57.48829 1.2342621 3 56.19025 58.64694 56.90896 57.62768  
## WT/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 58.51751  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.83173  
## BLK:MornLow 59.00000  
## BRN:MornHigh 58.65328  
## BRN:MornLow 57.00000  
## WHT:MornHigh 57.51333  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 59.97983  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 58.13731  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.67492 a  
## BLK:MornHigh 59.47531 a  
## BLK:MornLow 58.33333 ab  
## BRN:MornHigh 57.74515 ab  
## BL/BR:MornHigh 57.67642 ab  
## WT/BR:MornHigh 57.48829 ab  
## WHT:MornHigh 57.17187 ab  
## WT/BLK:MornLow 57.00000 ab  
## BRN:MornLow 55.33333 ab  
## BL/BR:MornLow 55.00000 ab  
## WHT:MornLow 54.33333 b  
## WT/BR:MornLow 54.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT72 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 141.211 28.242 14.2837 1.565e-06 \*\*\*  
## THIregime 1 48.432 48.432 24.4950 4.728e-05 \*\*\*  
## Colour:THIregime 5 11.937 2.387 1.2075 0.3357   
## Residuals 24 47.454 1.977   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.977236   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 53.93908 1.803035 6 52 55.81274  
## BLK 59.60637 1.114859 6 58 61.00000  
## BRN 54.37034 1.501254 6 53 55.77209  
## WHT 53.85903 1.719552 6 52 55.70022  
## WT/BLK 56.03071 2.311002 6 53 59.06510  
## WT/BR 55.48715 2.553327 6 52 58.80375  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.510143   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.60637 a  
## WT/BLK 56.03071 b  
## WT/BR 55.48715 b  
## BRN 54.37034 b  
## BL/BR 53.93908 b  
## WHT 53.85903 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.977236   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.70867 1.720539 18 55.19712 60.39799  
## MornLow 54.38889 2.973192 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9673784   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.70867 a  
## MornLow 54.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.977236 24 55.54878 2.531365 4.139661  
##   
## $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 55.54483 0.2423547 3 55.34086 55.81274 55.41087 55.48087  
## BL/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 59.54608 0.8735191 3 58.65244 60.39799 59.12012 59.58780  
## BLK:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BRN:MornHigh 55.74068 0.0305328 3 55.71111 55.77209 55.72497 55.73883  
## BRN:MornLow 53.00000 0.0000000 3 53.00000 53.00000 53.00000 53.00000  
## WHT:MornHigh 55.38473 0.2748473 3 55.19712 55.70022 55.22699 55.25686  
## WHT:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BLK:MornHigh 57.06142 1.7789727 3 55.66755 59.06510 56.05958 56.45160  
## WT/BLK:MornLow 55.00000 2.6457513 3 53.00000 58.00000 53.50000 54.00000  
## WT/BR:MornHigh 56.97430 1.6321302 3 55.66755 58.80375 56.05958 56.45160  
## WT/BR:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.64681  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 59.99289  
## BLK:MornLow 60.50000  
## BRN:MornHigh 55.75546  
## BRN:MornLow 53.00000  
## WHT:MornHigh 55.47854  
## WHT:MornLow 52.50000  
## WT/BLK:MornHigh 57.75835  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 57.62768  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornLow 59.66667 a  
## BLK:MornHigh 59.54608 a  
## WT/BLK:MornHigh 57.06142 ab  
## WT/BR:MornHigh 56.97430 ab  
## BRN:MornHigh 55.74068 abc  
## BL/BR:MornHigh 55.54483 abc  
## WHT:MornHigh 55.38473 bc  
## WT/BLK:MornLow 55.00000 bc  
## WT/BR:MornLow 54.00000 bc  
## BRN:MornLow 53.00000 bc  
## BL/BR:MornLow 52.33333 c  
## WHT:MornLow 52.33333 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 48.194 9.639 4.4792 0.0050370 \*\*   
## THIregime 1 37.878 37.878 17.6023 0.0003211 \*\*\*  
## Colour:THIregime 5 2.203 0.441 0.2048 0.9572773   
## Residuals 24 51.645 2.152   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.151871   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.16945 1.4732399 6 53 56.91622  
## BLK 57.88137 0.7318392 6 57 58.78999  
## BRN 55.74855 1.2537289 6 54 57.02182  
## WHT 54.68292 2.3317721 6 51 57.46433  
## WT/BLK 54.26813 2.6591693 6 51 57.67123  
## WT/BR 55.40408 1.2485846 6 54 56.86976  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.618649   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 57.88137 a  
## BRN 55.74855 ab  
## WT/BR 55.40408 ab  
## BL/BR 55.16945 b  
## WHT 54.68292 b  
## WT/BLK 54.26813 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.151871   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.5515 1.362130 18 53.57675 58.78999  
## MornLow 54.5000 2.036433 18 51.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.009195   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.5515 a  
## MornLow 54.5000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.151871 24 55.52575 2.641884 4.318606  
##   
## $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 56.33890 0.5685457 3 55.77956 56.91622 56.05024 56.32093  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 58.42940 0.3234371 3 58.16489 58.78999 58.24911 58.33332  
## BLK:MornLow 57.33333 0.5773503 3 57.00000 58.00000 57.00000 57.00000  
## BRN:MornHigh 56.83043 0.2913204 3 56.49516 57.02182 56.73473 56.97430  
## BRN:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WHT:MornHigh 56.03251 1.3399319 3 54.80883 57.46433 55.31659 55.82436  
## WHT:MornLow 53.33333 2.5166115 3 51.00000 56.00000 52.00000 53.00000  
## WT/BLK:MornHigh 55.20293 2.1732655 3 53.57675 57.67123 53.96878 54.36080  
## WT/BLK:MornLow 53.33333 3.2145503 3 51.00000 57.00000 51.50000 52.00000  
## WT/BR:MornHigh 56.47483 0.3529390 3 56.19025 56.86976 56.27737 56.36448  
## WT/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.61857  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 58.56166  
## BLK:MornLow 57.50000  
## BRN:MornHigh 56.99806  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.64435  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.01602  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.61712  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.42940 a  
## BLK:MornLow 57.33333 ab  
## BRN:MornHigh 56.83043 ab  
## WT/BR:MornHigh 56.47483 ab  
## BL/BR:MornHigh 56.33890 ab  
## WHT:MornHigh 56.03251 ab  
## WT/BLK:MornHigh 55.20293 ab  
## BRN:MornLow 54.66667 ab  
## WT/BR:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 b  
## WHT:MornLow 53.33333 b  
## WT/BLK:MornLow 53.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT74 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 29.268 5.854 1.9841 0.1175124   
## THIregime 1 57.937 57.937 19.6383 0.0001763 \*\*\*  
## Colour:THIregime 5 2.888 0.578 0.1958 0.9611050   
## Residuals 24 70.805 2.950   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.950226   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.63092 1.546041 6 54 58.42624  
## BLK 56.54406 2.293044 6 54 59.24805  
## BRN 54.33303 2.016772 6 52 56.81749  
## WHT 54.71906 2.668089 6 50 57.49700  
## WT/BLK 56.20494 1.521610 6 54 58.01970  
## WT/BR 55.17964 2.275201 6 52 58.15038  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 3.066174   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BL/BR 56.63092 a  
## BLK 56.54406 a  
## WT/BLK 56.20494 a  
## WT/BR 55.17964 a  
## WHT 54.71906 a  
## BRN 54.33303 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.950226   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.87055 1.211741 18 54.29111 59.24805  
## MornLow 54.33333 2.142017 18 50.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.181666   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.87055 a  
## MornLow 54.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.950226 24 55.60194 3.089141 5.056652  
##   
## $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 57.59518 0.9235259 3 56.60094 58.42624 57.17965 57.75835  
## BL/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BLK:MornHigh 57.42145 1.5818802 3 56.50662 59.24805 56.50815 56.50968  
## BLK:MornLow 55.66667 2.8867513 3 54.00000 59.00000 54.00000 54.00000  
## BRN:MornHigh 55.99939 0.7105134 3 55.53688 56.81749 55.59033 55.64379  
## BRN:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WHT:MornHigh 56.10479 1.6439803 3 54.29111 57.49700 55.40869 56.52627  
## WHT:MornLow 53.33333 3.0550505 3 50.00000 56.00000 52.00000 54.00000  
## WT/BLK:MornHigh 57.40988 0.6577164 3 56.71295 58.01970 57.10498 57.49700  
## WT/BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BR:MornHigh 56.69262 1.3193598 3 55.58043 58.15038 55.96375 56.34706  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 58.09230  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 57.87886  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.23064  
## BRN:MornLow 53.00000  
## WHT:MornHigh 57.01164  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 57.75835  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 57.24872  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BL/BR:MornHigh 57.59518 a  
## BLK:MornHigh 57.42145 a  
## WT/BLK:MornHigh 57.40988 a  
## WT/BR:MornHigh 56.69262 a  
## WHT:MornHigh 56.10479 a  
## BRN:MornHigh 55.99939 a  
## BL/BR:MornLow 55.66667 a  
## BLK:MornLow 55.66667 a  
## WT/BLK:MornLow 55.00000 a  
## WT/BR:MornLow 53.66667 a  
## WHT:MornLow 53.33333 a  
## BRN:MornLow 52.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT75 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 81.255 16.251 6.9802 0.0003746 \*\*\*  
## THIregime 1 40.993 40.993 17.6073 0.0003207 \*\*\*  
## Colour:THIregime 5 6.097 1.219 0.5237 0.7559071   
## Residuals 24 55.876 2.328   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.328163   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.32598 1.846424 6 53 58.28105  
## BLK 58.60550 1.157773 6 57 60.00000  
## BRN 53.95187 1.960205 6 51 56.03344  
## WHT 54.92623 2.158941 6 51 56.93696  
## WT/BLK 55.00801 2.298955 6 52 58.01970  
## WT/BR 54.91829 1.433422 6 53 56.36448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.723804   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.60550 a  
## BL/BR 56.32598 ab  
## WT/BLK 55.00801 b  
## WHT 54.92623 b  
## WT/BR 54.91829 b  
## BRN 53.95187 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.328163   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 56.68974 1.470957 18 54.62215 59.87529  
## MornLow 54.55556 2.502287 18 51.00000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.049721   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 56.68974 a  
## MornLow 54.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.328163 24 55.62265 2.743185 4.492025  
##   
## $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 57.31862 1.1107912 3 56.10313 58.28105 56.83740 57.57167  
## BL/BR:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BLK:MornHigh 58.87767 0.8919284 3 58.15725 59.87529 58.37887 58.60048  
## BLK:MornLow 58.33333 1.5275252 3 57.00000 60.00000 57.50000 58.00000  
## BRN:MornHigh 55.57040 0.6432049 3 54.83598 56.03344 55.33888 55.84178  
## BRN:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## WHT:MornHigh 56.18579 1.2488975 3 54.74411 56.93696 55.81020 56.87629  
## WHT:MornLow 53.66667 2.3094011 3 51.00000 55.00000 53.00000 55.00000  
## WT/BLK:MornHigh 56.01602 1.7789727 3 54.62215 58.01970 55.01418 55.40620  
## WT/BLK:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.16992 0.3220176 3 55.79823 56.36448 56.07264 56.34706  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.92636  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.23788  
## BLK:MornLow 59.00000  
## BRN:MornHigh 55.93761  
## BRN:MornLow 53.00000  
## WHT:MornHigh 56.90663  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 56.35577  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.87767 a  
## BLK:MornLow 58.33333 ab  
## BL/BR:MornHigh 57.31862 abc  
## WHT:MornHigh 56.18579 abcd  
## WT/BR:MornHigh 56.16992 abcd  
## WT/BLK:MornHigh 56.01602 abcd  
## BRN:MornHigh 55.57040 abcd  
## BL/BR:MornLow 55.33333 abcd  
## WT/BLK:MornLow 54.00000 bcd  
## WHT:MornLow 53.66667 cd  
## WT/BR:MornLow 53.66667 cd  
## BRN:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT76 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 53.749 10.750 5.0963 0.002527 \*\*   
## THIregime 1 53.270 53.270 25.2541 3.898e-05 \*\*\*  
## Colour:THIregime 5 4.154 0.831 0.3938 0.848125   
## Residuals 24 50.624 2.109   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.10935   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.18126 1.803386 6 54 58.48432  
## BLK 58.54439 1.399195 6 56 59.71848  
## BRN 55.95485 1.638344 6 54 57.97218  
## WHT 54.63417 1.926492 6 52 56.74562  
## WT/BLK 56.85770 2.312510 6 53 59.41357  
## WT/BR 55.45956 2.157865 6 52 57.93258  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.592647   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.54439 a  
## WT/BLK 56.85770 ab  
## BL/BR 56.18126 ab  
## BRN 55.95485 ab  
## WT/BR 55.45956 b  
## WHT 54.63417 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.10935   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.48843 1.273779 18 55.71982 59.71848  
## MornLow 55.05556 2.182072 18 52.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9991745   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.48843 a  
## MornLow 55.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.10935 24 56.27199 2.580964 4.275725  
##   
## $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 57.36252 0.9717874 3 56.77829 58.48432 56.80162 56.82496  
## BL/BR:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## BLK:MornHigh 59.08879 1.0026318 3 57.93258 59.71848 58.77395 59.61531  
## BLK:MornLow 58.00000 1.7320508 3 56.00000 59.00000 57.50000 59.00000  
## BRN:MornHigh 57.24304 0.6315139 3 56.86976 57.97218 56.87847 56.88718  
## BRN:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WHT:MornHigh 56.26834 0.5165976 3 55.71982 56.74562 56.02971 56.33959  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 58.04874 1.6673987 3 56.19025 59.41357 57.36633 58.54240  
## WT/BLK:MornLow 55.66667 2.5166115 3 53.00000 58.00000 54.50000 56.00000  
## WT/BR:MornHigh 56.91913 1.1180274 3 55.71982 57.93258 56.41240 57.10498  
## WT/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.65464  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 59.66689  
## BLK:MornLow 59.00000  
## BRN:MornHigh 57.42968  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.54261  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 58.97798  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 57.51878  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.08879 a  
## WT/BLK:MornHigh 58.04874 ab  
## BLK:MornLow 58.00000 ab  
## BL/BR:MornHigh 57.36252 ab  
## BRN:MornHigh 57.24304 abc  
## WT/BR:MornHigh 56.91913 abc  
## WHT:MornHigh 56.26834 abc  
## WT/BLK:MornLow 55.66667 abc  
## BL/BR:MornLow 55.00000 abc  
## BRN:MornLow 54.66667 bc  
## WT/BR:MornLow 54.00000 bc  
## WHT:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT77 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 88.093 17.619 10.8952 1.477e-05 \*\*\*  
## THIregime 1 42.331 42.331 26.1769 3.096e-05 \*\*\*  
## Colour:THIregime 5 6.533 1.307 0.8079 0.5554   
## Residuals 24 38.810 1.617   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.617094   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.90535 1.750091 6 53 57.90354  
## BLK 59.85442 1.128338 6 58 61.00000  
## BRN 56.73072 1.241281 6 55 58.01970  
## WHT 54.88137 2.364981 6 52 57.82369  
## WT/BLK 55.87856 1.602171 6 54 58.01970  
## WT/BR 56.25576 1.870252 6 54 58.67308  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.270057   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.85442 a  
## BRN 56.73072 b  
## WT/BR 56.25576 b  
## BL/BR 55.90535 b  
## WT/BLK 55.87856 b  
## WHT 54.88137 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.617094   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.66873 1.391897 18 55.68497 60.86842  
## MornLow 55.50000 2.431412 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8748521   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.66873 a  
## MornLow 55.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.617094 24 56.58437 2.247352 3.743717  
##   
## $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 57.14404 0.8489311 3 56.22759 57.90354 56.76429 57.30099  
## BL/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BLK:MornHigh 60.04218 0.8624236 3 59.14763 60.86842 59.62907 60.11050  
## BLK:MornLow 59.66667 1.5275252 3 58.00000 61.00000 59.00000 60.00000  
## BRN:MornHigh 57.79478 0.3492290 3 57.39246 58.01970 57.68232 57.97218  
## BRN:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WHT:MornHigh 56.42941 1.2084090 3 55.68497 57.82369 55.73227 55.77956  
## WHT:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WT/BLK:MornHigh 57.09046 0.8233946 3 56.45160 58.01970 56.62583 56.80007  
## WT/BLK:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BR:MornHigh 57.51152 1.0068792 3 56.88718 58.67308 56.93074 56.97430  
## WT/BR:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.60227  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 60.48946  
## BLK:MornLow 60.50000  
## BRN:MornHigh 57.99594  
## BRN:MornLow 56.00000  
## WHT:MornHigh 56.80162  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 57.40988  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 57.82369  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 60.04218 a  
## BLK:MornLow 59.66667 a  
## BRN:MornHigh 57.79478 ab  
## WT/BR:MornHigh 57.51152 ab  
## BL/BR:MornHigh 57.14404 ab  
## WT/BLK:MornHigh 57.09046 ab  
## WHT:MornHigh 56.42941 abc  
## BRN:MornLow 55.66667 bc  
## WT/BR:MornLow 55.00000 bc  
## BL/BR:MornLow 54.66667 bc  
## WT/BLK:MornLow 54.66667 bc  
## WHT:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT78 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 70.421 14.084 6.6061 0.0005355 \*\*\*  
## THIregime 1 43.431 43.431 20.3710 0.0001431 \*\*\*  
## Colour:THIregime 5 4.967 0.993 0.4659 0.7976917   
## Residuals 24 51.168 2.132   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.131983   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.10555 1.413030 6 54 57.78739  
## BLK 59.34683 1.303095 6 58 61.00000  
## BRN 55.63006 2.304645 6 52 58.39985  
## WHT 56.36212 1.577274 6 54 58.31372  
## WT/BLK 56.61844 1.669227 6 54 58.54240  
## WT/BR 54.86052 2.373350 6 52 57.91516  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.60652   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.34683 a  
## WT/BLK 56.61844 b  
## WHT 56.36212 b  
## BL/BR 56.10555 b  
## BRN 55.63006 b  
## WT/BR 54.86052 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.131983   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.58562 1.377922 18 55.58043 60.77075  
## MornLow 55.38889 2.354942 18 52.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.004521   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.58562 a  
## MornLow 55.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.131983 24 56.48725 2.584886 4.298602  
##   
## $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 57.21111 0.5699958 3 56.64761 57.78739 56.92296 57.19831  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 59.69366 0.9403532 3 59.03606 60.77075 59.15512 59.27418  
## BLK:MornLow 59.00000 1.7320508 3 58.00000 61.00000 58.00000 58.00000  
## BRN:MornHigh 56.92678 1.3786416 3 55.66755 58.39985 56.19025 56.71295  
## BRN:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## WHT:MornHigh 57.39090 0.8431800 3 56.66068 58.31372 56.92950 57.19831  
## WHT:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WT/BLK:MornHigh 57.90354 0.8233946 3 56.97430 58.54240 57.58412 58.19393  
## WT/BLK:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BR:MornHigh 56.38771 1.3235236 3 55.58043 57.91516 55.62399 55.66755  
## WT/BR:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 57.49285  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 60.02247  
## BLK:MornLow 59.50000  
## BRN:MornHigh 57.55640  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.75602  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 58.36817  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 56.79136  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.69366 a  
## BLK:MornLow 59.00000 ab  
## WT/BLK:MornHigh 57.90354 abc  
## WHT:MornHigh 57.39090 abcd  
## BL/BR:MornHigh 57.21111 abcd  
## BRN:MornHigh 56.92678 abcd  
## WT/BR:MornHigh 56.38771 abcd  
## WHT:MornLow 55.33333 bcd  
## WT/BLK:MornLow 55.33333 bcd  
## BL/BR:MornLow 55.00000 bcd  
## BRN:MornLow 54.33333 cd  
## WT/BR:MornLow 53.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT79 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 101.944 20.389 21.3281 4.056e-08 \*\*\*  
## THIregime 1 61.005 61.005 63.8151 3.238e-08 \*\*\*  
## Colour:THIregime 5 8.285 1.657 1.7333 0.1653   
## Residuals 24 22.943 0.956   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.9559638   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.39095 1.937371 6 52 56.45160  
## BLK 58.93761 1.126235 6 57 60.00000  
## BRN 54.77473 1.630360 6 53 56.53872  
## WHT 54.96076 1.477200 6 53 56.45160  
## WT/BLK 57.81537 2.044567 6 55 60.63320  
## WT/BR 55.93114 2.098646 6 53 58.67308  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.74538   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.93761 a  
## WT/BLK 57.81537 a  
## WT/BR 55.93114 b  
## WHT 54.96076 b  
## BRN 54.77473 b  
## BL/BR 54.39095 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 0.9559638   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.43686 1.546768 18 55.73289 60.6332  
## MornLow 54.83333 2.332633 18 52.00000 60.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6726479   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.43686 a  
## MornLow 54.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9559638 24 56.13509 1.741752 2.878433  
##   
## $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 56.11523 0.3615555 3 55.73289 56.45160 55.94705 56.16121  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 59.20856 0.7857747 3 58.32232 59.82011 58.90279 59.48326  
## BLK:MornLow 58.66667 1.5275252 3 57.00000 60.00000 58.00000 59.00000  
## BRN:MornHigh 56.21612 0.2810782 3 56.02394 56.53872 56.05482 56.08571  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.25486 0.3128957 3 55.89405 56.45160 56.15649 56.41893  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 59.29741 1.2361156 3 58.19393 60.63320 58.62952 59.06510  
## WT/BLK:MornLow 56.33333 1.5275252 3 55.00000 58.00000 55.50000 56.00000  
## WT/BR:MornHigh 57.52894 1.0092132 3 56.76522 58.67308 56.95688 57.14853  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.30641  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 59.65169  
## BLK:MornLow 59.50000  
## BRN:MornHigh 56.31221  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.43527  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 59.84915  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 57.91080  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.29741 a  
## BLK:MornHigh 59.20856 ab  
## BLK:MornLow 58.66667 abc  
## WT/BR:MornHigh 57.52894 abc  
## WT/BLK:MornLow 56.33333 bcd  
## WHT:MornHigh 56.25486 cd  
## BRN:MornHigh 56.21612 cd  
## BL/BR:MornHigh 56.11523 cde  
## WT/BR:MornLow 54.33333 def  
## WHT:MornLow 53.66667 def  
## BRN:MornLow 53.33333 ef  
## BL/BR:MornLow 52.66667 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT80 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 103.193 20.639 14.3278 1.523e-06 \*\*\*  
## THIregime 1 44.587 44.587 30.9532 1.006e-05 \*\*\*  
## Colour:THIregime 5 8.338 1.668 1.1577 0.3583   
## Residuals 24 34.571 1.440   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.44046   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.51139 1.700108 6 53 57.61316  
## BLK 59.42149 1.127759 6 58 61.00000  
## BRN 55.24032 1.980065 6 52 57.58412  
## WHT 54.45901 1.750390 6 52 56.45160  
## WT/BLK 56.48776 1.714755 6 54 58.71663  
## WT/BR 54.55737 1.847174 6 52 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.142495   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.42149 a  
## WT/BLK 56.48776 b  
## BL/BR 55.51139 b  
## BRN 55.24032 b  
## WT/BR 54.55737 b  
## WHT 54.45901 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.44046   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.05911 1.447148 18 55.4062 60.52866  
## MornLow 54.83333 2.549510 18 52.0000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8256911   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.05911 a  
## MornLow 54.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.44046 24 55.94622 2.145259 3.533345  
##   
## $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 56.68944 0.8539015 3 55.92890 57.61316 56.22759 56.52627  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 59.50965 0.9071656 3 58.78999 60.52866 59.00014 59.21029  
## BLK:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## BRN:MornHigh 56.48064 1.0892487 3 55.40620 57.58412 55.92890 56.45160  
## BRN:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WHT:MornHigh 55.91801 0.5230402 3 55.40620 56.45160 55.65122 55.89623  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 57.64219 1.0097018 3 56.71295 58.71663 57.10498 57.49700  
## WT/BLK:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## WT/BR:MornHigh 56.11475 0.5038728 3 55.66755 56.66068 55.84178 56.01602  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 57.06971  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 59.86948  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.01786  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.17392  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 58.10682  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 56.33835  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.50965 a  
## BLK:MornLow 59.33333 ab  
## WT/BLK:MornHigh 57.64219 abc  
## BL/BR:MornHigh 56.68944 abcd  
## BRN:MornHigh 56.48064 abcde  
## WT/BR:MornHigh 56.11475 abcde  
## WHT:MornHigh 55.91801 bcde  
## WT/BLK:MornLow 55.33333 cde  
## BL/BR:MornLow 54.33333 cde  
## BRN:MornLow 54.00000 de  
## WHT:MornLow 53.00000 e  
## WT/BR:MornLow 53.00000 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 36.092 7.218 4.9768 0.00288 \*\*   
## THIregime 1 64.478 64.478 44.4549 6.763e-07 \*\*\*  
## Colour:THIregime 5 2.127 0.425 0.2932 0.91196   
## Residuals 24 34.810 1.450   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.450426   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.35999 1.658916 6 54 58.31839  
## BLK 57.23946 1.803421 6 54 59.09124  
## BRN 54.95794 2.085851 6 52 57.40988  
## WHT 55.40019 1.971679 6 53 57.85636  
## WT/BLK 57.83684 1.560628 6 56 59.93627  
## WT/BR 55.90210 1.898649 6 53 57.81062  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.149894   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## WT/BLK 57.83684 a  
## BLK 57.23946 ab  
## BL/BR 56.35999 abc  
## WT/BR 55.90210 abc  
## WHT 55.40019 bc  
## BRN 54.95794 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.450426   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.62106 1.086949 18 55.83386 59.93627  
## MornLow 54.94444 1.764760 18 52.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8285426   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.62106 a  
## MornLow 54.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.450426 24 56.28275 2.139796 3.545547  
##   
## $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 57.71998 0.5755867 3 57.17031 58.31839 57.42077 57.67123  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 58.14559 1.1551148 3 56.85814 59.09124 57.67276 58.48738  
## BLK:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## BRN:MornHigh 56.58254 0.7909495 3 55.83386 57.40988 56.16887 56.50387  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 56.80038 0.9149918 3 56.24252 57.85636 56.27239 56.30226  
## WHT:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BLK:MornHigh 59.00702 0.8047493 3 58.54240 59.93627 58.54240 58.54240  
## WT/BLK:MornLow 56.66667 1.1547005 3 56.00000 58.00000 56.00000 56.00000  
## WT/BR:MornHigh 57.47087 0.5438341 3 56.84363 57.81062 57.30099 57.75835  
## WT/BR:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 57.99481  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 58.78931  
## BLK:MornLow 57.50000  
## BRN:MornHigh 56.95688  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.07931  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 59.23933  
## WT/BLK:MornLow 57.00000  
## WT/BR:MornHigh 57.78449  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 59.00702 a  
## BLK:MornHigh 58.14559 ab  
## BL/BR:MornHigh 57.71998 abc  
## WT/BR:MornHigh 57.47087 abcd  
## WHT:MornHigh 56.80038 abcde  
## WT/BLK:MornLow 56.66667 abcde  
## BRN:MornHigh 56.58254 abcde  
## BLK:MornLow 56.33333 abcde  
## BL/BR:MornLow 55.00000 bcde  
## WT/BR:MornLow 54.33333 cde  
## WHT:MornLow 54.00000 de  
## BRN:MornLow 53.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT82 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.589 6.118 4.5538 0.004625 \*\*   
## THIregime 1 55.671 55.671 41.4392 1.174e-06 \*\*\*  
## Colour:THIregime 5 2.189 0.438 0.3259 0.892364   
## Residuals 24 32.242 1.343   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.343428   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.41265 2.122370 6 52 57.95436  
## BLK 57.74726 1.084010 6 56 59.03759  
## BRN 55.90852 1.749819 6 53 57.86289  
## WHT 54.85840 2.001215 6 52 57.28792  
## WT/BLK 56.53132 1.385752 6 55 58.19393  
## WT/BR 55.66979 1.831349 6 53 57.93258  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.069076   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 57.74726 a  
## WT/BLK 56.53132 ab  
## BRN 55.90852 ab  
## WT/BR 55.66979 b  
## BL/BR 55.41265 b  
## WHT 54.85840 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.343428   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.26487 0.9673817 18 55.63488 59.03759  
## MornLow 54.77778 1.6996732 18 52.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7973965   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.26487 a  
## MornLow 54.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.343428 24 56.02132 2.068969 3.412264  
##   
## $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 56.82530 1.1288868 3 55.69659 57.95436 56.26077 56.82496  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 58.49451 0.5123671 3 58.01970 59.03759 58.22297 58.42624  
## BLK:MornLow 57.00000 1.0000000 3 56.00000 58.00000 56.50000 57.00000  
## BRN:MornHigh 57.15038 0.8334917 3 56.23381 57.86289 56.79413 57.35445  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 56.38346 0.8374708 3 55.63488 57.28792 55.93123 56.22759  
## WHT:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 57.72931 0.4023746 3 57.49700 58.19393 57.49700 57.49700  
## WT/BLK:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WT/BR:MornHigh 57.00624 0.8324239 3 56.32093 57.93258 56.54307 56.76522  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.38966  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 58.73192  
## BLK:MornLow 57.50000  
## BRN:MornHigh 57.60867  
## BRN:MornLow 55.50000  
## WHT:MornHigh 56.75775  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 57.84547  
## WT/BLK:MornLow 55.50000  
## WT/BR:MornHigh 57.34890  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.49451 a  
## WT/BLK:MornHigh 57.72931 ab  
## BRN:MornHigh 57.15038 abc  
## WT/BR:MornHigh 57.00624 abc  
## BLK:MornLow 57.00000 abc  
## BL/BR:MornHigh 56.82530 abc  
## WHT:MornHigh 56.38346 abcd  
## WT/BLK:MornLow 55.33333 abcd  
## BRN:MornLow 54.66667 bcd  
## WT/BR:MornLow 54.33333 bcd  
## BL/BR:MornLow 54.00000 cd  
## WHT:MornLow 53.33333 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 77.905 15.581 13.0357 3.412e-06 \*\*\*  
## THIregime 1 51.324 51.324 42.9397 8.895e-07 \*\*\*  
## Colour:THIregime 5 6.886 1.377 1.1523 0.3609   
## Residuals 24 28.686 1.195   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.19525   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.40332 1.7030978 6 53 57.42233  
## BLK 58.64707 0.5205522 6 58 59.21029  
## BRN 55.33734 1.6314896 6 53 57.19209  
## WHT 54.47067 1.7598635 6 52 56.45160  
## WT/BLK 57.33623 2.0250817 6 54 59.76203  
## WT/BR 54.96942 2.0851473 6 52 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.951634   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.64707 a  
## WT/BLK 57.33623 ab  
## BL/BR 55.40332 bc  
## BRN 55.33734 c  
## WT/BR 54.96942 c  
## WHT 54.47067 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.19525   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.22135 1.305577 18 55.44354 59.76203  
## MornLow 54.83333 2.229482 18 52.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.752136   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.22135 a  
## MornLow 54.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.19525 24 56.02734 1.951324 3.218583  
##   
## $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 56.80663 0.5860508 3 56.25559 57.42233 56.49879 56.74199  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 58.96081 0.2209151 3 58.78999 59.21029 58.83607 58.88216  
## BLK:MornLow 58.33333 0.5773503 3 58.00000 59.00000 58.00000 58.00000  
## BRN:MornHigh 56.67467 0.5375826 3 56.11897 57.19209 56.41596 56.71295  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 55.94135 0.5041474 3 55.44354 56.45160 55.68622 55.92890  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 58.33913 1.7034223 3 56.45160 59.76203 57.62768 58.80375  
## WT/BLK:MornLow 56.33333 2.0816660 3 54.00000 58.00000 55.50000 57.00000  
## WT/BR:MornHigh 56.60551 0.7112868 3 56.05958 57.40988 56.20332 56.34706  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 57.08216  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.04622  
## BLK:MornLow 58.50000  
## BRN:MornHigh 56.95252  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.19025  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 59.28289  
## WT/BLK:MornLow 57.50000  
## WT/BR:MornHigh 56.87847  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 58.96081 a  
## WT/BLK:MornHigh 58.33913 a  
## BLK:MornLow 58.33333 a  
## BL/BR:MornHigh 56.80663 ab  
## BRN:MornHigh 56.67467 ab  
## WT/BR:MornHigh 56.60551 ab  
## WT/BLK:MornLow 56.33333 abc  
## WHT:MornHigh 55.94135 abcd  
## BL/BR:MornLow 54.00000 bcd  
## BRN:MornLow 54.00000 bcd  
## WT/BR:MornLow 53.33333 cd  
## WHT:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT84 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 84.684 16.937 11.2145 1.173e-05 \*\*\*  
## THIregime 1 41.860 41.860 27.7169 2.129e-05 \*\*\*  
## Colour:THIregime 5 5.808 1.162 0.7692 0.5812   
## Residuals 24 36.246 1.510   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.510261   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.98652 1.2945468 6 55 58.46773  
## BLK 59.60087 0.4876352 6 59 60.11050  
## BRN 56.25642 1.5536508 6 54 58.06722  
## WHT 54.87510 2.4711048 6 51 57.84547  
## WT/BLK 55.31292 2.0882159 6 52 58.01970  
## WT/BR 56.10476 1.4100899 6 54 57.81062  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.19379   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.60087 a  
## BL/BR 56.98652 b  
## BRN 56.25642 b  
## WT/BR 56.10476 b  
## WT/BLK 55.31292 b  
## WHT 54.87510 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.510261   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.60108 1.378279 18 55.18219 60.1105  
## MornLow 55.44444 2.357023 18 51.00000 60.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8454599   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.60108 a  
## MornLow 55.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.510261 24 56.52276 2.174215 3.61794  
##   
## $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 57.97303 0.5196073 3 57.43166 58.46773 57.72568 58.01970  
## BL/BR:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## BLK:MornHigh 59.86841 0.2154269 3 59.69784 60.11050 59.74736 59.79688  
## BLK:MornLow 59.33333 0.5773503 3 59.00000 60.00000 59.00000 59.00000  
## BRN:MornHigh 57.51284 0.5466312 3 56.97430 58.06722 57.23565 57.49700  
## BRN:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WHT:MornHigh 56.41686 1.3421905 3 55.18219 57.84547 55.70255 56.22292  
## WHT:MornLow 53.33333 2.5166115 3 51.00000 56.00000 52.00000 53.00000  
## WT/BLK:MornHigh 56.62583 1.3154328 3 55.40620 58.01970 55.92890 56.45160  
## WT/BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BR:MornHigh 57.20952 0.5562520 3 56.71295 57.81062 56.90896 57.10498  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 58.24371  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.95369  
## BLK:MornLow 59.50000  
## BRN:MornHigh 57.78211  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.03419  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 57.23565  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 57.45780  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.86841 a  
## BLK:MornLow 59.33333 ab  
## BL/BR:MornHigh 57.97303 abc  
## BRN:MornHigh 57.51284 abcd  
## WT/BR:MornHigh 57.20952 abcd  
## WT/BLK:MornHigh 56.62583 abcde  
## WHT:MornHigh 56.41686 abcde  
## BL/BR:MornLow 56.00000 bcde  
## BRN:MornLow 55.00000 cde  
## WT/BR:MornLow 55.00000 cde  
## WT/BLK:MornLow 54.00000 de  
## WHT:MornLow 53.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT85 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 115.390 23.078 10.6147 1.814e-05 \*\*\*  
## THIregime 1 46.987 46.987 21.6116 0.0001014 \*\*\*  
## Colour:THIregime 5 9.179 1.836 0.8444 0.5317824   
## Residuals 24 52.180 2.174   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.17415   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.98325 2.080869 6 52 57.55508  
## BLK 59.47661 1.133220 6 58 61.00000  
## BRN 56.59609 1.100065 6 55 57.75835  
## WHT 53.71555 2.353376 6 50 56.45160  
## WT/BLK 56.13991 2.402929 6 52 58.54240  
## WT/BR 55.27662 1.879465 6 53 57.67123  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.63217   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.47661 a  
## BRN 56.59609 b  
## WT/BLK 56.13991 bc  
## WT/BR 55.27662 bc  
## BL/BR 54.98325 bc  
## WHT 53.71555 c  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.17415   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.17379 1.626456 18 54.43547 60.6332  
## MornLow 54.88889 2.784176 18 50.00000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.014406   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.17379 a  
## MornLow 54.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.17415 24 56.03134 2.631563 4.340904  
##   
## $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 56.29984 1.1364495 3 55.34086 57.55508 55.67222 56.00357  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 59.61990 0.9030761 3 58.90004 60.63320 59.11324 59.32645  
## BLK:MornLow 59.33333 1.5275252 3 58.00000 61.00000 58.50000 59.00000  
## BRN:MornHigh 57.52551 0.3170926 3 57.16437 57.75835 57.40909 57.65381  
## BRN:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WHT:MornHigh 55.43109 1.0082947 3 54.43547 56.45160 54.92084 55.40620  
## WHT:MornLow 52.00000 2.0000000 3 50.00000 54.00000 51.00000 52.00000  
## WT/BLK:MornHigh 57.61316 1.6094986 3 55.75467 58.54240 57.14853 58.54240  
## WT/BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WT/BR:MornHigh 56.55324 0.9704161 3 55.92890 57.67123 55.99424 56.05958  
## WT/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.77932  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 59.97983  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.70608  
## BRN:MornLow 56.00000  
## WHT:MornHigh 55.92890  
## WHT:MornLow 53.00000  
## WT/BLK:MornHigh 58.54240  
## WT/BLK:MornLow 56.00000  
## WT/BR:MornHigh 56.86540  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.61990 a  
## BLK:MornLow 59.33333 a  
## WT/BLK:MornHigh 57.61316 ab  
## BRN:MornHigh 57.52551 ab  
## WT/BR:MornHigh 56.55324 ab  
## BL/BR:MornHigh 56.29984 abc  
## BRN:MornLow 55.66667 abc  
## WHT:MornHigh 55.43109 abc  
## WT/BLK:MornLow 54.66667 bc  
## WT/BR:MornLow 54.00000 bc  
## BL/BR:MornLow 53.66667 bc  
## WHT:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT86 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 97.786 19.557 9.1342 5.706e-05 \*\*\*  
## THIregime 1 44.460 44.460 20.7649 0.0001282 \*\*\*  
## Colour:THIregime 5 7.024 1.405 0.6561 0.6599006   
## Residuals 24 51.386 2.141   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.141093   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 54.81036 1.971379 6 52 57.27299  
## BLK 59.23223 1.443714 6 57 61.00000  
## BRN 55.48618 2.091591 6 53 58.10682  
## WHT 54.51143 1.802577 6 52 56.55614  
## WT/BLK 54.70371 2.181502 6 51 57.23565  
## WT/BR 56.59055 1.490049 6 54 58.33332  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.612083   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.23223 a  
## WT/BR 56.59055 b  
## BRN 55.48618 b  
## BL/BR 54.81036 b  
## WT/BLK 54.70371 b  
## WHT 54.51143 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.141093   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.00038 1.516280 18 54.53503 60.55067  
## MornLow 54.77778 2.624669 18 51.00000 61.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.006665   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.00038 a  
## MornLow 54.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.141093 24 55.88908 2.618128 4.307777  
##   
## $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 56.28739 0.9152354 3 55.46428 57.27299 55.79460 56.12491  
## BL/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BLK:MornHigh 59.46446 1.0241995 3 58.51627 60.55067 58.92136 59.32645  
## BLK:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## BRN:MornHigh 56.63903 1.2713601 3 55.88138 58.10682 55.90514 55.92890  
## BRN:MornLow 54.33333 2.3094011 3 53.00000 57.00000 53.00000 53.00000  
## WHT:MornHigh 56.02286 0.5195581 3 55.51821 56.55614 55.75622 55.99424  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 56.07409 1.3893219 3 54.53503 57.23565 55.49332 56.45160  
## WT/BLK:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## WT/BR:MornHigh 57.51442 0.8103255 3 56.71295 58.33332 57.10498 57.49700  
## WT/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.69895  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 59.93856  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.01786  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.27519  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 56.84363  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.91516  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.46446 a  
## BLK:MornLow 59.00000 a  
## WT/BR:MornHigh 57.51442 ab  
## BRN:MornHigh 56.63903 abc  
## BL/BR:MornHigh 56.28739 abc  
## WT/BLK:MornHigh 56.07409 abc  
## WHT:MornHigh 56.02286 abc  
## WT/BR:MornLow 55.66667 abc  
## BRN:MornLow 54.33333 bc  
## BL/BR:MornLow 53.33333 bc  
## WT/BLK:MornLow 53.33333 bc  
## WHT:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT87 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 83.501 16.700 14.7056 1.215e-06 \*\*\*  
## THIregime 1 40.587 40.587 35.7396 3.595e-06 \*\*\*  
## Colour:THIregime 5 6.384 1.277 1.1244 0.3742   
## Residuals 24 27.255 1.136   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.135633   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 55.99683 1.304661 6 54 57.49700  
## BLK 59.17665 1.486156 6 57 61.00000  
## BRN 55.77178 1.472400 6 54 57.62768  
## WHT 54.71320 1.724801 6 52 56.48894  
## WT/BLK 55.35648 1.689356 6 53 57.49700  
## WT/BR 54.68919 1.713972 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.90234   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.17665 a  
## BL/BR 55.99683 b  
## BRN 55.77178 b  
## WT/BLK 55.35648 b  
## WHT 54.71320 b  
## WT/BR 54.68919 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 1.135633   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.01249 1.314232 18 55.23197 60.5548  
## MornLow 54.88889 2.272311 18 52.00000 61.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7331386   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.01249 a  
## MornLow 54.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.135633 24 55.95069 1.904643 3.137288  
##   
## $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 56.99366 0.5237744 3 56.45160 57.49700 56.74199 57.03238  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 59.35330 1.1950041 3 58.16489 60.55480 58.75255 59.34021  
## BLK:MornLow 59.00000 2.0000000 3 57.00000 61.00000 58.00000 59.00000  
## BRN:MornHigh 56.87689 0.6502052 3 56.49912 57.62768 56.50149 56.50387  
## BRN:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WHT:MornHigh 56.09307 0.6260073 3 55.37135 56.48894 55.89514 56.41893  
## WHT:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BLK:MornHigh 56.71295 0.7840500 3 55.92890 57.49700 56.32093 56.71295  
## WT/BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BR:MornHigh 56.04506 0.7041556 3 55.23197 56.45160 55.84178 56.45160  
## WT/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.26469  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 59.94750  
## BLK:MornLow 60.00000  
## BRN:MornHigh 57.06577  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.45393  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 57.10498  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.45160  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.35330 a  
## BLK:MornLow 59.00000 ab  
## BL/BR:MornHigh 56.99366 abc  
## BRN:MornHigh 56.87689 abc  
## WT/BLK:MornHigh 56.71295 abc  
## WHT:MornHigh 56.09307 bcd  
## WT/BR:MornHigh 56.04506 bcd  
## BL/BR:MornLow 55.00000 cd  
## BRN:MornLow 54.66667 cd  
## WT/BLK:MornLow 54.00000 cd  
## WHT:MornLow 53.33333 d  
## WT/BR:MornLow 53.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT88 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 68.358 13.672 6.2359 0.0007704 \*\*\*  
## THIregime 1 37.763 37.763 17.2246 0.0003602 \*\*\*  
## Colour:THIregime 5 2.674 0.535 0.2439 0.9387978   
## Residuals 24 52.617 2.192   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.19238   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.60188 1.4893415 6 54 58.16904  
## BLK 59.13949 0.6650316 6 58 59.87529  
## BRN 56.36474 1.8881808 6 53 58.36817  
## WHT 55.90656 2.1451747 6 52 57.88903  
## WT/BLK 54.89942 2.0864613 6 52 57.75835  
## WT/BR 55.23306 1.8520383 6 53 57.62768  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.643182   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 59.13949 a  
## BL/BR 56.60188 ab  
## BRN 56.36474 b  
## WHT 55.90656 b  
## WT/BR 55.23306 b  
## WT/BLK 54.89942 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.19238   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.38172 1.448092 18 55.23197 59.87529  
## MornLow 55.33333 2.275186 18 52.00000 59.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.01865   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.38172 a  
## MornLow 55.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.19238 24 56.35753 2.627278 4.359065  
##   
## $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 57.53710 0.7668881 3 56.68391 58.16904 57.22113 57.75835  
## BL/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BLK:MornHigh 59.61230 0.3188430 3 59.25767 59.87529 59.48081 59.70396  
## BLK:MornLow 58.66667 0.5773503 3 58.00000 59.00000 58.50000 59.00000  
## BRN:MornHigh 57.39616 1.1782639 3 56.08571 58.36817 56.91015 57.73459  
## BRN:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## WHT:MornHigh 57.14646 1.2486292 3 55.70489 57.88903 56.77518 57.84547  
## WHT:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WT/BLK:MornHigh 56.13217 1.4110032 3 55.23197 57.75835 55.31908 55.40620  
## WT/BLK:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.46612 1.0068792 3 55.84178 57.62768 55.88534 55.92890  
## WT/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 57.96370  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.78962  
## BLK:MornLow 59.00000  
## BRN:MornHigh 58.05138  
## BRN:MornLow 56.50000  
## WHT:MornHigh 57.86725  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 56.58228  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.77829  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.61230 a  
## BLK:MornLow 58.66667 ab  
## BL/BR:MornHigh 57.53710 abc  
## BRN:MornHigh 57.39616 abc  
## WHT:MornHigh 57.14646 abc  
## WT/BR:MornHigh 56.46612 abc  
## WT/BLK:MornHigh 56.13217 abc  
## BL/BR:MornLow 55.66667 abc  
## BRN:MornLow 55.33333 abc  
## WHT:MornLow 54.66667 bc  
## WT/BR:MornLow 54.00000 c  
## WT/BLK:MornLow 53.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT89 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 69.644 13.929 6.2622 0.0007505 \*\*\*  
## THIregime 1 38.003 38.003 17.0853 0.0003759 \*\*\*  
## Colour:THIregime 5 3.919 0.784 0.3524 0.8755953   
## Residuals 24 53.383 2.224   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.22428   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.21207 1.812666 6 53 58.13586  
## BLK 58.77981 1.226053 6 57 60.21504  
## BRN 56.89686 1.213894 6 55 58.35233  
## WHT 55.10015 1.776111 6 53 57.25307  
## WT/BLK 54.85586 1.745640 6 52 56.80007  
## WT/BR 54.98654 2.568385 6 52 58.28105  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.662342   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 58.77981 a  
## BRN 56.89686 ab  
## BL/BR 56.21207 ab  
## WHT 55.10015 b  
## WT/BR 54.98654 b  
## WT/BLK 54.85586 b  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.22428   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.16599 1.438315 18 54.8835 60.21504  
## MornLow 55.11111 2.323509 18 52.0000 60.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.026034   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.16599 a  
## MornLow 55.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.22428 24 56.13855 2.656645 4.390663  
##   
## $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 57.09080 1.2508171 3 55.70489 58.13586 56.56827 57.43166  
## BL/BR:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BLK:MornHigh 59.22629 0.9092050 3 58.42624 60.21504 58.73192 59.03759  
## BLK:MornLow 58.33333 1.5275252 3 57.00000 60.00000 57.50000 58.00000  
## BRN:MornHigh 57.79372 0.5203460 3 57.32277 58.35233 57.51442 57.70608  
## BRN:MornLow 56.00000 1.0000000 3 55.00000 57.00000 55.50000 56.00000  
## WHT:MornHigh 56.53363 0.6232661 3 56.15758 57.25307 56.17392 56.19025  
## WHT:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.04506 1.0209142 3 54.88350 56.80007 55.66755 56.45160  
## WT/BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.30641 1.7123098 3 55.23197 58.28105 55.31908 55.40620  
## WT/BR:MornLow 53.66667 2.8867513 3 52.00000 57.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 57.78376  
## BL/BR:MornLow 56.50000  
## BLK:MornHigh 59.62631  
## BLK:MornLow 59.00000  
## BRN:MornHigh 58.02920  
## BRN:MornLow 56.50000  
## WHT:MornHigh 56.72166  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 56.62583  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.84363  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## BLK:MornHigh 59.22629 a  
## BLK:MornLow 58.33333 a  
## BRN:MornHigh 57.79372 ab  
## BL/BR:MornHigh 57.09080 ab  
## WHT:MornHigh 56.53363 ab  
## WT/BR:MornHigh 56.30641 ab  
## WT/BLK:MornHigh 56.04506 ab  
## BRN:MornLow 56.00000 ab  
## BL/BR:MornLow 55.33333 ab  
## WHT:MornLow 53.66667 b  
## WT/BLK:MornLow 53.66667 b  
## WT/BR:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- PULRAT90 ----"  
## Analysis of Variance Table  
##   
## Response: data2[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 27.835 5.567 2.4726 0.06085 .   
## THIregime 1 64.119 64.119 28.4787 1.777e-05 \*\*\*  
## Colour:THIregime 5 2.025 0.405 0.1798 0.96752   
## Residuals 24 54.035 2.251   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.251479   
##   
## Colour, means  
##   
## data2..i.. std r Min Max  
## BL/BR 56.68948 1.705178 6 54 58.46773  
## BLK 57.53991 1.451794 6 55 59.09414  
## BRN 55.31441 1.987599 6 53 57.68707  
## WHT 55.41689 2.650558 6 51 58.44439  
## WT/BLK 57.11905 1.998467 6 54 59.58780  
## WT/BR 57.26104 2.012617 6 54 59.71848  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.678571   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## BLK 57.53991 a  
## WT/BR 57.26104 a  
## WT/BLK 57.11905 a  
## BL/BR 56.68948 a  
## WHT 55.41689 a  
## BRN 55.31441 a  
##   
## Study: THIregime  
##   
## HSD Test for data2[[i]]   
##   
## Mean Square Error: 2.251479   
##   
## THIregime, means  
##   
## data2..i.. std r Min Max  
## MornHigh 57.89137 1.157677 18 55.25686 59.71848  
## MornLow 55.22222 1.895988 18 51.00000 58.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.032288   
##   
## Treatments with the same letter are not significantly different.  
##   
## data2[[i]] groups  
## MornHigh 57.89137 a  
## MornLow 55.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.251479 24 56.5568 2.653073 4.417427  
##   
## $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 58.04563 0.6467958 3 57.30099 58.46773 57.83458 58.36817  
## BL/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BLK:MornHigh 58.41315 0.8051542 3 57.52451 59.09414 58.07266 58.62081  
## BLK:MornLow 56.66667 1.5275252 3 55.00000 58.00000 56.00000 57.00000  
## BRN:MornHigh 56.96216 0.6307507 3 56.53872 57.68707 56.59970 56.66068  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.83377 1.5940356 3 55.25686 58.44439 56.02846 56.80007  
## WHT:MornLow 54.00000 3.0000000 3 51.00000 57.00000 52.50000 54.00000  
## WT/BLK:MornHigh 58.57144 1.1502479 3 57.32277 59.58780 58.06326 58.80375  
## WT/BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## WT/BR:MornHigh 58.52207 1.1644450 3 57.39246 59.71848 57.92387 58.45528  
## WT/BR:MornLow 56.00000 2.0000000 3 54.00000 58.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 58.41795  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 58.85747  
## BLK:MornLow 57.50000  
## BRN:MornHigh 57.17388  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.62223  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 59.19578  
## WT/BLK:MornLow 56.50000  
## WT/BR:MornHigh 59.08688  
## WT/BR:MornLow 57.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data2[[i]] groups  
## WT/BLK:MornHigh 58.57144 a  
## WT/BR:MornHigh 58.52207 a  
## BLK:MornHigh 58.41315 ab  
## BL/BR:MornHigh 58.04563 abc  
## BRN:MornHigh 56.96216 abc  
## WHT:MornHigh 56.83377 abc  
## BLK:MornLow 56.66667 abc  
## WT/BR:MornLow 56.00000 abc  
## WT/BLK:MornLow 55.66667 abc  
## BL/BR:MornLow 55.33333 abc  
## WHT:MornLow 54.00000 bc  
## BRN:MornLow 53.66667 c  
##   
## 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 3.906 0.781 0.5101 0.7658   
## THIregime 1 51.100 51.100 33.3649 5.922e-06 \*\*\*  
## Colour:THIregime 5 0.314 0.063 0.0410 0.9989   
## Residuals 24 36.757 1.532   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.531545   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.95266 1.793080 6 52 56.97430  
## BLK 55.30092 2.347955 6 52 58.10682  
## BRN 55.43906 1.282650 6 54 56.93074  
## WHT 55.24986 1.985862 6 52 57.57167  
## WT/BLK 54.48592 1.338749 6 53 56.10313  
## WT/BR 55.38666 1.234907 6 54 56.88718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.209195   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.43906 a  
## WT/BR 55.38666 a  
## BLK 55.30092 a  
## WHT 55.24986 a  
## BL/BR 54.95266 a  
## WT/BLK 54.48592 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.531545   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.32725 0.768214 18 55.29004 58.10682  
## MornLow 53.94444 1.349171 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8513967   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.32725 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.531545 24 55.13585 2.244558 3.643345  
##   
## $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 56.23865 0.8620850 3 55.29004 56.97430 55.87082 56.45160  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.60184 1.3057689 3 55.76982 58.10682 55.84936 55.92890  
## BLK:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## BRN:MornHigh 56.54479 0.3342791 3 56.34706 56.93074 56.35181 56.35656  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 56.49972 1.0828969 3 55.40620 57.57167 55.96375 56.52129  
## WHT:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.63851 0.4023746 3 55.40620 56.10313 55.40620 55.40620  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.43998 0.3881664 3 56.19025 56.88718 56.21639 56.24252  
## WT/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.71295  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.01786  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.64365  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.04648  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.75467  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.56485  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.60184 a  
## BRN:MornHigh 56.54479 a  
## WHT:MornHigh 56.49972 a  
## WT/BR:MornHigh 56.43998 a  
## BL/BR:MornHigh 56.23865 a  
## WT/BLK:MornHigh 55.63851 a  
## BRN:MornLow 54.33333 a  
## WT/BR:MornLow 54.33333 a  
## BLK:MornLow 54.00000 a  
## WHT:MornLow 54.00000 a  
## BL/BR:MornLow 53.66667 a  
## WT/BLK:MornLow 53.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM2 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.026 6.405 2.5301 0.0563678 .   
## THIregime 1 49.538 49.538 19.5680 0.0001799 \*\*\*  
## Colour:THIregime 5 2.653 0.531 0.2096 0.9551552   
## Residuals 24 60.758 2.532   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.531573   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.03584 1.847405 6 52 57.17031  
## BLK 55.53583 1.902833 6 52 57.13936  
## BRN 55.08892 1.875174 6 52 57.25941  
## WHT 52.74097 2.402727 6 49 55.63021  
## WT/BLK 53.83316 1.561210 6 52 55.92890  
## WT/BR 54.80359 1.956840 6 52 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.840301   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.53583 a  
## BRN 55.08892 a  
## BL/BR 55.03584 a  
## WT/BR 54.80359 a  
## WT/BLK 53.83316 a  
## WHT 52.74097 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.531573   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.67943 1.174148 18 53.3154 57.25941  
## MornLow 53.33333 2.057983 18 49.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.094617   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.67943 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.531573 24 54.50638 2.919092 4.684148  
##   
## $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 56.07167 1.1460325 3 54.88350 57.17031 55.52236 56.16121  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 56.40498 1.2051071 3 55.01418 57.13936 56.03780 57.06142  
## BLK:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## BRN:MornHigh 56.17784 1.1106076 3 55.04031 57.25941 55.63706 56.23381  
## BRN:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WHT:MornHigh 54.48193 1.1575151 3 53.31540 55.63021 53.90779 54.50019  
## WHT:MornLow 51.00000 2.0000000 3 49.00000 53.00000 50.00000 51.00000  
## WT/BLK:MornHigh 54.99966 0.8233946 3 54.36080 55.92890 54.53503 54.70927  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.94052 1.1670165 3 54.97062 57.23565 55.29295 55.61528  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.66576  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 57.10039  
## BLK:MornLow 56.00000  
## BRN:MornHigh 56.74661  
## BRN:MornLow 55.00000  
## WHT:MornHigh 55.06520  
## WHT:MornLow 52.00000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.42547  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.40498 a  
## BRN:MornHigh 56.17784 a  
## BL/BR:MornHigh 56.07167 a  
## WT/BR:MornHigh 55.94052 a  
## WT/BLK:MornHigh 54.99966 ab  
## BLK:MornLow 54.66667 ab  
## WHT:MornHigh 54.48193 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WT/BR:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.66667 ab  
## WHT:MornLow 51.00000 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 3.179 0.636 0.4904 0.7801   
## THIregime 1 49.086 49.086 37.8608 2.341e-06 \*\*\*  
## Colour:THIregime 5 0.141 0.028 0.0218 0.9998   
## Residuals 24 31.116 1.296   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.29649   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.56561 1.412519 6 53 56.16121  
## BLK 55.40632 1.603948 6 53 57.35181  
## BRN 55.11426 1.416157 6 53 56.78423  
## WHT 54.87375 1.718321 6 52 56.78762  
## WT/BLK 54.57304 1.627504 6 52 56.45160  
## WT/BR 54.80649 1.973277 6 52 57.28792  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.032608   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.40632 a  
## BRN 55.11426 a  
## WHT 54.87375 a  
## WT/BR 54.80649 a  
## WT/BLK 54.57304 a  
## BL/BR 54.56561 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.29649   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05760 0.7204814 18 54.8835 57.35181  
## MornLow 53.72222 1.2274103 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7833423   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05760 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.29649 24 54.88991 2.074397 3.352123  
##   
## $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 55.79788 0.3149659 3 55.60221 56.16121 55.61621 55.63021  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.47931 0.8027205 3 55.77209 57.35181 56.04307 56.31405  
## BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BRN:MornHigh 56.22853 0.5375826 3 55.71111 56.78423 55.95068 56.19025  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.08084 0.8228463 3 55.17752 56.78762 55.72744 56.27737  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.81274 0.8233946 3 54.88350 56.45160 55.49332 56.10313  
## WT/BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BR:MornHigh 55.94632 1.2262116 3 54.88350 57.28792 55.27553 55.66755  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.89571  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.83293  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.48724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.53249  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.27737  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.47774  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.47931 a  
## BRN:MornHigh 56.22853 a  
## WHT:MornHigh 56.08084 a  
## WT/BR:MornHigh 55.94632 a  
## WT/BLK:MornHigh 55.81274 a  
## BL/BR:MornHigh 55.79788 a  
## BLK:MornLow 54.33333 a  
## BRN:MornLow 54.00000 a  
## WHT:MornLow 53.66667 a  
## WT/BR:MornLow 53.66667 a  
## BL/BR:MornLow 53.33333 a  
## WT/BLK:MornLow 53.33333 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM4 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)  
## Colour 5 119.41 23.883 1.0072 0.4358  
## THIregime 1 10.10 10.095 0.4257 0.5206  
## Colour:THIregime 5 91.28 18.256 0.7699 0.5811  
## Residuals 23 545.37 23.712   
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 23.71187   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.48842 1.788219 6 51.00000 55.53688  
## BLK 54.80767 1.662373 6 52.00000 56.66683  
## BRN 54.46414 1.307885 6 53.00000 55.97246  
## WHT 49.30720 12.042890 5 27.87733 56.10313  
## WT/BLK 54.11598 1.945931 6 51.00000 56.45160  
## WT/BR 55.04286 1.365909 6 53.00000 56.66068  
##   
## 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  
## WT/BR 55.04286 a  
## BLK 54.80767 a  
## BRN 54.46414 a  
## WT/BLK 54.11598 a  
## BL/BR 53.48842 a  
## WHT 49.30720 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 23.71187   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 54.05836 6.576155 18 27.87733 56.66683  
## MornLow 53.23529 1.251470 17 51.00000 55.00000  
##   
## 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 54.05836 a  
## MornLow 53.23529 a  
## $statistics  
## MSerror Df Mean CV  
## 23.71187 23 53.65858 9.074939  
##   
## $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 54.97684 0.5900342 3 54.36080 55.53688 54.69682 55.03284  
## BL/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BLK:MornHigh 55.94868 0.8183466 3 55.05773 56.66683 55.58960 56.12147  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 55.59495 0.3269294 3 55.40620 55.97246 55.40620 55.40620  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 46.51200 16.1404199 3 27.87733 56.10313 41.71644 55.55554  
## WHT:MornLow 53.50000 0.7071068 2 53.00000 54.00000 53.25000 53.50000  
## WT/BLK:MornHigh 55.23197 1.3154328 3 53.83810 56.45160 54.62215 55.40620  
## WT/BLK:MornLow 53.00000 2.0000000 3 51.00000 55.00000 52.00000 53.00000  
## WT/BR:MornHigh 56.08571 0.6337401 3 55.40620 56.66068 55.79823 56.19025  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.28486  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.39415  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.68933  
## BRN:MornLow 53.50000  
## WHT:MornHigh 55.82934  
## WHT:MornLow 53.75000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.42547  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.08571 a  
## BLK:MornHigh 55.94868 a  
## BRN:MornHigh 55.59495 a  
## WT/BLK:MornHigh 55.23197 a  
## BL/BR:MornHigh 54.97684 a  
## WT/BR:MornLow 54.00000 a  
## BLK:MornLow 53.66667 a  
## WHT:MornLow 53.50000 a  
## BRN:MornLow 53.33333 a  
## WT/BLK:MornLow 53.00000 a  
## BL/BR:MornLow 52.00000 a  
## WHT:MornHigh 46.51200 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM5 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.361 0.472 0.3368 0.8855   
## THIregime 1 50.201 50.201 35.8156 3.539e-06 \*\*\*  
## Colour:THIregime 5 0.615 0.123 0.0878 0.9935   
## Residuals 24 33.640 1.402   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.40166   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.87574 1.565898 6 53 56.82496  
## BLK 54.37741 1.669714 6 52 56.28654  
## BRN 54.86919 1.381182 6 53 56.26153  
## WHT 54.87961 1.723883 6 52 56.82496  
## WT/BLK 54.26813 1.985600 6 51 56.62583  
## WT/BR 54.81521 1.682031 6 52 56.71295  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.113443   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 54.87961 a  
## BL/BR 54.87574 a  
## BRN 54.86919 a  
## WT/BR 54.81521 a  
## BLK 54.37741 a  
## WT/BLK 54.26813 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.40166   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.86176 0.8442016 18 53.3154 56.82496  
## MornLow 53.50000 1.2004901 18 51.0000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8144949   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.86176 a  
## MornLow 53.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.40166 24 54.68088 2.165139 3.485433  
##   
## $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 56.08481 0.6412421 3 55.69659 56.82496 55.71474 55.73289  
## BL/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BLK:MornHigh 55.75482 0.5273410 3 55.23197 56.28654 55.48896 55.74596  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 56.07172 0.3124422 3 55.71111 56.26153 55.97681 56.24252  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.09255 0.8260739 3 55.19712 56.82496 55.72635 56.25559  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.20293 1.7034223 3 53.31540 56.62583 54.49148 55.66755  
## WT/BLK:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## WT/BR:MornHigh 55.96375 0.8844809 3 54.98804 56.71295 55.58915 56.19025  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.27892  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.01625  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.25202  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.54027  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.14669  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.45160  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.09255 a  
## BL/BR:MornHigh 56.08481 a  
## BRN:MornHigh 56.07172 a  
## WT/BR:MornHigh 55.96375 a  
## BLK:MornHigh 55.75482 a  
## WT/BLK:MornHigh 55.20293 a  
## BL/BR:MornLow 53.66667 a  
## BRN:MornLow 53.66667 a  
## WHT:MornLow 53.66667 a  
## WT/BR:MornLow 53.66667 a  
## WT/BLK:MornLow 53.33333 a  
## BLK:MornLow 53.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM6 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.664 5.733 5.1859 0.002292 \*\*   
## THIregime 1 43.628 43.628 39.4661 1.709e-06 \*\*\*  
## Colour:THIregime 5 2.094 0.419 0.3789 0.858176   
## Residuals 24 26.531 1.105   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.105468   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.39085 1.228120 6 53 55.77956  
## BLK 53.46544 1.762184 6 51 55.49332  
## BRN 54.15453 1.777563 6 52 56.40408  
## WHT 55.99514 1.328597 6 54 57.62768  
## WT/BLK 53.22396 1.899439 6 50 55.40620  
## WT/BR 54.04193 1.142139 6 53 55.14485  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.876905   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.99514 a  
## BL/BR 54.39085 ab  
## BRN 54.15453 ab  
## WT/BR 54.04193 b  
## BLK 53.46544 b  
## WT/BLK 53.22396 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.105468   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.31284 0.955238 18 53.05405 57.62768  
## MornLow 53.11111 1.567647 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.723336   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.31284 a  
## MornLow 53.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.105468 24 54.21198 1.939447 3.095341  
##   
## $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 55.44838 0.28690355 3 55.27553 55.77956 55.28278 55.29004  
## BL/BR:MornLow 53.33333 0.57735027 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 54.93088 0.56629701 3 54.36080 55.49332 54.64966 54.93852  
## BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 55.30905 0.94896390 3 54.72669 56.40408 54.76154 54.79638  
## BRN:MornLow 53.00000 1.73205081 3 52.00000 55.00000 52.00000 52.00000  
## WHT:MornHigh 56.65695 0.87500291 3 55.92890 57.62768 56.17158 56.41426  
## WHT:MornLow 55.33333 1.52752523 3 54.00000 57.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.44792 1.23509191 3 53.05405 55.40620 53.96878 54.88350  
## WT/BLK:MornLow 52.00000 1.73205081 3 50.00000 53.00000 51.50000 53.00000  
## WT/BR:MornHigh 55.08387 0.06577164 3 55.01418 55.14485 55.05338 55.09258  
## WT/BR:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.53480  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.21592  
## BLK:MornLow 52.50000  
## BRN:MornHigh 55.60023  
## BRN:MornLow 53.50000  
## WHT:MornHigh 57.02097  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.14485  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.11872  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.65695 a  
## BL/BR:MornHigh 55.44838 ab  
## WHT:MornLow 55.33333 ab  
## BRN:MornHigh 55.30905 ab  
## WT/BR:MornHigh 55.08387 abc  
## BLK:MornHigh 54.93088 abc  
## WT/BLK:MornHigh 54.44792 abc  
## BL/BR:MornLow 53.33333 bc  
## BRN:MornLow 53.00000 bc  
## WT/BR:MornLow 53.00000 bc  
## BLK:MornLow 52.00000 c  
## WT/BLK:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM7 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 27.690 5.538 4.8873 0.00318 \*\*   
## THIregime 1 56.734 56.734 50.0684 2.58e-07 \*\*\*  
## Colour:THIregime 5 2.109 0.422 0.3723 0.86261   
## Residuals 24 27.195 1.133   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.13313   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.03113 2.130061 6 52 57.72101  
## BLK 53.89814 1.904440 6 51 55.87082  
## BRN 54.68708 1.540196 6 53 56.40408  
## WHT 55.43841 1.279886 6 54 56.90461  
## WT/BLK 54.00739 1.748922 6 52 56.45160  
## WT/BR 56.47003 1.405183 6 54 57.88903  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.900243   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.47003 a  
## WHT 55.43841 ab  
## BL/BR 55.03113 ab  
## BRN 54.68708 ab  
## WT/BLK 54.00739 b  
## BLK 53.89814 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.13313   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.17740 0.9391492 18 54.70927 57.88903  
## MornLow 53.66667 1.5718105 18 51.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7323302   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.17740 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.13313 24 54.92203 1.938176 3.133829  
##   
## $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 56.39560 1.1934296 3 55.40620 57.72101 55.73289 56.05958  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 55.46295 0.6229045 3 54.74595 55.87082 55.25902 55.77209  
## BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## BRN:MornHigh 56.04083 0.3150659 3 55.84178 56.40408 55.85921 55.87663  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.54349 0.3136079 3 56.33959 56.90461 56.36293 56.38626  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.34812 0.9596024 3 54.70927 56.45160 54.79638 54.88350  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 57.27340 0.8165919 3 56.34706 57.88903 56.96559 57.58412  
## WT/BR:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.89029  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.82146  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.14036  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.64543  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.73657  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.27340 a  
## WHT:MornHigh 56.54349 ab  
## BL/BR:MornHigh 56.39560 abc  
## BRN:MornHigh 56.04083 abc  
## WT/BR:MornLow 55.66667 abcd  
## BLK:MornHigh 55.46295 abcde  
## WT/BLK:MornHigh 55.34812 abcde  
## WHT:MornLow 54.33333 abcde  
## BL/BR:MornLow 53.66667 bcde  
## BRN:MornLow 53.33333 cde  
## WT/BLK:MornLow 52.66667 de  
## BLK:MornLow 52.33333 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM8 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.551 2.310 3.7099 0.01251 \*   
## THIregime 1 47.708 47.708 76.6113 6.197e-09 \*\*\*  
## Colour:THIregime 5 0.894 0.179 0.2871 0.91552   
## Residuals 24 14.945 0.623   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6227248   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.76425 1.270373 6 53 56.05958  
## BLK 54.37789 1.673732 6 52 56.30641  
## BRN 54.78960 1.298552 6 53 56.10313  
## WHT 55.86327 1.574954 6 53 57.33366  
## WT/BLK 54.20310 1.317930 6 53 55.40620  
## WT/BR 54.24230 1.546124 6 52 56.05958  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.408696   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.86327 a  
## BRN 54.78960 ab  
## BL/BR 54.76425 ab  
## BLK 54.37789 b  
## WT/BR 54.24230 b  
## WT/BLK 54.20310 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6227248   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.85792 0.6392125 18 54.8835 57.33366  
## MornLow 53.55556 1.0966378 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5428941   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.85792 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6227248 24 54.70674 1.442472 2.323183  
##   
## $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 55.86183 0.2953275 3 55.52236 56.05958 55.76296 56.00357  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 55.75579 0.5546866 3 55.19712 56.30641 55.48048 55.76384  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 55.91253 0.3151615 3 55.54875 56.10313 55.81723 56.08571  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.72654 0.9826026 3 55.59288 57.33366 56.42298 57.25307  
## WHT:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WT/BLK:MornHigh 55.40620 0.0000000 3 55.40620 55.40620 55.40620 55.40620  
## WT/BLK:MornLow 53.00000 0.0000000 3 53.00000 53.00000 53.00000 53.00000  
## WT/BR:MornHigh 55.48461 0.5884729 3 54.88350 56.05958 55.19712 55.51074  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.03157  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.03512  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.09442  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.29336  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.40620  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.78516  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.72654 a  
## BRN:MornHigh 55.91253 ab  
## BL/BR:MornHigh 55.86183 ab  
## BLK:MornHigh 55.75579 ab  
## WT/BR:MornHigh 55.48461 ab  
## WT/BLK:MornHigh 55.40620 ab  
## WHT:MornLow 55.00000 abc  
## BL/BR:MornLow 53.66667 bc  
## BRN:MornLow 53.66667 bc  
## BLK:MornLow 53.00000 c  
## WT/BLK:MornLow 53.00000 c  
## WT/BR:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM9 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 45.625 9.125 8.9514 6.624e-05 \*\*\*  
## THIregime 1 46.674 46.674 45.7861 5.343e-07 \*\*\*  
## Colour:THIregime 5 3.164 0.633 0.6208 0.6853   
## Residuals 24 24.465 1.019   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.019389   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.36809 1.209150 6 54 56.77829  
## BLK 53.40917 2.207040 6 50 55.87388  
## BRN 55.12958 1.760387 6 53 57.36633  
## WHT 56.26966 1.493468 6 54 58.05704  
## WT/BLK 53.18040 1.293063 6 52 54.36080  
## WT/BR 55.47492 1.235379 6 54 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.80235   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.26966 a  
## WT/BR 55.47492 a  
## BL/BR 55.36809 a  
## BRN 55.12958 ab  
## BLK 53.40917 bc  
## WT/BLK 53.18040 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.019389   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.94394 1.118143 18 54.20399 58.05704  
## MornLow 53.66667 1.748949 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6946035   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.94394 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.019389 24 54.8053 1.842245 2.972387  
##   
## $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 56.40286 0.3310342 3 56.15291 56.77829 56.21514 56.27737  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 55.15168 0.8574758 3 54.20399 55.87388 54.79058 55.37716  
## BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## BRN:MornHigh 56.25915 0.9589465 3 55.69131 57.36633 55.70556 55.71982  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 57.20599 0.7827244 3 56.51694 58.05704 56.78047 57.04399  
## WHT:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## 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 56.28317 0.7226659 3 55.66755 57.07884 55.88534 56.10313  
## WT/BR:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.52783  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.62552  
## BLK:MornLow 52.50000  
## BRN:MornHigh 56.54307  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.55051  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 56.59099  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.20599 a  
## BL/BR:MornHigh 56.40286 ab  
## WT/BR:MornHigh 56.28317 ab  
## BRN:MornHigh 56.25915 ab  
## WHT:MornLow 55.33333 ab  
## BLK:MornHigh 55.15168 ab  
## WT/BR:MornLow 54.66667 abc  
## WT/BLK:MornHigh 54.36080 abcd  
## BL/BR:MornLow 54.33333 abcd  
## BRN:MornLow 54.00000 bcd  
## WT/BLK:MornLow 52.00000 cd  
## BLK:MornLow 51.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM10 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 48.403 9.681 5.9389 0.001039 \*\*   
## THIregime 1 38.204 38.204 23.4373 6.219e-05 \*\*\*  
## Colour:THIregime 5 2.420 0.484 0.2969 0.909823   
## Residuals 24 39.121 1.630   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.63004   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.65580 1.443962 6 53 56.97430  
## BLK 53.84738 1.984677 6 51 56.21639  
## BRN 54.71647 1.598541 6 52 56.53872  
## WHT 55.86908 1.731987 6 53 57.81062  
## WT/BLK 52.67979 1.670748 6 50 54.62215  
## WT/BR 53.41240 1.256351 6 52 54.88350  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.279126   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.86908 a  
## BL/BR 55.65580 ab  
## BRN 54.71647 abc  
## BLK 53.84738 abc  
## WT/BR 53.41240 bc  
## WT/BLK 52.67979 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.63004   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.39364 1.327187 18 52.27 57.81062  
## MornLow 53.33333 1.878673 18 50.00 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8783472   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.39364 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.63004 24 54.36349 2.348507 3.758674  
##   
## $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 56.31159 0.9603973 3 55.21019 56.97430 55.98024 56.75029  
## BL/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## BLK:MornHigh 55.36142 0.7981525 3 54.63591 56.21639 54.93394 55.23197  
## BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## BRN:MornHigh 55.76628 0.8652809 3 54.83123 56.53872 55.38007 55.92890  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.73815 1.1106618 3 55.59288 57.81062 56.20192 56.81096  
## WHT:MornLow 55.00000 2.0000000 3 53.00000 57.00000 54.00000 55.00000  
## WT/BLK:MornHigh 53.69291 1.2513706 3 52.27000 54.62215 53.22828 54.18657  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 54.49148 0.3457336 3 54.23013 54.88350 54.29546 54.36080  
## WT/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.86229  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 55.72418  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.23381  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.31079  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 54.40436  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 54.62215  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.73815 a  
## BL/BR:MornHigh 56.31159 a  
## BRN:MornHigh 55.76628 ab  
## BLK:MornHigh 55.36142 abc  
## BL/BR:MornLow 55.00000 abc  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornHigh 54.49148 abc  
## WT/BLK:MornHigh 53.69291 abc  
## BRN:MornLow 53.66667 abc  
## BLK:MornLow 52.33333 bc  
## WT/BR:MornLow 52.33333 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM11 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.672 3.934 3.5474 0.01528 \*   
## THIregime 1 46.417 46.417 41.8525 1.087e-06 \*\*\*  
## Colour:THIregime 5 1.207 0.241 0.2176 0.95151   
## Residuals 24 26.618 1.109   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.109073   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.83996 1.352542 6 53 56.21929  
## BLK 54.18843 1.718001 6 52 55.92890  
## BRN 55.67687 1.178794 6 54 56.87926  
## WHT 55.71434 2.024170 6 52 57.52967  
## WT/BLK 53.74604 1.480017 6 52 55.75467  
## WT/BR 55.31406 1.546043 6 53 57.28792  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.879963   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.71434 a  
## BRN 55.67687 a  
## WT/BR 55.31406 ab  
## BL/BR 54.83996 ab  
## BLK 54.18843 ab  
## WT/BLK 53.74604 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.109073   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.04879 0.9198847 18 54.3608 57.52967  
## MornLow 53.77778 1.3956047 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7245147   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.04879 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.109073 24 54.91328 1.917797 3.100385  
##   
## $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 56.01325 0.3320372 3 55.63021 56.21929 55.91023 56.19025  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 55.71019 0.3133756 3 55.35118 55.92890 55.60084 55.85050  
## BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BRN:MornHigh 56.68708 0.2810782 3 56.36448 56.87926 56.59099 56.81749  
## BRN:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WHT:MornHigh 56.76200 1.2716108 3 55.29419 57.52967 56.37817 57.46215  
## WHT:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WT/BLK:MornHigh 54.82542 0.8047493 3 54.36080 55.75467 54.36080 54.36080  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.29479 0.8699462 3 55.66755 57.28792 55.79823 55.92890  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.20477  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 55.88970  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.84838  
## BRN:MornLow 55.00000  
## WHT:MornHigh 57.49591  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.05773  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.60841  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.76200 a  
## BRN:MornHigh 56.68708 a  
## WT/BR:MornHigh 56.29479 a  
## BL/BR:MornHigh 56.01325 a  
## BLK:MornHigh 55.71019 ab  
## WT/BLK:MornHigh 54.82542 ab  
## BRN:MornLow 54.66667 ab  
## WHT:MornLow 54.66667 ab  
## WT/BR:MornLow 54.33333 ab  
## BL/BR:MornLow 53.66667 ab  
## BLK:MornLow 52.66667 b  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM12 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.302 2.260 2.1679 0.0916 .   
## THIregime 1 49.133 49.133 47.1228 4.236e-07 \*\*\*  
## Colour:THIregime 5 0.834 0.167 0.1600 0.9748   
## Residuals 24 25.024 1.043   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.04266   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.61099 1.115776 6 54 56.80007  
## BLK 54.38661 1.677530 6 52 56.29479  
## BRN 55.15333 1.776720 6 53 57.40196  
## WHT 54.65533 1.819510 6 52 56.89963  
## WT/BLK 53.83316 1.727163 6 51 55.75467  
## WT/BR 54.70341 1.220103 6 53 56.01602  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.822806   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.61099 a  
## BRN 55.15333 a  
## WT/BR 54.70341 a  
## WHT 54.65533 a  
## BLK 54.38661 a  
## WT/BLK 53.83316 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.04266   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.89205 0.7939162 18 53.8381 57.40196  
## MornLow 53.55556 1.2472191 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7024871   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.89205 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.04266 24 54.7238 1.865929 3.006123  
##   
## $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 56.55531 0.3222171 3 56.19025 56.80007 56.43293 56.67561  
## BL/BR:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BLK:MornHigh 55.77321 0.5169560 3 55.26101 56.29479 55.51242 55.76384  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 56.30667 0.9493623 3 55.71982 57.40196 55.75902 55.79823  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 55.97733 0.8367547 3 55.26681 56.89963 55.51618 55.76556  
## WHT:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 54.99966 1.0209142 3 53.83810 55.75467 54.62215 55.40620  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.74015 0.4047254 3 55.27553 56.01602 55.60221 55.92890  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.73784  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.02931  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.60009  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.33259  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.58043  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.97246  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.55531 a  
## BRN:MornHigh 56.30667 ab  
## WHT:MornHigh 55.97733 abc  
## BLK:MornHigh 55.77321 abc  
## WT/BR:MornHigh 55.74015 abc  
## WT/BLK:MornHigh 54.99966 abcd  
## BL/BR:MornLow 54.66667 abcd  
## BRN:MornLow 54.00000 abcd  
## WT/BR:MornLow 53.66667 abcd  
## WHT:MornLow 53.33333 bcd  
## BLK:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM13 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 29.743 5.949 7.1501 0.0003195 \*\*\*  
## THIregime 1 40.244 40.244 48.3730 3.423e-07 \*\*\*  
## Colour:THIregime 5 0.980 0.196 0.2356 0.9429421   
## Residuals 24 19.967 0.832   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8319502   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.31459 1.614401 6 52 56.22759  
## BLK 55.12475 1.426627 6 53 56.79136  
## BRN 55.07453 1.382129 6 53 56.71295  
## WHT 55.63396 1.138023 6 54 56.81096  
## WT/BLK 53.09328 1.445449 6 51 54.88350  
## WT/BR 55.76936 1.517202 6 53 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.628238   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.76936 a  
## WHT 55.63396 a  
## BLK 55.12475 a  
## BRN 55.07453 a  
## BL/BR 54.31459 ab  
## WT/BLK 53.09328 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8319502   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.89238 1.016869 18 53.3154 57.23565  
## MornLow 53.77778 1.395605 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6275029   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.89238 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8319502 24 54.83508 1.663375 2.685246  
##   
## $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 55.62918 0.5755867 3 55.07951 56.22759 55.32997 55.58043  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.24950 0.5412706 3 55.70882 56.79136 55.97857 56.24833  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.14907 0.5584212 3 55.59627 56.71295 55.86713 56.13798  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.60125 0.3121503 3 56.24252 56.81096 56.49640 56.75029  
## WHT:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.18657 0.7984374 3 53.31540 54.88350 53.83810 54.36080  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 56.53872 0.9894551 3 55.40620 57.23565 56.19025 56.97430  
## WT/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 55.90401  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.51984  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.42547  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.78062  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.62215  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 57.10498  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.60125 a  
## WT/BR:MornHigh 56.53872 a  
## BLK:MornHigh 56.24950 a  
## BRN:MornHigh 56.14907 a  
## BL/BR:MornHigh 55.62918 ab  
## WT/BR:MornLow 55.00000 ab  
## WHT:MornLow 54.66667 abc  
## WT/BLK:MornHigh 54.18657 abc  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## BL/BR:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM14 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.615 6.123 5.7205 0.001301 \*\*   
## THIregime 1 36.934 36.934 34.5061 4.646e-06 \*\*\*  
## Colour:THIregime 5 0.285 0.057 0.0532 0.997988   
## Residuals 24 25.689 1.070   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.070362   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.17977 1.481815 6 52 55.92890  
## BLK 55.67801 1.560148 6 53 57.41860  
## BRN 54.73311 1.242842 6 53 56.01602  
## WHT 55.59860 1.316548 6 54 57.25307  
## WT/BLK 52.96261 1.772199 6 50 54.88350  
## WT/BR 54.92525 1.238157 6 53 56.32093  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.846862   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.67801 a  
## WHT 55.59860 a  
## WT/BR 54.92525 a  
## BRN 54.73311 ab  
## BL/BR 54.17977 ab  
## WT/BLK 52.96261 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.070362   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.69245 1.152707 18 52.27 57.4186  
## MornLow 53.66667 1.414214 18 50.00 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.711758   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.69245 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.070362 24 54.67956 1.892084 3.045795  
##   
## $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 55.35953 0.5602690 3 54.80883 55.92890 55.07485 55.34086  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.68936 0.8266494 3 55.79135 57.41860 56.32475 56.85814  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 55.79954 0.3412216 3 55.40620 56.01602 55.69131 55.97642  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.53052 0.6280439 3 56.11558 57.25307 56.16925 56.22292  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 53.92522 1.4394036 3 52.27000 54.88350 53.44608 54.62215  
## WT/BLK:MornLow 52.00000 1.7320508 3 50.00000 53.00000 51.50000 53.00000  
## WT/BR:MornHigh 55.85050 0.5141360 3 55.30166 56.32093 55.61528 55.92890  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.63488  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.13837  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.99622  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.73800  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.75283  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.12491  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.68936 a  
## WHT:MornHigh 56.53052 a  
## WT/BR:MornHigh 55.85050 ab  
## BRN:MornHigh 55.79954 ab  
## BL/BR:MornHigh 55.35953 ab  
## BLK:MornLow 54.66667 abc  
## WHT:MornLow 54.66667 abc  
## WT/BR:MornLow 54.00000 abc  
## WT/BLK:MornHigh 53.92522 abc  
## BRN:MornLow 53.66667 abc  
## BL/BR:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.00000 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 16.134 3.227 2.3354 0.0731 .   
## THIregime 1 43.329 43.329 31.3595 9.182e-06 \*\*\*  
## Colour:THIregime 5 1.063 0.213 0.1538 0.9768   
## Residuals 24 33.160 1.382   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.381685   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.07041 1.3841126 6 53 56.74199  
## BLK 54.95413 1.7869913 6 52 56.97430  
## BRN 55.10568 1.7428895 6 53 57.32277  
## WHT 56.46443 0.9678159 6 55 57.49700  
## WT/BLK 54.68163 1.6675435 6 52 56.80007  
## WT/BR 54.30619 1.9095175 6 52 56.76522  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.09833   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.46443 a  
## BRN 55.10568 ab  
## BL/BR 55.07041 ab  
## BLK 54.95413 ab  
## WT/BLK 54.68163 ab  
## WT/BR 54.30619 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.381685   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.19416 0.9189794 18 54.3608 57.497  
## MornLow 54.00000 1.4552138 18 52.0000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8086705   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.19416 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.381685 24 55.09708 2.133418 3.460509  
##   
## $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 56.14081 0.5933829 3 55.55554 56.74199 55.84023 56.12491  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.24160 0.8229756 3 55.35118 56.97430 55.87525 56.39933  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 56.21137 0.9625718 3 55.64379 57.32277 55.65567 55.66755  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 57.26220 0.3147079 3 56.90461 57.49700 57.14480 57.38499  
## WHT:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WT/BLK:MornHigh 55.69659 1.2361156 3 54.36080 56.80007 55.14485 55.92890  
## WT/BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BR:MornHigh 55.61238 0.9986296 3 55.01418 56.76522 55.03595 55.05773  
## WT/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.43345  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.68682  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.49516  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.44100  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 55.91148  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.26220 a  
## BLK:MornHigh 56.24160 ab  
## BRN:MornHigh 56.21137 ab  
## BL/BR:MornHigh 56.14081 ab  
## WT/BLK:MornHigh 55.69659 ab  
## WHT:MornLow 55.66667 ab  
## WT/BR:MornHigh 55.61238 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## BLK:MornLow 53.66667 b  
## WT/BLK:MornLow 53.66667 b  
## WT/BR:MornLow 53.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM16 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 44.970 8.994 9.8876 3.142e-05 \*\*\*  
## THIregime 1 45.769 45.769 50.3161 2.477e-07 \*\*\*  
## Colour:THIregime 5 3.299 0.660 0.7254 0.6111   
## Residuals 24 21.831 0.910   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9096256   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.86606 1.9977182 6 52 57.34766  
## BLK 53.95327 1.9590526 6 51 55.98698  
## BRN 55.11426 1.4161567 6 53 56.78423  
## WHT 57.25996 0.7725145 6 56 58.11771  
## WT/BLK 53.87672 1.3993586 6 52 55.40620  
## WT/BR 55.02834 1.3381180 6 53 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.702553   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 57.25996 a  
## BRN 55.11426 b  
## WT/BR 55.02834 b  
## BL/BR 54.86606 b  
## BLK 53.95327 b  
## WT/BLK 53.87672 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9096256   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.14398 1.038165 18 54.62215 58.11771  
## MornLow 53.88889 1.745208 18 51.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6561428   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.14398 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9096256 24 55.01643 1.73356 2.807804  
##   
## $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 56.06545 1.1524901 3 55.11581 57.34766 55.42435 55.73289  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 55.57320 0.6235675 3 54.85599 55.98698 55.36631 55.87663  
## BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## BRN:MornHigh 56.22853 0.5375826 3 55.71111 56.78423 55.95068 56.19025  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 57.85324 0.3203705 3 57.49700 58.11771 57.72101 57.94503  
## WHT:MornLow 56.66667 0.5773503 3 56.00000 57.00000 56.50000 57.00000  
## WT/BLK:MornHigh 55.08677 0.4116973 3 54.62215 55.40620 54.92706 55.23197  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.05667 0.5513414 3 55.58043 56.66068 55.75467 55.92890  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.54027  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.93180  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.48724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 58.03137  
## WHT:MornLow 57.00000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.29479  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.85324 a  
## WHT:MornLow 56.66667 ab  
## BRN:MornHigh 56.22853 abc  
## BL/BR:MornHigh 56.06545 abc  
## WT/BR:MornHigh 56.05667 abc  
## BLK:MornHigh 55.57320 abc  
## WT/BLK:MornHigh 55.08677 abcd  
## BRN:MornLow 54.00000 bcd  
## WT/BR:MornLow 54.00000 bcd  
## BL/BR:MornLow 53.66667 cd  
## WT/BLK:MornLow 52.66667 d  
## BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM17 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.956 2.791 3.5639 0.01497 \*   
## THIregime 1 45.950 45.950 58.6693 6.754e-08 \*\*\*  
## Colour:THIregime 5 0.756 0.151 0.1931 0.96223   
## Residuals 24 18.797 0.783   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.783199   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.54291 1.388775 6 52 55.11581  
## BLK 54.55770 1.403655 6 53 56.13798  
## BRN 55.15158 1.428187 6 53 56.87926  
## WHT 54.78638 1.643552 6 52 56.60094  
## WT/BLK 53.83316 1.561210 6 52 55.92890  
## WT/BR 53.57357 1.422405 6 52 55.19712  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.579811   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.15158 a  
## WHT 54.78638 ab  
## BLK 54.55770 ab  
## WT/BLK 53.83316 ab  
## WT/BR 53.57357 ab  
## BL/BR 53.54291 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.783199   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.37065 0.7565869 18 54.3608 56.87926  
## MornLow 53.11111 1.1826634 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6088399   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.37065 a  
## MornLow 53.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.783199 24 54.24088 1.631584 2.605383  
##   
## $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 54.75248 0.3149659 3 54.55681 55.11581 54.57081 54.58481  
## BL/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 55.78208 0.3082689 3 55.59877 56.13798 55.60412 55.60947  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 55.96982 0.8702873 3 55.14485 56.87926 55.51510 55.88534  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 55.90608 0.8115291 3 55.01418 56.60094 55.55865 56.10313  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.99966 0.8233946 3 54.36080 55.92890 54.53503 54.70927  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 54.81381 0.3319591 3 54.62215 55.19712 54.62215 54.62215  
## WT/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 54.85031  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.87373  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.38230  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.35204  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 54.90964  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 55.96982 a  
## WHT:MornHigh 55.90608 ab  
## BLK:MornHigh 55.78208 ab  
## WT/BLK:MornHigh 54.99966 abc  
## WT/BR:MornHigh 54.81381 abcd  
## BL/BR:MornHigh 54.75248 abcd  
## BRN:MornLow 54.33333 abcd  
## WHT:MornLow 53.66667 abcd  
## BLK:MornLow 53.33333 bcd  
## WT/BLK:MornLow 52.66667 cd  
## BL/BR:MornLow 52.33333 d  
## WT/BR:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM18 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.695 1.539 1.8564 0.1398   
## THIregime 1 58.529 58.529 70.5997 1.31e-08 \*\*\*  
## Colour:THIregime 5 0.260 0.052 0.0628 0.9970   
## Residuals 24 19.897 0.829   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8290229   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.59862 1.446549 6 53 56.21929  
## BLK 54.08228 1.896566 6 51 56.20401  
## BRN 54.86127 1.373213 6 53 56.24252  
## WHT 54.86136 1.550034 6 53 56.77829  
## WT/BLK 55.55218 1.408488 6 54 57.23565  
## WT/BR 54.36136 1.943068 6 52 56.80007  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.625371   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BLK 55.55218 a  
## WHT 54.86136 a  
## BRN 54.86127 a  
## BL/BR 54.59862 a  
## WT/BR 54.36136 a  
## BLK 54.08228 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8290229   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.99458 0.6601001 18 54.62215 57.23565  
## MornLow 53.44444 1.0966378 18 51.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6263979   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.99458 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8290229 24 54.71951 1.663953 2.680518  
##   
## $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 55.86391 0.3083343 3 55.66755 56.21929 55.68622 55.70489  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.49790 0.8044575 3 54.62215 56.20401 55.14485 55.66755  
## BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## BRN:MornHigh 56.05588 0.3157570 3 55.69131 56.24252 55.96256 56.23381  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.05605 0.6255563 3 55.68497 56.77829 55.69493 55.70489  
## WHT:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.77103 0.4116973 3 56.45160 57.23565 56.53872 56.62583  
## WT/BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BR:MornHigh 55.72272 0.9374795 3 55.09258 56.80007 55.18405 55.27553  
## WT/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 55.96209  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.93578  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.23816  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.24159  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 56.93074  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.03780  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 56.77103 a  
## WHT:MornHigh 56.05605 ab  
## BRN:MornHigh 56.05588 ab  
## BL/BR:MornHigh 55.86391 abc  
## WT/BR:MornHigh 55.72272 abc  
## BLK:MornHigh 55.49790 abcd  
## WT/BLK:MornLow 54.33333 abcde  
## BRN:MornLow 53.66667 bcde  
## WHT:MornLow 53.66667 bcde  
## BL/BR:MornLow 53.33333 cde  
## WT/BR:MornLow 53.00000 de  
## BLK:MornLow 52.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM19 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.898 2.980 2.2291 0.08434 .   
## THIregime 1 48.453 48.453 36.2491 3.238e-06 \*\*\*  
## Colour:THIregime 5 1.042 0.208 0.1559 0.97614   
## Residuals 24 32.080 1.337   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336677   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.53657 2.246968 6 51 57.19831  
## BLK 53.77386 1.631526 6 52 55.57126  
## BRN 55.00933 1.676214 6 52 56.62583  
## WHT 54.78601 1.294490 6 53 56.09224  
## WT/BLK 53.26752 1.607146 6 51 55.40620  
## WT/BR 54.92089 1.239372 6 53 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.06387   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.00933 a  
## WT/BR 54.92089 a  
## WHT 54.78601 a  
## BL/BR 54.53657 a  
## BLK 53.77386 a  
## WT/BLK 53.26752 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336677   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.54250 0.8714034 18 53.8381 57.19831  
## MornLow 53.22222 1.4371359 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7953903   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.54250 a  
## MornLow 53.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.336677 24 54.38236 2.12596 3.403679  
##   
## $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 55.73980 1.3948171 3 54.41888 57.19831 55.01055 55.60221  
## BL/BR:MornLow 53.33333 2.5166115 3 51.00000 56.00000 52.00000 53.00000  
## BLK:MornHigh 55.21439 0.3098272 3 55.01418 55.57126 55.03595 55.05773  
## BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BRN:MornHigh 56.01866 0.9838716 3 54.88350 56.62583 55.71507 56.54664  
## BRN:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## WHT:MornHigh 55.90536 0.3116495 3 55.54559 56.09224 55.81191 56.07824  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.53503 0.7984374 3 53.83810 55.40620 54.09945 54.36080  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.84178 0.5440434 3 55.40620 56.45160 55.53688 55.66755  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.40026  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.31450  
## BLK:MornLow 52.50000  
## BRN:MornHigh 56.58623  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.08524  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 54.88350  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.05958  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.01866 a  
## WHT:MornHigh 55.90536 a  
## WT/BR:MornHigh 55.84178 a  
## BL/BR:MornHigh 55.73980 a  
## BLK:MornHigh 55.21439 ab  
## WT/BLK:MornHigh 54.53503 ab  
## BRN:MornLow 54.00000 ab  
## WT/BR:MornLow 54.00000 ab  
## WHT:MornLow 53.66667 ab  
## BL/BR:MornLow 53.33333 ab  
## BLK:MornLow 52.33333 b  
## WT/BLK:MornLow 52.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM20 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.241 1.248 0.9343 0.4765   
## THIregime 1 62.877 62.877 47.0615 4.281e-07 \*\*\*  
## Colour:THIregime 5 0.299 0.060 0.0447 0.9987   
## Residuals 24 32.065 1.336   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336057   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.72100 1.580104 6 53 56.52627  
## BLK 54.35927 1.653949 6 52 56.25903  
## BRN 54.95750 1.794212 6 52 56.97430  
## WHT 54.62505 1.788987 6 52 56.81096  
## WT/BLK 55.44359 2.128263 6 53 58.54240  
## WT/BR 55.48975 1.693146 6 53 57.60154  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.063391   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.48975 a  
## WT/BLK 55.44359 a  
## BRN 54.95750 a  
## BL/BR 54.72100 a  
## WHT 54.62505 a  
## BLK 54.35927 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.336057   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.25427 0.8515591 18 55.17099 58.5424  
## MornLow 53.61111 1.2432826 18 52.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7952057   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.25427 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.336057 24 54.93269 2.104173 3.40289  
##   
## $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 56.10866 0.3628221 3 55.87082 56.52627 55.89986 55.92890  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.71855 0.5440552 3 55.17099 56.25903 55.44831 55.72563  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 56.24833 0.8461237 3 55.31908 56.97430 55.88534 56.45160  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 55.91677 0.8137917 3 55.21952 56.81096 55.46967 55.71982  
## WHT:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 56.88718 1.4394036 3 55.92890 58.54240 56.05958 56.19025  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.64616 0.9064460 3 55.79823 57.60154 56.16847 56.53872  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.22759  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.99233  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.71295  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.26539  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 57.36633  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.07013  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BLK:MornHigh 56.88718 a  
## WT/BR:MornHigh 56.64616 ab  
## BRN:MornHigh 56.24833 abc  
## BL/BR:MornHigh 56.10866 abc  
## WHT:MornHigh 55.91677 abc  
## BLK:MornHigh 55.71855 abc  
## WT/BR:MornLow 54.33333 abc  
## WT/BLK:MornLow 54.00000 abc  
## BRN:MornLow 53.66667 abc  
## BL/BR:MornLow 53.33333 bc  
## WHT:MornLow 53.33333 bc  
## BLK:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM21 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.820 5.764 3.9192 0.009714 \*\*   
## THIregime 1 38.501 38.501 26.1792 3.095e-05 \*\*\*  
## Colour:THIregime 5 0.474 0.095 0.0645 0.996824   
## Residuals 24 35.296 1.471   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.470681   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.78914 1.941076 6 52 57.19831  
## BLK 56.49882 1.415781 6 54 57.99066  
## BRN 55.06727 1.371215 6 53 56.66068  
## WHT 55.12676 1.427440 6 53 56.80007  
## WT/BLK 53.46322 1.315323 6 52 55.05773  
## WT/BR 54.59306 1.853182 6 52 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.164853   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.49882 a  
## WHT 55.12676 ab  
## BRN 55.06727 ab  
## BL/BR 54.78914 ab  
## WT/BR 54.59306 ab  
## WT/BLK 53.46322 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.470681   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95720 1.106464 18 54.3608 57.99066  
## MornLow 53.88889 1.604732 18 52.0000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8343077   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95720 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.470681 24 54.92305 2.208028 3.570217  
##   
## $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 55.91161 1.1429166 3 55.01418 57.19831 55.26827 55.52236  
## BL/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## BLK:MornHigh 57.33097 0.7748097 3 56.47774 57.99066 57.00112 57.52451  
## BLK:MornLow 55.66667 1.5275252 3 54.00000 57.00000 55.00000 56.00000  
## BRN:MornHigh 56.13455 0.5323075 3 55.59627 56.66068 55.87148 56.14669  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.25351 0.5340618 3 55.73289 56.80007 55.98024 56.22759  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.59311 0.4023746 3 54.36080 55.05773 54.36080 54.36080  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.51945 1.2952874 3 54.49148 56.97430 54.79203 55.09258  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.36033  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.75759  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.40369  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.51383  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 54.70927  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.03344  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.33097 a  
## WHT:MornHigh 56.25351 ab  
## BRN:MornHigh 56.13455 ab  
## BL/BR:MornHigh 55.91161 ab  
## BLK:MornLow 55.66667 abc  
## WT/BR:MornHigh 55.51945 abc  
## WT/BLK:MornHigh 54.59311 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 54.00000 abc  
## BL/BR:MornLow 53.66667 bc  
## WT/BR:MornLow 53.66667 bc  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM22 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.761 2.552 3.1509 0.02512 \*   
## THIregime 1 47.977 47.977 59.2337 6.217e-08 \*\*\*  
## Colour:THIregime 5 0.939 0.188 0.2319 0.94474   
## Residuals 24 19.439 0.810   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8099638   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.37906 1.677463 6 52 56.32093  
## BLK 55.89456 1.221419 6 54 57.36633  
## BRN 54.85256 1.364646 6 53 56.23381  
## WHT 54.31340 1.606336 6 52 56.15758  
## WT/BLK 54.39881 1.504641 6 52 56.10313  
## WT/BR 55.42151 1.630601 6 53 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.606579   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.89456 a  
## WT/BR 55.42151 a  
## BRN 54.85256 a  
## WT/BLK 54.39881 a  
## BL/BR 54.37906 a  
## WHT 54.31340 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8099638   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.03107 0.7486443 18 54.3608 57.497  
## MornLow 53.72222 1.1785113 18 52.0000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6191557   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.03107 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8099638 24 54.87665 1.640005 2.649526  
##   
## $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 55.75812 0.5738184 3 55.17389 56.32093 55.47672 55.77956  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.78911 0.5735537 3 56.21929 57.36633 56.50051 56.78173  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 56.03846 0.3213664 3 55.66755 56.23381 55.94078 56.21401  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 55.62679 0.5251281 3 55.10751 56.15758 55.36140 55.61528  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 55.46428 0.9596024 3 54.36080 56.10313 55.14485 55.92890  
## WT/BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.50968 0.8726174 3 55.84178 57.49700 56.01602 56.19025  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.05024  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.07403  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.22391  
## BRN:MornLow 54.00000  
## WHT:MornHigh 55.88643  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 56.01602  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.84363  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.78911 a  
## WT/BR:MornHigh 56.50968 a  
## BRN:MornHigh 56.03846 ab  
## BL/BR:MornHigh 55.75812 abc  
## WHT:MornHigh 55.62679 abcd  
## WT/BLK:MornHigh 55.46428 abcd  
## BLK:MornLow 55.00000 abcd  
## WT/BR:MornLow 54.33333 abcd  
## BRN:MornLow 53.66667 bcd  
## WT/BLK:MornLow 53.33333 cd  
## BL/BR:MornLow 53.00000 d  
## WHT:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM23 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.817 3.763 1.7392 0.1640094   
## THIregime 1 40.509 40.509 18.7206 0.0002301 \*\*\*  
## Colour:THIregime 5 1.101 0.220 0.1018 0.9908143   
## Residuals 24 51.932 2.164   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.16385   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.01535 1.532638 6 52 55.53688  
## BLK 55.34129 1.384504 6 53 56.73909  
## BRN 55.29426 1.845212 6 52 57.23565  
## WHT 54.55551 1.401695 6 53 56.13798  
## WT/BLK 53.48469 2.579389 6 50 56.80007  
## WT/BR 55.34020 1.555570 6 53 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.625928   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.34129 a  
## WT/BR 55.34020 a  
## BRN 55.29426 a  
## WHT 54.55551 a  
## BL/BR 54.01535 a  
## WT/BLK 53.48469 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.16385   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.73266 1.226484 18 52.27 57.23565  
## MornLow 53.61111 1.649916 18 50.00 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.012   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.73266 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.16385 24 54.67188 2.690603 4.330609  
##   
## $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 55.36402 0.2869036 3 55.03284 55.53688 55.27760 55.52236  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.34925 0.6409773 3 55.60947 56.73909 56.15433 56.69919  
## BLK:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## BRN:MornHigh 56.25519 1.1868167 3 54.93577 57.23565 55.76496 56.59415  
## BRN:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WHT:MornHigh 55.77769 0.3120549 3 55.59288 56.13798 55.59755 55.60221  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 54.30272 2.3004959 3 52.27000 56.80007 53.05405 53.83810  
## WT/BLK:MornLow 52.66667 3.0550505 3 50.00000 56.00000 51.00000 52.00000  
## WT/BR:MornHigh 56.34706 0.8214875 3 55.61528 57.23565 55.90277 56.19025  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.52962  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.71914  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.91490  
## BRN:MornLow 55.50000  
## WHT:MornHigh 55.87010  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.71295  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.34925 a  
## WT/BR:MornHigh 56.34706 a  
## BRN:MornHigh 56.25519 a  
## WHT:MornHigh 55.77769 a  
## BL/BR:MornHigh 55.36402 a  
## BLK:MornLow 54.33333 a  
## BRN:MornLow 54.33333 a  
## WT/BR:MornLow 54.33333 a  
## WT/BLK:MornHigh 54.30272 a  
## WHT:MornLow 53.33333 a  
## BL/BR:MornLow 52.66667 a  
## WT/BLK:MornLow 52.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM24 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 2.475 0.495 0.4873 0.7823   
## THIregime 1 50.436 50.436 49.6596 2.76e-07 \*\*\*  
## Colour:THIregime 5 0.186 0.037 0.0366 0.9992   
## Residuals 24 24.375 1.016   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.015635   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.24792 1.546229 6 53 57.03238  
## BLK 55.49772 1.341693 6 54 57.02657  
## BRN 55.24890 1.852322 6 53 57.59204  
## WHT 55.21377 1.511671 6 53 56.97430  
## WT/BLK 54.85586 1.581627 6 53 56.97430  
## WT/BR 55.70433 1.609572 6 53 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.799028   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.70433 a  
## BLK 55.49772 a  
## BRN 55.24890 a  
## BL/BR 55.24792 a  
## WHT 55.21377 a  
## WT/BLK 54.85586 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.015635   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.47839 0.6534113 18 55.4062 57.59204  
## MornLow 54.11111 1.0786096 18 53.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6933235   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.47839 a  
## MornLow 54.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.015635 24 55.29475 1.822573 2.966909  
##   
## $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 56.49585 0.5523676 3 55.92890 57.03238 56.22759 56.52627  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.66211 0.3156356 3 56.47911 57.02657 56.47987 56.48064  
## BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 56.49780 0.9478883 3 55.92890 57.59204 55.95068 55.97246  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 56.42754 0.5414484 3 55.89156 56.97430 56.15416 56.41675  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.04506 0.8233946 3 55.40620 56.97430 55.58043 55.75467  
## WT/BLK:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.74199 0.9556398 3 55.66755 57.49700 56.36448 57.06142  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.77932  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.75360  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.78225  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.69553  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.27921  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.74199 a  
## BLK:MornHigh 56.66211 a  
## BRN:MornHigh 56.49780 ab  
## BL/BR:MornHigh 56.49585 ab  
## WHT:MornHigh 56.42754 ab  
## WT/BLK:MornHigh 56.04506 ab  
## WT/BR:MornLow 54.66667 ab  
## BLK:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BLK:MornLow 53.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM25 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 27.914 5.583 5.9176 0.001062 \*\*   
## THIregime 1 41.993 41.993 44.5110 6.695e-07 \*\*\*  
## Colour:THIregime 5 0.836 0.167 0.1773 0.968501   
## Residuals 24 22.642 0.943   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9434314   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.89786 1.744812 6 52 56.89963  
## BLK 54.97660 1.657086 6 53 57.00181  
## BRN 55.42309 1.264587 6 54 56.87926  
## WHT 55.99218 1.300662 6 54 57.53185  
## WT/BLK 53.33255 1.631158 6 51 55.58043  
## WT/BR 55.85793 1.162958 6 54 57.10498  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.733901   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.99218 a  
## WT/BR 55.85793 a  
## BRN 55.42309 a  
## BLK 54.97660 ab  
## BL/BR 54.89786 ab  
## WT/BLK 53.33255 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9434314   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.16007 1.068068 18 53.3154 57.53185  
## MornLow 54.00000 1.371989 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6682242   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.16007 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9434314 24 55.08003 1.763441 2.859503  
##   
## $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 56.12906 0.8544289 3 55.21019 56.89963 55.74378 56.27737  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.28654 0.6194452 3 55.92890 57.00181 55.92890 55.92890  
## BLK:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BRN:MornHigh 56.51285 0.3192349 3 56.29479 56.87926 56.32964 56.36448  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 56.98436 0.5253947 3 56.48427 57.53185 56.71062 56.93696  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.33176 1.1502479 3 53.31540 55.58043 53.70743 54.09945  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 56.71585 0.4160068 3 56.27737 57.10498 56.52129 56.76522  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.58850  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.46536  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.62187  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.23441  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.83994  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.93510  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.98436 a  
## WT/BR:MornHigh 56.71585 a  
## BRN:MornHigh 56.51285 ab  
## BLK:MornHigh 56.28654 ab  
## BL/BR:MornHigh 56.12906 ab  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 55.00000 abc  
## BRN:MornLow 54.33333 abc  
## WT/BLK:MornHigh 54.33176 abc  
## BL/BR:MornLow 53.66667 bc  
## BLK:MornLow 53.66667 bc  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM26 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 33.351 6.670 11.1415 1.236e-05 \*\*\*  
## THIregime 1 35.282 35.282 58.9333 6.497e-08 \*\*\*  
## Colour:THIregime 5 0.609 0.122 0.2034 0.9579   
## Residuals 24 14.368 0.599   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5986769   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.19213 1.040297 6 54 56.50968  
## BLK 55.91318 1.234174 6 54 57.39246  
## BRN 55.02675 1.338527 6 53 56.62583  
## WHT 55.85782 1.188949 6 54 57.25307  
## WT/BLK 53.22396 1.539716 6 51 55.14485  
## WT/BR 54.05936 1.367645 6 52 55.71982  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.381228   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.91318 a  
## WHT 55.85782 a  
## BL/BR 55.19213 ab  
## BRN 55.02675 ab  
## WT/BR 54.05936 bc  
## WT/BLK 53.22396 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5986769   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.86884 0.9866828 18 53.8381 57.39246  
## MornLow 53.88889 1.3672165 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5323084   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.86884 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5986769 24 54.87887 1.409909 2.277884  
##   
## $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 56.05093 0.3994993 3 55.77956 56.50968 55.82156 55.86356  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 56.82635 0.5534300 3 56.28654 57.39246 56.54330 56.80007  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 56.05350 0.5625669 3 55.50124 56.62583 55.76734 56.03344  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.71565 0.5713287 3 56.11558 57.25307 56.44693 56.77829  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.44792 0.6577164 3 53.83810 55.14485 54.09945 54.36080  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.11872 0.5562520 3 54.62215 55.71982 54.81816 55.01418  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.18662  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.09626  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.32964  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.01568  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.75283  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.36700  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.82635 a  
## WHT:MornHigh 56.71565 ab  
## BRN:MornHigh 56.05350 abc  
## BL/BR:MornHigh 56.05093 abc  
## WT/BR:MornHigh 55.11872 abcd  
## BLK:MornLow 55.00000 abcd  
## WHT:MornLow 55.00000 abcd  
## WT/BLK:MornHigh 54.44792 bcd  
## BL/BR:MornLow 54.33333 cd  
## BRN:MornLow 54.00000 cde  
## WT/BR:MornLow 53.00000 de  
## WT/BLK:MornLow 52.00000 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 36.370 7.274 4.5277 0.004765 \*\*   
## THIregime 1 37.247 37.247 23.1844 6.647e-05 \*\*\*  
## Colour:THIregime 5 1.136 0.227 0.1414 0.980735   
## Residuals 24 38.557 1.607   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.606555   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.01838 2.217465 6 51 57.14853  
## BLK 56.42510 1.379578 6 54 57.94130  
## BRN 55.08245 1.185884 6 54 56.19025  
## WHT 54.32543 1.451969 6 53 55.66755  
## WT/BLK 53.04973 1.402926 6 51 54.88350  
## WT/BR 54.86862 1.756413 6 52 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.262648   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.42510 a  
## BRN 55.08245 ab  
## BL/BR 55.01838 ab  
## WT/BR 54.86862 ab  
## WHT 54.32543 ab  
## WT/BLK 53.04973 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.606555   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.81212 1.211520 18 53.3154 57.9413  
## MornLow 53.77778 1.733937 18 51.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8719967   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.81212 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.606555 24 54.79495 2.313168 3.731498  
##   
## $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 56.03676 1.47702135 3 54.36080 57.14853 55.48087 56.60094  
## BL/BR:MornLow 54.00000 2.64575131 3 51.00000 56.00000 53.00000 55.00000  
## BLK:MornHigh 57.18353 0.83611942 3 56.28654 57.94130 56.80465 57.32277  
## BLK:MornLow 55.66667 1.52752523 3 54.00000 57.00000 55.00000 56.00000  
## BRN:MornHigh 56.16491 0.02617097 3 56.13798 56.19025 56.15224 56.16649  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 55.65085 0.01634647 3 55.63488 55.66755 55.64250 55.65013  
## WHT:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## WT/BLK:MornHigh 54.09945 0.78405000 3 53.31540 54.88350 53.70743 54.09945  
## WT/BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.73724 1.20372412 3 54.56988 56.97430 55.11872 55.66755  
## WT/BR:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.87474  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.63203  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.17837  
## BRN:MornLow 54.00000  
## WHT:MornHigh 55.65884  
## WHT:MornLow 53.00000  
## WT/BLK:MornHigh 54.49148  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.32093  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.18353 a  
## BRN:MornHigh 56.16491 ab  
## BL/BR:MornHigh 56.03676 ab  
## WT/BR:MornHigh 55.73724 ab  
## BLK:MornLow 55.66667 abc  
## WHT:MornHigh 55.65085 abc  
## WT/BLK:MornHigh 54.09945 abc  
## BL/BR:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WT/BR:MornLow 54.00000 abc  
## WHT:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM28 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.837 2.167 4.0557 0.008255 \*\*   
## THIregime 1 45.913 45.913 85.9172 2.118e-09 \*\*\*  
## Colour:THIregime 5 0.430 0.086 0.1611 0.974373   
## Residuals 24 12.825 0.534   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5343834   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.49958 1.344856 6 53 56.04506  
## BLK 55.39690 1.235049 6 54 56.80007  
## BRN 55.32753 1.166635 6 54 56.68919  
## WHT 54.33123 1.626849 6 52 56.20767  
## WT/BLK 53.83316 1.561210 6 52 55.92890  
## WT/BR 54.72083 1.433404 6 53 56.55614  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.304955   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.39690 a  
## BRN 55.32753 a  
## WT/BR 54.72083 ab  
## BL/BR 54.49958 ab  
## WHT 54.33123 ab  
## WT/BLK 53.83316 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5343834   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.81419 0.6707212 18 54.3608 56.80007  
## MornLow 53.55556 0.9835244 18 52.0000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5029138   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.81419 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5343834 24 54.68487 1.336778 2.152097  
##   
## $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 55.66582 0.3284595 3 55.47154 56.04506 55.47620 55.48087  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.46046 0.2941330 3 56.28654 56.80007 56.29066 56.29479  
## BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 56.32172 0.3225058 3 56.08571 56.68919 56.13798 56.19025  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 55.66247 0.5477637 3 55.11218 56.20767 55.38987 55.66755  
## WHT:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BLK:MornHigh 54.99966 0.8233946 3 54.36080 55.92890 54.53503 54.70927  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.77499 0.6852009 3 55.27553 56.55614 55.38442 55.49332  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.76296  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.54743  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.43972  
## BRN:MornLow 54.50000  
## WHT:MornHigh 55.93761  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.02473  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.46046 a  
## BRN:MornHigh 56.32172 a  
## WT/BR:MornHigh 55.77499 ab  
## BL/BR:MornHigh 55.66582 ab  
## WHT:MornHigh 55.66247 ab  
## WT/BLK:MornHigh 54.99966 abc  
## BLK:MornLow 54.33333 abcd  
## BRN:MornLow 54.33333 abcd  
## WT/BR:MornLow 53.66667 bcd  
## BL/BR:MornLow 53.33333 cd  
## WHT:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.66667 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 14.295 2.859 1.7686 0.1576   
## THIregime 1 47.035 47.035 29.0957 1.538e-05 \*\*\*  
## Colour:THIregime 5 0.692 0.138 0.0856 0.9938   
## Residuals 24 38.797 1.617   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.61656   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.88265 1.730882 6 52 56.85814  
## BLK 55.72804 1.600925 6 53 57.49700  
## BRN 55.17723 1.795340 6 53 57.44948  
## WHT 54.89631 1.581877 6 53 56.84363  
## WT/BLK 53.96384 1.872438 6 51 56.45160  
## WT/BR 55.87680 1.585657 6 53 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.269682   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.87680 a  
## BLK 55.72804 a  
## BRN 55.17723 a  
## WHT 54.89631 a  
## BL/BR 54.88265 a  
## WT/BLK 53.96384 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.61656   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.23051 0.9343026 18 54.09945 57.497  
## MornLow 53.94444 1.5135553 18 51.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8747077   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.23051 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.61656 24 55.08748 2.308038 3.743099  
##   
## $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 56.09864 0.8489311 3 55.18219 56.85814 55.71889 56.25559  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.78942 0.8333723 3 55.87082 57.49700 56.43563 57.00044  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 56.35445 0.9489639 3 55.77209 57.44948 55.80694 55.84178  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 56.12595 0.6216497 3 55.75467 56.84363 55.76711 55.77956  
## WHT:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BLK:MornHigh 55.26101 1.1763438 3 54.09945 56.45160 54.66571 55.23197  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 56.75360 0.9896596 3 55.61528 57.40988 56.42547 57.23565  
## WT/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.55687  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.24872  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.64563  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.31159  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.84178  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.32277  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.78942 a  
## WT/BR:MornHigh 56.75360 a  
## BRN:MornHigh 56.35445 ab  
## WHT:MornHigh 56.12595 ab  
## BL/BR:MornHigh 56.09864 ab  
## WT/BLK:MornHigh 55.26101 ab  
## WT/BR:MornLow 55.00000 ab  
## BLK:MornLow 54.66667 ab  
## BRN:MornLow 54.00000 ab  
## BL/BR:MornLow 53.66667 ab  
## WHT:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM30 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 56.840 11.368 14.0734 1.778e-06 \*\*\*  
## THIregime 1 32.160 32.160 39.8145 1.598e-06 \*\*\*  
## Colour:THIregime 5 1.082 0.216 0.2678 0.9262   
## Residuals 24 19.386 0.808   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8077552   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.37841 1.2195269 6 53 55.79823  
## BLK 56.14834 0.9895917 6 55 57.36633  
## BRN 54.67740 1.3907232 6 53 56.45160  
## WHT 55.81743 1.1439299 6 54 57.18338  
## WT/BLK 52.24482 1.5857122 6 50 54.36080  
## WT/BR 54.73795 1.5172065 6 53 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.604387   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.14834 a  
## WHT 55.81743 ab  
## WT/BR 54.73795 ab  
## BRN 54.67740 ab  
## BL/BR 54.37841 b  
## WT/BLK 52.24482 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8077552   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.61256 1.276395 18 52.7927 57.36633  
## MornLow 53.72222 1.708303 18 50.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.618311   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.61256 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8077552 24 54.66739 1.644037 2.645912  
##   
## $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 55.42349 0.3289846 3 55.18219 55.79823 55.23612 55.29004  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.96335 0.3495545 3 56.74199 57.36633 56.76186 56.78173  
## BLK:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BRN:MornHigh 55.68814 0.6611918 3 55.30166 56.45160 55.30641 55.31116  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.63486 0.5165976 3 56.15758 57.18338 56.36059 56.56361  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 53.48963 0.7984374 3 52.79270 54.36080 53.05405 53.31540  
## WT/BLK:MornLow 51.00000 1.0000000 3 50.00000 52.00000 50.50000 51.00000  
## WT/BR:MornHigh 55.47589 1.0588170 3 54.62215 56.66068 54.88350 55.14485  
## WT/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.54413  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.07403  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.88138  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.87349  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 53.83810  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 55.90277  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.96335 a  
## WHT:MornHigh 56.63486 ab  
## BRN:MornHigh 55.68814 abc  
## WT/BR:MornHigh 55.47589 abc  
## BL/BR:MornHigh 55.42349 abc  
## BLK:MornLow 55.33333 abc  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 54.00000 bc  
## BRN:MornLow 53.66667 c  
## WT/BLK:MornHigh 53.48963 cd  
## BL/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 51.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM31 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 9.236 1.847 3.014 0.02994 \*   
## THIregime 1 44.701 44.701 72.936 9.737e-09 \*\*\*  
## Colour:THIregime 5 0.386 0.077 0.126 0.98509   
## Residuals 24 14.709 0.613   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6128825   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.47901 1.507731 6 52 56.00357  
## BLK 55.10613 1.410225 6 53 56.76522  
## BRN 55.03467 1.133640 6 54 56.10313  
## WHT 54.86172 1.373055 6 53 56.24252  
## WT/BLK 53.59390 1.460220 6 52 55.40620  
## WT/BR 54.61048 1.547484 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.397519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.10613 a  
## BRN 55.03467 a  
## WHT 54.86172 ab  
## WT/BR 54.61048 ab  
## BL/BR 54.47901 ab  
## WT/BLK 53.59390 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6128825   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.72864 0.6787357 18 54.49148 56.76522  
## MornLow 53.50000 0.9851844 18 52.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5385867   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.72864 a  
## MornLow 53.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6128825 24 54.61432 1.433448 2.304751  
##   
## $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 55.62468 0.64193699 3 54.88350 56.00357 55.43524 55.98698  
## BL/BR:MornLow 53.33333 1.15470054 3 52.00000 54.00000 53.00000 54.00000  
## BLK:MornHigh 56.21226 0.54888154 3 55.66755 56.76522 55.93578 56.20401  
## BLK:MornLow 54.00000 1.00000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.06934 0.03489463 3 56.03344 56.10313 56.05245 56.07145  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.05677 0.30887689 3 55.70022 56.24252 55.96390 56.22759  
## WHT:MornLow 53.66667 0.57735027 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.85446 0.47980119 3 54.53503 55.40620 54.57859 54.62215  
## WT/BLK:MornLow 52.33333 0.57735027 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.55430 0.99049007 3 54.49148 56.45160 55.10565 55.71982  
## WT/BR:MornLow 53.66667 1.52752523 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.99527  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.48461  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.08729  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.23505  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.01418  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.08571  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.21226 a  
## BRN:MornHigh 56.06934 a  
## WHT:MornHigh 56.05677 a  
## BL/BR:MornHigh 55.62468 ab  
## WT/BR:MornHigh 55.55430 ab  
## WT/BLK:MornHigh 54.85446 ab  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 53.66667 bc  
## WT/BR:MornLow 53.66667 bc  
## BL/BR:MornLow 53.33333 bc  
## WT/BLK:MornLow 52.33333 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 25.188 5.038 5.9148 0.001065 \*\*   
## THIregime 1 47.013 47.013 55.1986 1.139e-07 \*\*\*  
## Colour:THIregime 5 1.186 0.237 0.2785 0.920372   
## Residuals 24 20.441 0.852   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8517048   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.06286 1.367107 6 54 57.64634  
## BLK 54.97686 1.493926 6 53 56.48064  
## BRN 55.02772 1.707440 6 53 57.11685  
## WHT 55.26620 1.561460 6 53 57.07231  
## WT/BLK 53.65893 1.651068 6 51 55.75467  
## WT/BR 56.19738 1.244029 6 54 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.647456   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.19738 a  
## BL/BR 56.06286 a  
## WHT 55.26620 ab  
## BRN 55.02772 ab  
## BLK 54.97686 ab  
## WT/BLK 53.65893 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8517048   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.34109 1.025282 18 53.3154 57.64634  
## MornLow 54.05556 1.304843 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6349092   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.34109 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8517048 24 55.19832 1.671932 2.71694  
##   
## $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 57.12572 0.5324007 3 56.58228 57.64634 56.86540 57.14853  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 56.28705 0.3105034 3 55.92890 56.48064 56.19025 56.45160  
## BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BRN:MornHigh 56.38877 0.6305995 3 56.01602 57.11685 56.02473 56.03344  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.53239 0.5344538 3 56.00357 57.07231 56.26243 56.52129  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.65119 1.2361156 3 53.31540 55.75467 54.09945 54.88350  
## WT/BLK:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WT/BR:MornHigh 57.06142 0.5440434 3 56.45160 57.49700 56.84363 57.23565  
## WT/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.39744  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.46612  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.57515  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.79680  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.36633  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 57.12572 a  
## WT/BR:MornHigh 57.06142 a  
## WHT:MornHigh 56.53239 ab  
## BRN:MornHigh 56.38877 ab  
## BLK:MornHigh 56.28705 abc  
## WT/BR:MornLow 55.33333 abcd  
## BL/BR:MornLow 55.00000 abcd  
## WT/BLK:MornHigh 54.65119 abcd  
## WHT:MornLow 54.00000 bcd  
## BLK:MornLow 53.66667 cd  
## BRN:MornLow 53.66667 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM33 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 18.556 3.711 4.2413 0.006634 \*\*   
## THIregime 1 39.879 39.879 45.5741 5.545e-07 \*\*\*  
## Colour:THIregime 5 0.525 0.105 0.1201 0.986629   
## Residuals 24 21.001 0.875   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8750295   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.03803 1.137407 6 53 55.11581  
## BLK 55.25425 1.090994 6 54 56.53413  
## BRN 54.06701 1.377139 6 52 55.71111  
## WHT 54.91047 1.604479 6 52 56.41893  
## WT/BLK 53.26752 1.607146 6 51 55.40620  
## WT/BR 53.44435 1.656265 6 51 55.51074  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.669862   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.25425 a  
## WHT 54.91047 ab  
## BRN 54.06701 ab  
## BL/BR 54.03803 ab  
## WT/BR 53.44435 b  
## WT/BLK 53.26752 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8750295   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.21610 0.8507656 18 53.70743 56.53413  
## MornLow 53.11111 1.2782750 18 51.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6435442   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.21610 a  
## MornLow 53.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8750295 24 54.1636 1.727046 2.753891  
##   
## $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 55.07606 0.04159202 3 55.03284 55.11581 55.05618 55.07951  
## BL/BR:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## BLK:MornHigh 56.17517 0.31315345 3 55.95794 56.53413 55.99569 56.03344  
## BLK:MornLow 54.33333 0.57735027 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 55.13403 0.57072412 3 54.56988 55.71111 54.84549 55.12109  
## BRN:MornLow 53.00000 1.00000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 55.82094 0.97417615 3 54.69682 56.41893 55.52194 56.34706  
## WHT:MornLow 54.00000 1.73205081 3 52.00000 55.00000 53.50000 55.00000  
## WT/BLK:MornHigh 54.53503 0.79843744 3 53.83810 55.40620 54.09945 54.36080  
## WT/BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 54.55536 0.90644602 3 53.70743 55.51074 54.07767 54.44792  
## WT/BR:MornLow 52.33333 1.52752523 3 51.00000 54.00000 51.50000 52.00000  
## Q75  
## BL/BR:MornHigh 55.09766  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.28379  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.41610  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.38300  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.88350  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 54.97933  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.17517 a  
## WHT:MornHigh 55.82094 a  
## BRN:MornHigh 55.13403 ab  
## BL/BR:MornHigh 55.07606 abc  
## WT/BR:MornHigh 54.55536 abcd  
## WT/BLK:MornHigh 54.53503 abcd  
## BLK:MornLow 54.33333 abcd  
## WHT:MornLow 54.00000 abcd  
## BL/BR:MornLow 53.00000 bcd  
## BRN:MornLow 53.00000 bcd  
## WT/BR:MornLow 52.33333 cd  
## WT/BLK:MornLow 52.00000 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 12.366 2.473 4.2388 0.006653 \*\*   
## THIregime 1 43.792 43.792 75.0543 7.489e-09 \*\*\*  
## Colour:THIregime 5 0.763 0.153 0.2615 0.929663   
## Residuals 24 14.003 0.583   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5834709   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.43355 1.277791 6 53 55.92890  
## BLK 55.61370 1.117147 6 54 56.76522  
## BRN 54.99415 1.313147 6 53 56.58228  
## WHT 54.82096 1.330823 6 53 56.15758  
## WT/BLK 53.72457 1.966515 6 51 56.45160  
## WT/BR 54.36396 1.211705 6 53 55.84178  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.363574   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.61370 a  
## BRN 54.99415 ab  
## WHT 54.82096 ab  
## BL/BR 54.43355 ab  
## WT/BR 54.36396 ab  
## WT/BLK 53.72457 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5834709   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.76141 0.7148778 18 54.01233 56.76522  
## MornLow 53.55556 1.0416176 18 51.00000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5255048   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.76141 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5834709 24 54.65848 1.397501 2.24877  
##   
## $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 55.53376 0.3422299 3 55.33153 55.92890 55.33620 55.34086  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.56073 0.3100320 3 56.20401 56.76522 56.45848 56.71295  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 55.98830 0.5881275 3 55.40620 56.58228 55.69131 55.97642  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 55.97526 0.3117593 3 55.61528 56.15758 55.88410 56.15291  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.11581 1.2361156 3 54.01233 56.45160 54.44792 54.88350  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.39458 0.3881664 3 55.14485 55.84178 55.17099 55.19712  
## WT/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.63488  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.73909  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.27935  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.15525  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.51945  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.56073 a  
## BRN:MornHigh 55.98830 ab  
## WHT:MornHigh 55.97526 ab  
## BL/BR:MornHigh 55.53376 abc  
## WT/BR:MornHigh 55.39458 abc  
## WT/BLK:MornHigh 55.11581 abc  
## BLK:MornLow 54.66667 abc  
## BRN:MornLow 54.00000 bcd  
## WHT:MornLow 53.66667 cd  
## BL/BR:MornLow 53.33333 cd  
## WT/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.33333 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 37.532 7.506 4.9543 0.002953 \*\*   
## THIregime 1 42.198 42.198 27.8508 2.062e-05 \*\*\*  
## Colour:THIregime 5 2.201 0.440 0.2905 0.913556   
## Residuals 24 36.364 1.515   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.515149   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.23880 1.466953 6 53 56.97430  
## BLK 53.58488 1.881532 6 51 55.75467  
## BRN 54.75700 1.267047 6 53 56.05958  
## WHT 55.12131 1.746250 6 52 56.80007  
## WT/BLK 52.30985 1.614576 6 50 54.53503  
## WT/BR 54.48416 1.788480 6 52 56.66068  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.197338   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.23880 a  
## WHT 55.12131 a  
## BRN 54.75700 a  
## WT/BR 54.48416 ab  
## BLK 53.58488 ab  
## WT/BLK 52.30985 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.515149   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.33200 1.274092 18 52.27 56.9743  
## MornLow 53.16667 1.689065 18 50.00 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.846827   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.33200 a  
## MornLow 53.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.515149 24 54.24933 2.268993 3.623791  
##   
## $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 56.14427 0.7661100 3 55.46428 56.97430 55.72926 55.99424  
## BL/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 55.16976 0.5611249 3 54.63591 55.75467 54.87731 55.11872  
## BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BRN:MornHigh 55.84733 0.3372313 3 55.45847 56.05958 55.74120 56.02394  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.24262 0.9227437 3 55.17752 56.80007 55.96390 56.75029  
## WHT:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## WT/BLK:MornHigh 53.28636 1.1502479 3 52.27000 54.53503 52.66202 53.05405  
## WT/BLK:MornLow 51.33333 1.5275252 3 50.00000 53.00000 50.50000 51.00000  
## WT/BR:MornHigh 55.30166 1.2877953 3 54.09945 56.66068 54.62215 55.14485  
## WT/BR:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.48427  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 55.43669  
## BLK:MornLow 52.50000  
## BRN:MornHigh 56.04176  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.77518  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 55.90277  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.24262 a  
## BL/BR:MornHigh 56.14427 a  
## BRN:MornHigh 55.84733 a  
## WT/BR:MornHigh 55.30166 ab  
## BLK:MornHigh 55.16976 ab  
## BL/BR:MornLow 54.33333 abc  
## WHT:MornLow 54.00000 abc  
## BRN:MornLow 53.66667 abc  
## WT/BR:MornLow 53.66667 abc  
## WT/BLK:MornHigh 53.28636 abc  
## BLK:MornLow 52.00000 bc  
## WT/BLK:MornLow 51.33333 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 6.431 1.286 1.3406 0.2813   
## THIregime 1 57.399 57.399 59.8231 5.705e-08 \*\*\*  
## Colour:THIregime 5 0.730 0.146 0.1521 0.9774   
## Residuals 24 23.028 0.959   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9594848   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.99691 1.832045 6 52 57.12364  
## BLK 54.14225 1.666856 6 52 55.79135  
## BRN 55.21788 1.516378 6 53 56.97430  
## WHT 54.69531 1.548600 6 53 56.41675  
## WT/BLK 55.05157 1.763465 6 53 57.49700  
## WT/BR 55.47232 1.513005 6 53 57.06142  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.748591   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.47232 a  
## BRN 55.21788 a  
## WT/BLK 55.05157 a  
## BL/BR 54.99691 a  
## WHT 54.69531 a  
## BLK 54.14225 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9594848   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.19208 0.6940353 18 55.29004 57.497  
## MornLow 53.66667 1.1375929 18 52.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6738855   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.19208 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9594848 24 54.92937 1.783259 2.883729  
##   
## $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 56.32715 0.8654587 3 55.40620 57.12364 55.92890 56.45160  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 55.61783 0.2840315 3 55.29004 55.79135 55.53107 55.77209  
## BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BRN:MornHigh 56.43576 0.5466312 3 55.88138 56.97430 56.16649 56.45160  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.05729 0.3116161 3 55.86356 56.41675 55.87756 55.89156  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.10313 1.2071239 3 55.40620 57.49700 55.40620 55.40620  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.61131 0.7055016 3 55.79823 57.06142 56.38626 56.97430  
## WT/BR:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.78762  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 55.78172  
## BLK:MornLow 53.00000  
## BRN:MornHigh 56.71295  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.15416  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 56.45160  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.01786  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.61131 a  
## BRN:MornHigh 56.43576 ab  
## BL/BR:MornHigh 56.32715 ab  
## WT/BLK:MornHigh 56.10313 abc  
## WHT:MornHigh 56.05729 abc  
## BLK:MornHigh 55.61783 abc  
## WT/BR:MornLow 54.33333 abcd  
## BRN:MornLow 54.00000 abcd  
## WT/BLK:MornLow 54.00000 abcd  
## BL/BR:MornLow 53.66667 bcd  
## WHT:MornLow 53.33333 cd  
## BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM37 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.436 2.887 2.3497 0.07171 .   
## THIregime 1 47.162 47.162 38.3835 2.111e-06 \*\*\*  
## Colour:THIregime 5 0.822 0.164 0.1339 0.98294   
## Residuals 24 29.489 1.229   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.22871   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.06286 1.367107 6 54 57.64634  
## BLK 55.10040 1.911572 6 52 57.23565  
## BRN 55.56644 1.413487 6 54 57.16437  
## WHT 56.39121 1.231217 6 55 57.81062  
## WT/BLK 54.44236 1.721274 6 52 56.71295  
## WT/BR 55.63754 1.869498 6 53 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.978764   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.39121 a  
## BL/BR 56.06286 a  
## WT/BR 55.63754 a  
## BRN 55.56644 a  
## BLK 55.10040 a  
## WT/BLK 54.44236 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.22871   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.67805 0.9225746 18 54.3608 58.0197  
## MornLow 54.38889 1.3345583 18 52.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7625913   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.67805 a  
## MornLow 54.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.22871 24 55.53347 1.996043 3.263324  
##   
## $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 57.12572 0.5324007 3 56.58228 57.64634 56.86540 57.14853  
## BL/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 56.53413 0.7969748 3 55.66755 57.23565 56.18337 56.69919  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 56.79954 0.3160756 3 56.60841 57.16437 56.61712 56.62583  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 57.44909 0.3147975 3 57.23565 57.81062 57.26832 57.30099  
## WHT:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WT/BLK:MornHigh 55.55139 1.1763438 3 54.36080 56.71295 54.97062 55.58043  
## WT/BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.60841 1.2555685 3 55.61528 58.01970 55.90277 56.19025  
## WT/BR:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.39744  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.96742  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.89510  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.55580  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.14669  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.10498  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.44909 a  
## BL/BR:MornHigh 57.12572 a  
## BRN:MornHigh 56.79954 ab  
## WT/BR:MornHigh 56.60841 ab  
## BLK:MornHigh 56.53413 abc  
## WT/BLK:MornHigh 55.55139 abc  
## WHT:MornLow 55.33333 abc  
## BL/BR:MornLow 55.00000 abc  
## WT/BR:MornLow 54.66667 abc  
## BRN:MornLow 54.33333 abc  
## BLK:MornLow 53.66667 bc  
## WT/BLK:MornLow 53.33333 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 16.899 3.380 2.4648 0.06149 .   
## THIregime 1 52.983 52.983 38.6388 2.008e-06 \*\*\*  
## Colour:THIregime 5 1.176 0.235 0.1715 0.97066   
## Residuals 24 32.910 1.371   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.37123   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.08137 1.601454 6 52 55.66755  
## BLK 54.69090 1.848379 6 52 56.94679  
## BRN 55.08179 1.725616 6 53 57.27921  
## WHT 56.23430 1.784369 6 53 58.05455  
## WT/BLK 55.50862 1.362226 6 54 57.14853  
## WT/BR 54.68193 1.847992 6 52 56.97430  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.090376   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.23430 a  
## WT/BLK 55.50862 ab  
## BRN 55.08179 ab  
## BLK 54.69090 ab  
## WT/BR 54.68193 ab  
## BL/BR 54.08137 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.37123   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.25964 0.856955 18 55.18219 58.05455  
## MornLow 53.83333 1.504894 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8056052   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.25964 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.37123 24 55.04649 2.127285 3.447392  
##   
## $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 55.49608 0.2722299 3 55.18219 55.66755 55.41035 55.63851  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.04847 0.8239870 3 55.32780 56.94679 55.59931 55.87082  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 56.16359 0.9662031 3 55.59627 57.27921 55.60578 55.61528  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 57.13526 1.0915129 3 55.92890 58.05455 56.67561 57.42233  
## WHT:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## WT/BLK:MornHigh 56.68391 0.4023746 3 56.45160 57.14853 56.45160 56.45160  
## WT/BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BR:MornHigh 56.03054 0.8649739 3 55.27553 56.97430 55.55865 55.84178  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.65303  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.40881  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.44724  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.73844  
## WHT:MornLow 56.50000  
## WT/BLK:MornHigh 56.80007  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.40804  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.13526 a  
## WT/BLK:MornHigh 56.68391 ab  
## BRN:MornHigh 56.16359 ab  
## BLK:MornHigh 56.04847 abc  
## WT/BR:MornHigh 56.03054 abc  
## BL/BR:MornHigh 55.49608 abc  
## WHT:MornLow 55.33333 abc  
## WT/BLK:MornLow 54.33333 abc  
## BRN:MornLow 54.00000 abc  
## BLK:MornLow 53.33333 bc  
## WT/BR:MornLow 53.33333 bc  
## BL/BR:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM39 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.936 2.787 5.1213 0.002459 \*\*   
## THIregime 1 45.766 45.766 84.0952 2.594e-09 \*\*\*  
## Colour:THIregime 5 0.599 0.120 0.2202 0.950323   
## Residuals 24 13.061 0.544   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5442205   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.61220 1.498760 6 53 57.19831  
## BLK 54.69116 1.545211 6 53 56.42256  
## BRN 55.39128 1.234153 6 54 56.84363  
## WHT 55.42094 1.261822 6 54 56.86976  
## WT/BLK 53.87672 1.399359 6 52 55.40620  
## WT/BR 54.43946 1.475760 6 52 55.92890  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.316912   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.61220 a  
## WHT 55.42094 a  
## BRN 55.39128 a  
## BLK 54.69116 ab  
## WT/BR 54.43946 ab  
## WT/BLK 53.87672 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5442205   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.03280 0.7064814 18 54.62215 57.19831  
## MornLow 53.77778 1.0602750 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5075216   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.03280 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5442205 24 54.90529 1.34361 2.171815  
##   
## $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 56.55773 0.7747767 3 55.69659 57.19831 56.23744 56.77829  
## BL/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BLK:MornHigh 56.04898 0.3237434 3 55.85050 56.42256 55.86219 55.87388  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.44922 0.3416934 3 56.24252 56.84363 56.25202 56.26153  
## BRN:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WHT:MornHigh 56.50854 0.3138796 3 56.30226 56.86976 56.32793 56.35359  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.08677 0.4116973 3 54.62215 55.40620 54.92706 55.23197  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.54559 0.6639182 3 54.77896 55.92890 55.35393 55.92890  
## WT/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.98830  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.14822  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.55258  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.61168  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.31908  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.92890  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.55773 a  
## WHT:MornHigh 56.50854 a  
## BRN:MornHigh 56.44922 ab  
## BLK:MornHigh 56.04898 ab  
## WT/BR:MornHigh 55.54559 ab  
## WT/BLK:MornHigh 55.08677 abc  
## BL/BR:MornLow 54.66667 abcd  
## BRN:MornLow 54.33333 bcd  
## WHT:MornLow 54.33333 bcd  
## BLK:MornLow 53.33333 cd  
## WT/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM40 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 4.954 0.991 0.4592 0.8025   
## THIregime 1 50.099 50.099 23.2177 6.589e-05 \*\*\*  
## Colour:THIregime 5 0.363 0.073 0.0337 0.9993   
## Residuals 24 51.787 2.158   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.157802   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.51202 1.538092 6 52 56.07824  
## BLK 54.59492 2.036164 6 51 56.74199  
## BRN 55.33544 1.552687 6 53 57.25941  
## WHT 54.32501 1.912312 6 52 56.73037  
## WT/BLK 54.15954 1.850304 6 52 56.71295  
## WT/BR 54.48447 2.108767 6 52 57.18338  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.622255   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.33544 a  
## BLK 54.59492 a  
## BL/BR 54.51202 a  
## WT/BR 54.48447 a  
## WHT 54.32501 a  
## WT/BLK 54.15954 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.157802   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.74825 0.9339065 18 54.3608 57.25941  
## MornLow 53.38889 1.5769997 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.010585   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.74825 a  
## MornLow 53.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.157802 24 54.56857 2.691927 4.324553  
##   
## $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 55.69071 0.6426964 3 54.94884 56.07824 55.49695 56.04506  
## BL/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## BLK:MornHigh 55.85651 1.1210597 3 54.59602 56.74199 55.41377 56.23152  
## BLK:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## BRN:MornHigh 56.33756 0.8252719 3 55.66755 57.25941 55.87663 56.08571  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 55.65002 0.9356138 3 55.10751 56.73037 55.10985 55.11218  
## WHT:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## WT/BLK:MornHigh 55.31908 1.2350919 3 54.36080 56.71295 54.62215 54.88350  
## WT/BLK:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.63561 1.3448267 3 54.75283 57.18338 54.86172 54.97062  
## WT/BR:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.06165  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.48675  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.67256  
## BRN:MornLow 55.00000  
## WHT:MornHigh 55.92128  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 55.79823  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.07700  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.33756 a  
## BLK:MornHigh 55.85651 a  
## BL/BR:MornHigh 55.69071 a  
## WHT:MornHigh 55.65002 a  
## WT/BR:MornHigh 55.63561 a  
## WT/BLK:MornHigh 55.31908 a  
## BRN:MornLow 54.33333 a  
## BL/BR:MornLow 53.33333 a  
## BLK:MornLow 53.33333 a  
## WT/BR:MornLow 53.33333 a  
## WHT:MornLow 53.00000 a  
## WT/BLK:MornLow 53.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM41 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.409 2.682 2.2173 0.08568 .   
## THIregime 1 46.550 46.550 38.4886 2.068e-06 \*\*\*  
## Colour:THIregime 5 1.297 0.259 0.2144 0.95297   
## Residuals 24 29.027 1.209   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.20946   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.39093 1.691605 6 51 55.40620  
## BLK 54.26742 1.562480 6 52 56.05958  
## BRN 54.90584 1.764597 6 52 56.97430  
## WHT 55.01065 1.315374 6 53 56.52627  
## WT/BLK 53.63746 1.683230 6 51 55.40620  
## WT/BR 54.61048 1.547484 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.963202   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.01065 a  
## BRN 54.90584 a  
## WT/BR 54.61048 a  
## BLK 54.26742 a  
## WT/BLK 53.63746 a  
## BL/BR 53.39093 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.20946   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.44093 0.8128662 18 54.01233 56.9743  
## MornLow 53.16667 1.3826658 18 51.00000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7565939   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.44093 a  
## MornLow 53.16667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.20946 24 54.3038 2.025189 3.23766  
##   
## $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 54.78186 0.5913889 3 54.23013 55.40620 54.46970 54.70927  
## BL/BR:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## BLK:MornHigh 55.53484 0.5332093 3 54.99354 56.05958 55.27247 55.55139  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 55.81169 1.1501494 3 54.67442 56.97430 55.23038 55.78635  
## BRN:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WHT:MornHigh 56.02131 0.5111406 3 55.50421 56.52627 55.76882 56.03344  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.94158 0.8047493 3 54.01233 55.40620 54.70927 55.40620  
## WT/BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.55430 0.9904901 3 54.49148 56.45160 55.10565 55.71982  
## WT/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.05773  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.80548  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.38032  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.27986  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.40620  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.08571  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.02131 a  
## BRN:MornHigh 55.81169 a  
## WT/BR:MornHigh 55.55430 ab  
## BLK:MornHigh 55.53484 ab  
## WT/BLK:MornHigh 54.94158 abc  
## BL/BR:MornHigh 54.78186 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 54.00000 abc  
## WT/BR:MornLow 53.66667 abc  
## BLK:MornLow 53.00000 abc  
## WT/BLK:MornLow 52.33333 bc  
## BL/BR:MornLow 52.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM42 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.074 1.215 0.8945 0.5005   
## THIregime 1 52.346 52.346 38.5420 2.047e-06 \*\*\*  
## Colour:THIregime 5 0.476 0.095 0.0701 0.9961   
## Residuals 24 32.595 1.358   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.358144   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.20402 1.957974 6 52 57.49700  
## BLK 56.00529 1.312404 6 54 57.52604  
## BRN 54.67916 1.530229 6 53 56.36448  
## WHT 55.22539 1.831022 6 53 57.53185  
## WT/BLK 55.46506 1.738915 6 53 57.75835  
## WT/BR 54.98944 1.676104 6 53 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.080377   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.00529 a  
## WT/BLK 55.46506 a  
## WHT 55.22539 a  
## BL/BR 55.20402 a  
## WT/BR 54.98944 a  
## BRN 54.67916 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.358144   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.46723 0.7746583 18 55.27553 57.75835  
## MornLow 54.05556 1.3048427 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8017519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.46723 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.358144 24 55.26139 2.108876 3.430903  
##   
## $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 56.40804 1.1113779 3 55.27553 57.49700 55.86356 56.45160  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 57.01057 0.5236475 3 56.47911 57.52604 56.75284 57.02657  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 56.02499 0.2947844 3 55.83386 56.36448 55.85525 55.87663  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.45077 0.9364257 3 55.89156 57.53185 55.91023 55.92890  
## WHT:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BLK:MornHigh 56.59679 1.1763438 3 55.40620 57.75835 56.01602 56.62583  
## WT/BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BR:MornHigh 56.31221 0.6639182 3 55.92890 57.07884 55.92890 55.92890  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.97430  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 57.27630  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.12056  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.73037  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 57.19209  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 56.50387  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.01057 a  
## WT/BLK:MornHigh 56.59679 ab  
## WHT:MornHigh 56.45077 ab  
## BL/BR:MornHigh 56.40804 ab  
## WT/BR:MornHigh 56.31221 ab  
## BRN:MornHigh 56.02499 ab  
## BLK:MornLow 55.00000 ab  
## WT/BLK:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BR:MornLow 53.66667 ab  
## BRN:MornLow 53.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM43 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 30.724 6.145 10.0894 2.691e-05 \*\*\*  
## THIregime 1 39.378 39.378 64.6562 2.883e-08 \*\*\*  
## Colour:THIregime 5 0.903 0.181 0.2965 0.9101   
## Residuals 24 14.617 0.609   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.609041   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.44444 1.287313 6 53 55.92890  
## BLK 55.12014 1.420757 6 53 56.78173  
## BRN 55.00207 1.317555 6 53 56.54664  
## WHT 54.84425 1.354639 6 53 56.20767  
## WT/BLK 52.48408 1.337981 6 51 54.09945  
## WT/BR 55.04690 1.393801 6 53 56.88718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.393133   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.12014 a  
## WT/BR 55.04690 a  
## BRN 55.00207 a  
## WHT 54.84425 a  
## BL/BR 54.44444 a  
## WT/BLK 52.48408 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.609041   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.53618 1.023246 18 53.3154 56.88718  
## MornLow 53.44444 1.293523 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5368962   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.53618 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.609041 24 54.49031 1.432201 2.297517  
##   
## $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 55.55554 0.3254852 3 55.33153 55.92890 55.36886 55.40620  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.24028 0.5312642 3 55.71982 56.78173 55.96955 56.21929  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.00414 0.5722358 3 55.40620 56.54664 55.73289 56.05958  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.02182 0.3069343 3 55.66755 56.20767 55.92890 56.19025  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 53.63483 0.4116973 3 53.31540 54.09945 53.40252 53.48963  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 55.76047 0.9979074 3 54.98804 56.88718 55.19712 55.40620  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.66755  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.50051  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.30311  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.19896  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 56.14669  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.24028 a  
## WHT:MornHigh 56.02182 a  
## BRN:MornHigh 56.00414 a  
## WT/BR:MornHigh 55.76047 ab  
## BL/BR:MornHigh 55.55554 abc  
## WT/BR:MornLow 54.33333 abc  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 53.66667 bc  
## WT/BLK:MornHigh 53.63483 bc  
## BL/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 51.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM44 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.286 1.457 1.0166 0.4298   
## THIregime 1 53.736 53.736 37.4898 2.521e-06 \*\*\*  
## Colour:THIregime 5 0.809 0.162 0.1129 0.9884   
## Residuals 24 34.401 1.433   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.433362   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.63164 1.480699 6 53 56.27737  
## BLK 54.14683 1.820919 6 52 56.34156  
## BRN 55.38112 2.385077 6 51 57.40988  
## WHT 54.92581 1.440465 6 53 56.37693  
## WT/BLK 54.52948 1.384938 6 53 56.19025  
## WT/BR 55.38230 1.612264 6 53 57.39246  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.13721   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.38230 a  
## BRN 55.38112 a  
## WHT 54.92581 a  
## BL/BR 54.63164 a  
## WT/BLK 54.52948 a  
## BLK 54.14683 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.433362   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05462 0.7752583 18 54.56988 57.40988  
## MornLow 53.61111 1.3779306 18 51.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8236543   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05462 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.433362 24 54.83286 2.183419 3.524629  
##   
## $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 55.92994 0.3017863 3 55.73289 56.27737 55.75622 55.77956  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.62700 0.6191613 3 55.24939 56.34156 55.26972 55.29004  
## BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BRN:MornHigh 56.42890 1.6107786 3 54.56988 57.40988 55.93840 57.30693  
## BRN:MornLow 54.33333 2.8867513 3 51.00000 56.00000 53.50000 56.00000  
## WHT:MornHigh 56.18496 0.3125073 3 55.82436 56.37693 56.08898 56.35359  
## WHT:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.72563 0.4116973 3 55.40620 56.19025 55.49332 55.58043  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.43127 0.9295938 3 55.53688 57.39246 55.95068 56.36448  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.02846  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 55.81580  
## BLK:MornLow 53.00000  
## BRN:MornHigh 57.35841  
## BRN:MornLow 56.00000  
## WHT:MornHigh 56.36526  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.88534  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.87847  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.43127 a  
## BRN:MornHigh 56.42890 a  
## WHT:MornHigh 56.18496 ab  
## BL/BR:MornHigh 55.92994 ab  
## WT/BLK:MornHigh 55.72563 ab  
## BLK:MornHigh 55.62700 ab  
## BRN:MornLow 54.33333 ab  
## WT/BR:MornLow 54.33333 ab  
## WHT:MornLow 53.66667 ab  
## BL/BR:MornLow 53.33333 ab  
## WT/BLK:MornLow 53.33333 ab  
## BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM45 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.957 2.191 1.7925 0.1525   
## THIregime 1 48.112 48.112 39.3559 1.746e-06 \*\*\*  
## Colour:THIregime 5 0.451 0.090 0.0738 0.9956   
## Residuals 24 29.340 1.222   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.222483   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.80850 1.670026 6 52 56.68391  
## BLK 54.89392 1.579352 6 53 56.83675  
## BRN 54.28995 1.585284 6 52 56.11897  
## WHT 55.65761 1.976145 6 52 57.39246  
## WT/BLK 53.92028 1.443587 6 52 55.40620  
## WT/BR 55.03269 1.339772 6 53 56.58228  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.973743   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.65761 a  
## WT/BR 55.03269 a  
## BLK 54.89392 a  
## BL/BR 54.80850 a  
## BRN 54.28995 a  
## WT/BLK 53.92028 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.222483   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.92320 0.7847699 18 54.70927 57.39246  
## MornLow 53.61111 1.3345583 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7606562   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.92320 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.222483 24 54.76716 2.018837 3.255044  
##   
## $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 55.95033 0.8531025 3 55.01418 56.68391 55.58354 56.15291  
## BL/BR:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BLK:MornHigh 56.12117 0.6197711 3 55.75467 56.83675 55.76338 55.77209  
## BLK:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BRN:MornHigh 55.57991 0.5393316 3 55.04031 56.11897 55.31037 55.58043  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.64855 1.2180555 3 55.24286 57.39246 56.27659 57.31032  
## WHT:MornLow 54.66667 2.3094011 3 52.00000 56.00000 54.00000 56.00000  
## WT/BLK:MornHigh 55.17389 0.4023746 3 54.70927 55.40620 55.05773 55.40620  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.06538 0.5367640 3 55.51074 56.58228 55.80694 56.10313  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.41841  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.30442  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.84970  
## BRN:MornLow 53.50000  
## WHT:MornHigh 57.35139  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.40620  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.34270  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.64855 a  
## BLK:MornHigh 56.12117 ab  
## WT/BR:MornHigh 56.06538 ab  
## BL/BR:MornHigh 55.95033 ab  
## BRN:MornHigh 55.57991 abc  
## WT/BLK:MornHigh 55.17389 abc  
## WHT:MornLow 54.66667 abc  
## WT/BR:MornLow 54.00000 abc  
## BL/BR:MornLow 53.66667 abc  
## BLK:MornLow 53.66667 abc  
## BRN:MornLow 53.00000 bc  
## WT/BLK:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM46 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 22.953 4.591 4.8223 0.003418 \*\*   
## THIregime 1 48.578 48.578 51.0303 2.204e-07 \*\*\*  
## Colour:THIregime 5 1.278 0.256 0.2685 0.925865   
## Residuals 24 22.847 0.952   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9519479   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.38874 1.681578 6 52 56.32093  
## BLK 54.70929 1.562066 6 53 56.42547  
## BRN 54.85190 1.984898 6 52 57.32277  
## WHT 55.72134 1.227593 6 54 56.97430  
## WT/BLK 53.78960 1.318560 6 52 55.23197  
## WT/BR 56.17560 1.444796 6 54 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.74171   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.17560 a  
## WHT 55.72134 ab  
## BRN 54.85190 abc  
## BLK 54.70929 abc  
## BL/BR 54.38874 bc  
## WT/BLK 53.78960 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9519479   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.10105 0.9063985 18 54.3608 58.0197  
## MornLow 53.77778 1.3956047 18 52.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6712335   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.10105 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9519479 24 54.93941 1.775917 2.872381  
##   
## $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 55.77748 0.5324007 3 55.25686 56.32093 55.50576 55.75467  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.08525 0.2949545 3 55.90139 56.42547 55.91514 55.92890  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.03714 1.1409954 3 55.14485 57.32277 55.39432 55.64379  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 56.77601 0.3116814 3 56.41675 56.97430 56.67686 56.93696  
## WHT:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.91254 0.4798012 3 54.36080 55.23197 54.75283 55.14485  
## WT/BLK:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## WT/BR:MornHigh 57.01786 0.8700770 3 56.45160 58.01970 56.51694 56.58228  
## WT/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.03780  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.17718  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.48328  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.95563  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.18841  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.30099  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.01786 a  
## WHT:MornHigh 56.77601 a  
## BLK:MornHigh 56.08525 ab  
## BRN:MornHigh 56.03714 ab  
## BL/BR:MornHigh 55.77748 abc  
## WT/BR:MornLow 55.33333 abcd  
## WT/BLK:MornHigh 54.91254 abcd  
## WHT:MornLow 54.66667 abcd  
## BRN:MornLow 53.66667 bcd  
## BLK:MornLow 53.33333 bcd  
## BL/BR:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.66667 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 17.755 3.551 4.5538 0.004626 \*\*   
## THIregime 1 54.768 54.768 70.2343 1.373e-08 \*\*\*  
## Colour:THIregime 5 1.405 0.281 0.3603 0.870475   
## Residuals 24 18.715 0.780   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7797846   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.77735 1.940249 6 52 57.19831  
## BLK 54.74169 1.751521 6 52 56.53872  
## BRN 55.21709 1.515963 6 53 56.97430  
## WHT 55.24908 1.545781 6 53 57.04399  
## WT/BLK 54.24666 1.561418 6 52 56.19025  
## WT/BR 56.50198 1.009678 6 55 57.67123  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.576364   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.50198 a  
## WHT 55.24908 ab  
## BRN 55.21709 ab  
## BL/BR 54.77735 b  
## BLK 54.74169 b  
## WT/BLK 54.24666 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7797846   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.35573 0.7706702 18 54.8835 57.67123  
## MornLow 53.88889 1.2782750 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6075113   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.35573 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7797846 24 55.12231 1.60199 2.599697  
##   
## $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 56.22136 0.9069454 3 55.40620 57.19831 55.73289 56.05958  
## BL/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BLK:MornHigh 56.15005 0.6211206 3 55.43371 56.53872 55.95572 56.47774  
## BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## BRN:MornHigh 56.43418 0.5490424 3 55.87663 56.97430 56.16412 56.45160  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.49817 0.5412713 3 55.96157 57.04399 56.22525 56.48894  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.49332 0.6577164 3 54.88350 56.19025 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 57.33729 0.3493730 3 56.97430 57.67123 57.17031 57.36633  
## WT/BR:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.62894  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.50823  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.71295  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.76646  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.79823  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.51878  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.33729 a  
## WHT:MornHigh 56.49817 ab  
## BRN:MornHigh 56.43418 ab  
## BL/BR:MornHigh 56.22136 ab  
## BLK:MornHigh 56.15005 ab  
## WT/BR:MornLow 55.66667 abc  
## WT/BLK:MornHigh 55.49332 abcd  
## BRN:MornLow 54.00000 bcd  
## WHT:MornLow 54.00000 bcd  
## BL/BR:MornLow 53.33333 cd  
## BLK:MornLow 53.33333 cd  
## WT/BLK:MornLow 53.00000 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 33.192 6.638 6.5004 0.0005935 \*\*\*  
## THIregime 1 37.471 37.471 36.6920 2.959e-06 \*\*\*  
## Colour:THIregime 5 0.725 0.145 0.1419 0.9805895   
## Residuals 24 24.510 1.021   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.02124   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.08072 1.392297 6 52 55.75467  
## BLK 55.04229 1.345567 6 53 56.59679  
## BRN 53.85296 1.985695 6 51 56.30905  
## WHT 55.48871 1.215083 6 54 56.97430  
## WT/BLK 52.48408 1.337981 6 51 54.09945  
## WT/BR 54.50594 1.257976 6 53 56.13798  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.803986   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.48871 a  
## BLK 55.04229 a  
## WT/BR 54.50594 a  
## BL/BR 54.08072 ab  
## BRN 53.85296 ab  
## WT/BLK 52.48408 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.02124   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.26268 1.065937 18 53.3154 56.9743  
## MornLow 53.22222 1.516791 18 51.0000 56.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.695234   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.26268 a  
## MornLow 53.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.02124 24 54.24245 1.863051 2.975085  
##   
## $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 55.16144 0.5851027 3 54.58481 55.75467 54.86483 55.14485  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.08459 0.5169560 3 55.56301 56.59679 55.82849 56.09396  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 55.03925 1.1411603 3 54.09945 56.30905 54.40436 54.70927  
## BRN:MornLow 52.66667 2.0816660 3 51.00000 55.00000 51.50000 52.00000  
## WHT:MornHigh 56.31076 0.5748435 3 55.96375 56.97430 55.97899 55.99424  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 53.63483 0.4116973 3 53.31540 54.09945 53.40252 53.48963  
## WT/BLK:MornLow 51.33333 0.5773503 3 51.00000 52.00000 51.00000 51.00000  
## WT/BR:MornHigh 55.34522 0.7139847 3 54.75283 56.13798 54.94884 55.14485  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.44976  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.34538  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.50916  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.48427  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 53.79454  
## WT/BLK:MornLow 51.50000  
## WT/BR:MornHigh 55.64142  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.31076 a  
## BLK:MornHigh 56.08459 a  
## WT/BR:MornHigh 55.34522 ab  
## BL/BR:MornHigh 55.16144 ab  
## BRN:MornHigh 55.03925 ab  
## WHT:MornLow 54.66667 ab  
## BLK:MornLow 54.00000 abc  
## WT/BR:MornLow 53.66667 abc  
## WT/BLK:MornHigh 53.63483 abc  
## BL/BR:MornLow 53.00000 bc  
## BRN:MornLow 52.66667 bc  
## WT/BLK:MornLow 51.33333 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 13.985 2.797 2.9293 0.0334 \*   
## THIregime 1 47.409 47.409 49.6511 2.764e-07 \*\*\*  
## Colour:THIregime 5 0.811 0.162 0.1698 0.9713   
## Residuals 24 22.916 0.955   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9548385   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.83028 1.340207 6 53 56.19025  
## BLK 54.65853 1.816961 6 52 56.86976  
## BRN 54.28995 1.585284 6 52 56.11897  
## WHT 55.39179 1.595643 6 53 57.35761  
## WT/BLK 53.50678 1.361435 6 52 55.14485  
## WT/BR 55.20807 1.488932 6 53 57.14853  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.744352   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.39179 a  
## WT/BR 55.20807 ab  
## BL/BR 54.83028 ab  
## BLK 54.65853 ab  
## BRN 54.28995 ab  
## WT/BLK 53.50678 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9548385   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.79513 0.8121075 18 54.3608 57.35761  
## MornLow 53.50000 1.2485285 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6722519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.79513 a  
## MornLow 53.50000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9548385 24 54.64757 1.78811 2.876739  
##   
## $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 55.99389 0.3083343 3 55.63851 56.19025 55.89571 56.15291  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 55.98372 0.8072360 3 55.29004 56.86976 55.54070 55.79135  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 55.57991 0.5393316 3 55.04031 56.11897 55.31037 55.58043  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.45025 0.8190522 3 55.76556 57.35761 55.99657 56.22759  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.68023 0.4116973 3 54.36080 55.14485 54.44792 54.53503  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.08281 0.9557589 3 55.30166 57.14853 55.54994 55.79823  
## WT/BR:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.17158  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.33055  
## BLK:MornLow 54.00000  
## BRN:MornHigh 55.84970  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.79260  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.83994  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.47338  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.45025 a  
## WT/BR:MornHigh 56.08281 ab  
## BL/BR:MornHigh 55.99389 ab  
## BLK:MornHigh 55.98372 ab  
## BRN:MornHigh 55.57991 abc  
## WT/BLK:MornHigh 54.68023 abcd  
## WHT:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.33333 abcd  
## BL/BR:MornLow 53.66667 abcd  
## BLK:MornLow 53.33333 bcd  
## BRN:MornLow 53.00000 cd  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM50 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 21.751 4.350 2.4643 0.06153 .   
## THIregime 1 40.985 40.985 23.2168 6.591e-05 \*\*\*  
## Colour:THIregime 5 0.829 0.166 0.0939 0.99237   
## Residuals 24 42.367 1.765   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.765306   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.29273 1.839599 6 52 57.20661  
## BLK 54.69090 1.848379 6 52 56.94679  
## BRN 55.34204 1.873407 6 52 57.32277  
## WHT 56.21101 1.262097 6 54 57.46215  
## WT/BLK 53.74604 1.480017 6 52 55.75467  
## WT/BR 54.45253 1.656062 6 52 56.55614  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.371806   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.21101 a  
## BRN 55.34204 ab  
## BL/BR 55.29273 ab  
## BLK 54.69090 ab  
## WT/BR 54.45253 ab  
## WT/BLK 53.74604 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.765306   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.02287 1.061899 18 54.3608 57.46215  
## MornLow 53.88889 1.640979 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.914065   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.02287 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.765306 24 54.95588 2.417664 3.911519  
##   
## $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 56.25213 1.1686051 3 54.94884 57.20661 55.77489 56.60094  
## BL/BR:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## BLK:MornHigh 56.04847 0.8239870 3 55.32780 56.94679 55.59931 55.87082  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 56.35076 1.1782639 3 55.04031 57.32277 55.86475 56.68919  
## BRN:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WHT:MornHigh 57.08869 0.5813119 3 56.41893 57.46215 56.90196 57.38499  
## WHT:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WT/BLK:MornHigh 54.82542 0.8047493 3 54.36080 55.75467 54.36080 54.36080  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.57172 0.8747745 3 54.88350 56.55614 55.07951 55.27553  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.90378  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.40881  
## BLK:MornLow 54.00000  
## BRN:MornHigh 57.00598  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.42357  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.05773  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.91583  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.08869 a  
## BRN:MornHigh 56.35076 ab  
## BL/BR:MornHigh 56.25213 ab  
## BLK:MornHigh 56.04847 ab  
## WT/BR:MornHigh 55.57172 ab  
## WHT:MornLow 55.33333 ab  
## WT/BLK:MornHigh 54.82542 ab  
## BL/BR:MornLow 54.33333 ab  
## BRN:MornLow 54.33333 ab  
## BLK:MornLow 53.33333 ab  
## WT/BR:MornLow 53.33333 ab  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM51 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 7.617 1.523 2.1096 0.09911 .   
## THIregime 1 48.822 48.822 67.6081 1.936e-08 \*\*\*  
## Colour:THIregime 5 0.565 0.113 0.1566 0.97591   
## Residuals 24 17.331 0.722   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7221321   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.61911 1.533367 6 53 57.30099  
## BLK 54.70010 1.553487 6 53 56.42409  
## BRN 54.89242 1.579336 6 53 56.84363  
## WHT 55.19666 1.494731 6 53 56.93945  
## WT/BLK 54.11598 1.466119 6 52 55.92890  
## WT/BR 54.79633 1.304279 6 53 56.13798  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.516972   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.61911 a  
## WHT 55.19666 a  
## BRN 54.89242 a  
## WT/BR 54.79633 a  
## BLK 54.70010 a  
## WT/BLK 54.11598 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7221321   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05131 0.6818057 18 54.3608 57.30099  
## MornLow 53.72222 1.0178152 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5846223   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05131 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7221321 24 54.88677 1.548249 2.501749  
##   
## $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 56.57156 0.9073274 3 55.55554 57.30099 56.20684 56.85814  
## BL/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BLK:MornHigh 56.06686 0.3095876 3 55.87663 56.42409 55.88825 55.89986  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.11818 0.6284732 3 55.73883 56.84363 55.75546 55.77209  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.39331 0.5381326 3 55.86356 56.93945 56.12025 56.37693  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.23197 0.7984374 3 54.36080 55.92890 54.88350 55.40620  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.92600 0.3018229 3 55.58043 56.13798 55.82000 56.05958  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 57.07957  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.16198  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.30786  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.65819  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.09878  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.57156 a  
## WHT:MornHigh 56.39331 ab  
## BRN:MornHigh 56.11818 abc  
## BLK:MornHigh 56.06686 abc  
## WT/BR:MornHigh 55.92600 abc  
## WT/BLK:MornHigh 55.23197 abcd  
## BL/BR:MornLow 54.66667 abcd  
## WHT:MornLow 54.00000 bcd  
## BRN:MornLow 53.66667 cd  
## WT/BR:MornLow 53.66667 cd  
## BLK:MornLow 53.33333 d  
## WT/BLK:MornLow 53.00000 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 6.918 1.384 1.0742 0.3993   
## THIregime 1 48.258 48.258 37.4688 2.531e-06 \*\*\*  
## Colour:THIregime 5 0.248 0.050 0.0385 0.9991   
## Residuals 24 30.911 1.288   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.287959   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.84272 1.534171 6 53 56.75029  
## BLK 55.73747 1.436481 6 54 57.52451  
## BRN 55.09763 1.404266 6 53 56.73671  
## WHT 55.45625 1.934467 6 52 57.49700  
## WT/BLK 54.66016 1.704386 6 52 56.45160  
## WT/BR 54.48592 1.687380 6 52 56.62583  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.025911   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.73747 a  
## WHT 55.45625 a  
## BRN 55.09763 a  
## BL/BR 54.84272 a  
## WT/BLK 54.66016 a  
## WT/BR 54.48592 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.287959   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.20449 0.7783515 18 54.8835 57.52451  
## MornLow 53.88889 1.2782750 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7807611   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.20449 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.287959 24 55.04669 2.061673 3.341077  
##   
## $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 56.01878 0.6336669 3 55.63851 56.75029 55.65303 55.66755  
## BL/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## BLK:MornHigh 56.80827 0.6208966 3 56.42256 57.52451 56.45015 56.47774  
## BLK:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## BRN:MornHigh 56.19527 0.5617072 3 55.61528 56.73671 55.92454 56.23381  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.57916 1.1132185 3 55.34086 57.49700 56.12025 56.89963  
## WHT:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## WT/BLK:MornHigh 55.98698 0.8047493 3 55.05773 56.45160 55.75467 56.45160  
## WT/BLK:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WT/BR:MornHigh 55.63851 0.8940960 3 54.88350 56.62583 55.14485 55.40620  
## WT/BR:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.20892  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 57.00112  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.48526  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.19831  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.45160  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.01602  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.80827 a  
## WHT:MornHigh 56.57916 ab  
## BRN:MornHigh 56.19527 ab  
## BL/BR:MornHigh 56.01878 ab  
## WT/BLK:MornHigh 55.98698 ab  
## WT/BR:MornHigh 55.63851 ab  
## BLK:MornLow 54.66667 ab  
## WHT:MornLow 54.33333 ab  
## BRN:MornLow 54.00000 ab  
## BL/BR:MornLow 53.66667 ab  
## WT/BLK:MornLow 53.33333 b  
## WT/BR:MornLow 53.33333 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 14.040 2.808 1.6524 0.1846   
## THIregime 1 48.084 48.084 28.2951 1.855e-05 \*\*\*  
## Colour:THIregime 5 1.187 0.237 0.1397 0.9813   
## Residuals 24 40.785 1.699   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.699389   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.10350 1.774900 6 52 56.21929  
## BLK 55.23451 1.971849 6 52 57.54927  
## BRN 55.12232 1.426341 6 53 56.80007  
## WHT 56.24016 1.072177 6 55 57.45966  
## WT/BLK 54.96445 1.923479 6 52 57.49700  
## WT/BR 55.26936 2.022143 6 52 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.327103   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 56.24016 a  
## WT/BR 55.26936 a  
## BLK 55.23451 a  
## BRN 55.12232 a  
## WT/BLK 54.96445 a  
## BL/BR 54.10350 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.699389   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.31143 0.9705082 18 54.3608 57.75835  
## MornLow 54.00000 1.5339300 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.896837   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.31143 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.699389 24 55.15572 2.363502 3.837796  
##   
## $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 55.54033 0.5906549 3 55.14485 56.21929 55.20085 55.25686  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 56.46902 1.0716412 3 55.40620 57.54927 55.92890 56.45160  
## BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 56.24463 0.5543818 3 55.69131 56.80007 55.96691 56.24252  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 57.14698 0.2712867 3 56.97430 57.45966 56.99063 57.00697  
## WHT:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WT/BLK:MornHigh 55.92890 1.5681000 3 54.36080 57.49700 55.14485 55.92890  
## WT/BLK:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BR:MornHigh 56.53872 1.1784924 3 55.40620 57.75835 55.92890 56.45160  
## WT/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.73807  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 57.00044  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.52129  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.23332  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 55.00000  
## WT/BR:MornHigh 57.10498  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 57.14698 a  
## WT/BR:MornHigh 56.53872 a  
## BLK:MornHigh 56.46902 ab  
## BRN:MornHigh 56.24463 ab  
## WT/BLK:MornHigh 55.92890 ab  
## BL/BR:MornHigh 55.54033 ab  
## WHT:MornLow 55.33333 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WT/BLK:MornLow 54.00000 ab  
## WT/BR:MornLow 54.00000 ab  
## BL/BR:MornLow 52.66667 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 11.032 2.206 2.1203 0.09769 .   
## THIregime 1 46.187 46.187 44.3839 6.849e-07 \*\*\*  
## Colour:THIregime 5 0.592 0.118 0.1138 0.98815   
## Residuals 24 24.975 1.041   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.040625   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.93835 1.270279 6 53 56.50968  
## BLK 55.12885 1.755474 6 52 56.81749  
## BRN 55.03467 1.133640 6 54 56.10313  
## WHT 55.11006 1.879288 6 52 57.27299  
## WT/BLK 54.29022 1.628678 6 52 56.45160  
## WT/BR 53.62729 1.478557 6 52 55.30166  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.821027   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.12885 a  
## WHT 55.11006 a  
## BRN 55.03467 a  
## BL/BR 54.93835 a  
## WT/BLK 54.29022 a  
## WT/BR 53.62729 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.040625   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.82092 0.7728841 18 54.70927 57.27299  
## MornLow 53.55556 1.2472191 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7018015   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.82092 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.040625 24 54.68824 1.86532 3.003189  
##   
## $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 55.87670 0.62651362 3 55.25686 56.50968 55.56021 55.86356  
## BL/BR:MornLow 54.00000 1.00000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.25770 0.93877978 3 55.17389 56.81749 55.97781 56.78173  
## BLK:MornLow 54.00000 1.73205081 3 52.00000 55.00000 53.50000 55.00000  
## BRN:MornHigh 56.06934 0.03489463 3 56.03344 56.10313 56.05245 56.07145  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.22012 1.06424470 3 55.14485 57.27299 55.69369 56.24252  
## WHT:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 55.58043 0.79843744 3 54.88350 56.45160 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.00000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 54.92125 0.33016336 3 54.70927 55.30166 54.73105 54.75283  
## WT/BR:MornLow 52.33333 0.57735027 3 52.00000 53.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.18662  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.79961  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.08729  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.75775  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.02724  
## WT/BR:MornLow 52.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.25770 a  
## WHT:MornHigh 56.22012 a  
## BRN:MornHigh 56.06934 a  
## BL/BR:MornHigh 55.87670 ab  
## WT/BLK:MornHigh 55.58043 ab  
## WT/BR:MornHigh 54.92125 abc  
## BL/BR:MornLow 54.00000 abc  
## BLK:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## WHT:MornLow 54.00000 abc  
## WT/BLK:MornLow 53.00000 bc  
## WT/BR:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM55 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 1010.98 202.197 2.4670 0.06131 .  
## THIregime 1 44.30 44.295 0.5404 0.46937   
## Colour:THIregime 5 52.58 10.517 0.1283 0.98449   
## Residuals 24 1967.09 81.962   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 81.96197   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 40.22848 20.0499844 6 5 53.00000  
## BLK 54.50895 1.3643502 6 53 56.09396  
## BRN 53.90453 0.6696103 6 53 55.00000  
## WHT 54.55298 1.1165138 6 53 56.00000  
## WT/BLK 54.13807 2.3435067 6 51 57.49700  
## WT/BR 54.98913 1.3201273 6 53 56.55614  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 16.16127   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 54.98913 a  
## WHT 54.55298 a  
## BLK 54.50895 a  
## WT/BLK 54.13807 a  
## BRN 53.90453 a  
## BL/BR 40.22848 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 81.96197   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 53.16294 6.702544 18 26.88171 57.497  
## MornLow 50.94444 11.547713 18 5.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 6.228354   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 53.16294 a  
## MornLow 50.94444 a  
## $statistics  
## MSerror Df Mean CV MSD  
## 81.96197 24 52.05369 17.39221 26.65273  
##   
## $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 43.79030 14.6496333 3 26.88171 52.67654 39.34718 51.81264  
## BL/BR:MornLow 36.66667 27.4286954 3 5.00000 53.00000 28.50000 52.00000  
## BLK:MornHigh 55.01789 0.9362410 3 54.38984 56.09396 54.47986 54.56988  
## BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BRN:MornHigh 53.80906 0.3059437 3 53.48963 54.09945 53.66387 53.83810  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 54.77263 0.7990216 3 54.19746 55.68497 54.31646 54.43547  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 55.60947 1.7034223 3 54.18657 57.49700 54.66571 55.14485  
## WT/BLK:MornLow 52.66667 2.0816660 3 51.00000 55.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.97827 0.6493747 3 55.27553 56.55614 55.68933 56.10313  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 52.24459  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 55.33192  
## BLK:MornLow 54.50000  
## BRN:MornHigh 53.96878  
## BRN:MornLow 54.50000  
## WHT:MornHigh 55.06022  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.32093  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.32964  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 55.97827 a  
## WT/BLK:MornHigh 55.60947 a  
## BLK:MornHigh 55.01789 a  
## WHT:MornHigh 54.77263 a  
## WHT:MornLow 54.33333 a  
## BLK:MornLow 54.00000 a  
## BRN:MornLow 54.00000 a  
## WT/BR:MornLow 54.00000 a  
## BRN:MornHigh 53.80906 a  
## WT/BLK:MornLow 52.66667 a  
## BL/BR:MornHigh 43.79030 a  
## BL/BR:MornLow 36.66667 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM56 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.401 2.280 3.3696 0.01906 \*   
## THIregime 1 43.707 43.707 64.5917 2.909e-08 \*\*\*  
## Colour:THIregime 5 0.344 0.069 0.1017 0.99083   
## Residuals 24 16.240 0.677   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6766711   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.82815 1.522613 6 52 55.73289  
## BLK 54.28143 1.577680 6 52 56.10313  
## BRN 54.63754 1.146956 6 53 55.84178  
## WHT 54.73317 1.433492 6 53 56.52129  
## WT/BLK 53.04973 1.402926 6 51 54.88350  
## WT/BR 54.08114 1.382851 6 52 55.66755  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.468446   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 54.73317 a  
## BRN 54.63754 a  
## BLK 54.28143 ab  
## WT/BR 54.08114 ab  
## BL/BR 53.82815 ab  
## WT/BLK 53.04973 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6766711   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.20372 0.7663807 18 53.3154 56.52129  
## MornLow 53.00000 1.0289915 18 51.0000 55.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5659211   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.20372 a  
## MornLow 53.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6766711 24 54.10186 1.520466 2.421722  
##   
## $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 54.98963 0.6445347 3 54.58481 55.73289 54.61800 54.65119  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 55.56286 0.5445278 3 55.01418 56.10313 55.29272 55.57126  
## BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BRN:MornHigh 55.60842 0.3572699 3 55.19712 55.84178 55.49173 55.78635  
## BRN:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 55.79968 0.6257914 3 55.40620 56.52129 55.43887 55.47154  
## WHT:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WT/BLK:MornHigh 54.09945 0.7840500 3 53.31540 54.88350 53.70743 54.09945  
## WT/BLK:MornLow 52.00000 1.0000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.16227 0.5235704 3 54.62215 55.66755 54.90964 55.19712  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.19204  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 55.83720  
## BLK:MornLow 53.50000  
## BRN:MornHigh 55.81406  
## BRN:MornLow 54.00000  
## WHT:MornHigh 55.99642  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 54.49148  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.43234  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 55.79968 a  
## BRN:MornHigh 55.60842 a  
## BLK:MornHigh 55.56286 a  
## WT/BR:MornHigh 55.16227 ab  
## BL/BR:MornHigh 54.98963 abc  
## WT/BLK:MornHigh 54.09945 abcd  
## BRN:MornLow 53.66667 abcd  
## WHT:MornLow 53.66667 abcd  
## BLK:MornLow 53.00000 bcd  
## WT/BR:MornLow 53.00000 bcd  
## BL/BR:MornLow 52.66667 cd  
## WT/BLK:MornLow 52.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM57 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 38.096 7.619 4.6169 0.004306 \*\*   
## THIregime 1 37.555 37.555 22.7561 7.446e-05 \*\*\*  
## Colour:THIregime 5 1.034 0.207 0.1254 0.985273   
## Residuals 24 39.607 1.650   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.65031   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.49958 1.3448561 6 53 56.04506  
## BLK 55.27150 1.5662157 6 53 57.07884  
## BRN 56.41288 0.9083644 6 55 57.35445  
## WHT 55.99218 1.3006618 6 54 57.53185  
## WT/BLK 53.24543 1.9728908 6 50 55.58043  
## WT/BR 55.03995 2.2290098 6 52 57.75835  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.293253   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.41288 a  
## WHT 55.99218 a  
## BLK 55.27150 ab  
## WT/BR 55.03995 ab  
## BL/BR 54.49958 ab  
## WT/BLK 53.24543 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.65031   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.09828 1.323849 18 52.27 57.75835  
## MornLow 54.05556 1.696787 18 50.00 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8837916   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.09828 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.65031 24 55.07692 2.332455 3.781972  
##   
## $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 55.66582 0.3284595 3 55.47154 56.04506 55.47620 55.48087  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.54300 0.5314671 3 56.01602 57.07884 56.27507 56.53413  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 57.15909 0.2428564 3 56.88718 57.35445 57.06142 57.23565  
## BRN:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WHT:MornHigh 56.98436 0.5253947 3 56.48427 57.53185 56.71062 56.93696  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.15753 1.7034223 3 52.27000 55.58043 53.44608 54.62215  
## WT/BLK:MornLow 52.33333 2.0816660 3 50.00000 54.00000 51.50000 53.00000  
## WT/BR:MornHigh 56.07990 1.4753699 3 54.98804 57.75835 55.24068 55.49332  
## WT/BR:MornLow 54.00000 2.6457513 3 52.00000 57.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 55.76296  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.80649  
## BLK:MornLow 54.50000  
## BRN:MornHigh 57.29505  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.23441  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.10129  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.62583  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.15909 a  
## WHT:MornHigh 56.98436 ab  
## BLK:MornHigh 56.54300 ab  
## WT/BR:MornHigh 56.07990 abc  
## BRN:MornLow 55.66667 abc  
## BL/BR:MornHigh 55.66582 abc  
## WHT:MornLow 55.00000 abc  
## WT/BLK:MornHigh 54.15753 abc  
## BLK:MornLow 54.00000 abc  
## WT/BR:MornLow 54.00000 abc  
## BL/BR:MornLow 53.33333 bc  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM58 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.740 3.348 3.3127 0.02047 \*   
## THIregime 1 49.217 49.217 48.7000 3.24e-07 \*\*\*  
## Colour:THIregime 5 1.069 0.214 0.2116 0.95424   
## Residuals 24 24.255 1.011   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.010619   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.05162 1.692482 6 53 57.69301  
## BLK 54.86063 1.998486 6 52 57.27692  
## BRN 56.34231 1.185237 6 55 57.75835  
## WHT 56.16071 1.779893 6 54 58.40301  
## WT/BLK 54.52948 1.384938 6 53 56.19025  
## WT/BR 55.40408 1.248585 6 54 56.86976  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.79458   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.34231 a  
## WHT 56.16071 ab  
## BL/BR 56.05162 ab  
## WT/BR 55.40408 ab  
## BLK 54.86063 ab  
## WT/BLK 54.52948 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.010619   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.72739 0.8326419 18 55.4062 58.40301  
## MornLow 54.38889 1.3345583 18 52.0000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6916092   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.72739 a  
## MornLow 54.38889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.010619 24 55.55814 1.809448 2.959574  
##   
## $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 57.10325 0.9184264 3 56.04506 57.69301 56.80836 57.57167  
## BL/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## BLK:MornHigh 56.38792 0.8084942 3 55.69659 57.27692 55.94342 56.19025  
## BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 57.35128 0.3529271 3 57.13111 57.75835 57.14774 57.16437  
## BRN:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## WHT:MornHigh 57.32142 0.9371797 3 56.75029 58.40301 56.78062 56.81096  
## WHT:MornLow 55.00000 1.7320508 3 54.00000 57.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.72563 0.4116973 3 55.40620 56.19025 55.49332 55.58043  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.47483 0.3529390 3 56.19025 56.86976 56.27737 56.36448  
## WT/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 57.63234  
## BL/BR:MornLow 56.00000  
## BLK:MornHigh 56.73358  
## BLK:MornLow 54.00000  
## BRN:MornHigh 57.46136  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.60698  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.88534  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.61712  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.35128 a  
## WHT:MornHigh 57.32142 a  
## BL/BR:MornHigh 57.10325 ab  
## WT/BR:MornHigh 56.47483 ab  
## BLK:MornHigh 56.38792 ab  
## WT/BLK:MornHigh 55.72563 abc  
## BRN:MornLow 55.33333 abc  
## BL/BR:MornLow 55.00000 abc  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 54.33333 bc  
## BLK:MornLow 53.33333 c  
## WT/BLK:MornLow 53.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM59 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 44.680 8.936 8.3942 0.0001056 \*\*\*  
## THIregime 1 36.559 36.559 34.3423 4.809e-06 \*\*\*  
## Colour:THIregime 5 1.373 0.275 0.2580 0.9315308   
## Residuals 24 25.549 1.065   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.064546   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.04016 1.345993 6 53 56.60094  
## BLK 55.99102 1.305953 6 54 57.54927  
## BRN 56.17573 1.230594 6 54 57.40196  
## WHT 54.67784 1.530165 6 53 56.38191  
## WT/BLK 52.76690 1.295392 6 51 54.18657  
## WT/BR 55.06142 1.909245 6 53 57.49700  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.841838   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.17573 a  
## BLK 55.99102 a  
## WT/BR 55.06142 a  
## BL/BR 55.04016 a  
## WHT 54.67784 a  
## WT/BLK 52.76690 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.064546   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95991 1.252234 18 53.3154 57.54927  
## MornLow 53.94444 1.625974 18 51.0000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7098218   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95991 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.064546 24 54.95218 1.877575 3.03751  
##   
## $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 56.08032 0.5324007 3 55.53688 56.60094 55.82000 56.10313  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.98204 0.5633944 3 56.42256 57.54927 56.69843 56.97430  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 57.01812 0.5689327 3 56.36448 57.40196 56.82620 57.28792  
## BRN:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## WHT:MornHigh 56.02234 0.3116098 3 55.83089 56.38191 55.84256 55.85423  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 53.86714 0.4798012 3 53.31540 54.18657 53.70743 54.09945  
## WT/BLK:MornLow 51.66667 0.5773503 3 51.00000 52.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.78951 1.4796504 3 54.88350 57.49700 54.93577 54.98804  
## WT/BR:MornLow 54.33333 2.3094011 3 53.00000 57.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.35204  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.26179  
## BLK:MornLow 55.50000  
## BRN:MornHigh 57.34494  
## BRN:MornLow 56.00000  
## WHT:MornHigh 56.11807  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 54.14301  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 56.24252  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.01812 a  
## BLK:MornHigh 56.98204 a  
## BL/BR:MornHigh 56.08032 ab  
## WHT:MornHigh 56.02234 ab  
## WT/BR:MornHigh 55.78951 ab  
## BRN:MornLow 55.33333 ab  
## BLK:MornLow 55.00000 ab  
## WT/BR:MornLow 54.33333 abc  
## BL/BR:MornLow 54.00000 abc  
## WT/BLK:MornHigh 53.86714 bc  
## WHT:MornLow 53.33333 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM60 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 46.993 9.399 6.698 0.0004901 \*\*\*  
## THIregime 1 37.884 37.884 26.998 2.532e-05 \*\*\*  
## Colour:THIregime 5 1.270 0.254 0.181 0.9670659   
## Residuals 24 33.677 1.403   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.403215   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.23490 1.841790 6 52 56.56776  
## BLK 56.27188 1.821780 6 53 58.15038  
## BRN 55.05064 1.360248 6 53 56.66939  
## WHT 55.92772 1.249320 6 54 57.39246  
## WT/BLK 52.94114 1.813907 6 50 55.14485  
## WT/BR 55.72870 1.074162 6 54 57.07884  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.114615   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.27188 a  
## WHT 55.92772 a  
## WT/BR 55.72870 a  
## BRN 55.05064 ab  
## BL/BR 54.23490 ab  
## WT/BLK 52.94114 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.403215   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.05166 1.235279 18 53.14117 58.15038  
## MornLow 54.00000 1.814970 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.8149466   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.05166 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.403215 24 55.02583 2.152759 3.487366  
##   
## $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 55.46981 0.9515823 3 54.88350 56.56776 54.92084 54.95817  
## BL/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## BLK:MornHigh 57.21043 1.1494564 3 55.92890 58.15038 56.74046 57.55202  
## BLK:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BRN:MornHigh 56.10129 0.5604809 3 55.54875 56.66939 55.81723 56.08571  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 56.85545 0.5656710 3 56.26492 57.39246 56.58694 56.90896  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.21561 1.0097018 3 53.14117 55.14485 53.75098 54.36080  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 56.45741 0.5399360 3 56.10313 57.07884 56.14669 56.19025  
## WT/BR:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 55.76296  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.85120  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.37755  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.15071  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.75283  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.63455  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.21043 a  
## WHT:MornHigh 56.85545 a  
## WT/BR:MornHigh 56.45741 ab  
## BRN:MornHigh 56.10129 ab  
## BL/BR:MornHigh 55.46981 ab  
## BLK:MornLow 55.33333 ab  
## WHT:MornLow 55.00000 abc  
## WT/BR:MornLow 55.00000 abc  
## WT/BLK:MornHigh 54.21561 abc  
## BRN:MornLow 54.00000 abc  
## BL/BR:MornLow 53.00000 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM61 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 1.952 0.390 0.3690 0.8648   
## THIregime 1 51.425 51.425 48.6008 3.294e-07 \*\*\*  
## Colour:THIregime 5 0.274 0.055 0.0518 0.9981   
## Residuals 24 25.395 1.058   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.058109   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.30272 1.600974 6 53 57.17031  
## BLK 55.59441 1.611271 6 53 57.22189  
## BRN 55.78696 1.653150 6 53 57.67123  
## WHT 55.60772 1.624718 6 53 57.25307  
## WT/BLK 55.13868 1.486916 6 53 56.97430  
## WT/BR 55.74063 1.635808 6 53 57.67123  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.836261   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.78696 a  
## WT/BR 55.74063 a  
## WHT 55.60772 a  
## BLK 55.59441 a  
## BL/BR 55.30272 a  
## WT/BLK 55.13868 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.058109   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.72371 0.6695381 18 55.4062 57.67123  
## MornLow 54.33333 1.0846523 18 53.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7076724   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.72371 a  
## MornLow 54.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.058109 24 55.52852 1.852461 3.028312  
##   
## $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 56.60544 0.5626419 3 56.04506 57.17031 56.32300 56.60094  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.85550 0.6214335 3 56.13798 57.22189 56.67230 57.20661  
## BLK:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## BRN:MornHigh 56.90725 0.8566115 3 55.98117 57.67123 56.52525 57.06934  
## BRN:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WHT:MornHigh 56.88210 0.6275134 3 56.15758 57.25307 56.69662 57.23565  
## WHT:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## WT/BLK:MornHigh 56.27737 0.7984374 3 55.40620 56.97430 55.92890 56.45160  
## WT/BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BR:MornHigh 56.81459 0.9466633 3 55.79823 57.67123 56.38626 56.97430  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.88563  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.21425  
## BLK:MornLow 55.00000  
## BRN:MornHigh 57.37028  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.24436  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.71295  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 57.32277  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.90725 a  
## WHT:MornHigh 56.88210 a  
## BLK:MornHigh 56.85550 a  
## WT/BR:MornHigh 56.81459 a  
## BL/BR:MornHigh 56.60544 a  
## WT/BLK:MornHigh 56.27737 a  
## BRN:MornLow 54.66667 a  
## WT/BR:MornLow 54.66667 a  
## BLK:MornLow 54.33333 a  
## WHT:MornLow 54.33333 a  
## BL/BR:MornLow 54.00000 a  
## WT/BLK:MornLow 54.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM62 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.394 3.279 4.4845 0.005007 \*\*   
## THIregime 1 46.276 46.276 63.2936 3.481e-08 \*\*\*  
## Colour:THIregime 5 1.162 0.232 0.3178 0.897362   
## Residuals 24 17.547 0.731   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7311255   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.30086 1.545294 6 53 57.26469  
## BLK 54.67712 1.836177 6 52 56.91928  
## BRN 54.85256 1.364646 6 53 56.23381  
## WHT 55.15590 1.266238 6 54 56.32093  
## WT/BLK 53.31108 1.645781 6 51 55.40620  
## WT/BR 55.17177 1.031097 6 54 56.53872  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.526389   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 55.30086 a  
## WT/BR 55.17177 a  
## WHT 55.15590 a  
## BRN 54.85256 a  
## BLK 54.67712 ab  
## WT/BLK 53.31108 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7311255   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.87865 0.7979565 18 53.8381 57.26469  
## MornLow 53.61111 1.1950333 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5882515   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.87865 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7311255 24 54.74488 1.561897 2.517279  
##   
## $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 56.26838 0.91005513 3 55.48087 57.26469 55.77022 56.05958  
## BL/BR:MornLow 54.33333 1.52752523 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 56.02091 0.82355136 3 55.30166 56.91928 55.57172 55.84178  
## BLK:MornLow 53.33333 1.52752523 3 52.00000 55.00000 52.50000 53.00000  
## BRN:MornHigh 56.03846 0.32136637 3 55.66755 56.23381 55.94078 56.21401  
## BRN:MornLow 53.66667 0.57735027 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.31180 0.00934084 3 56.30226 56.32093 56.30724 56.31221  
## WHT:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WT/BLK:MornHigh 54.62215 0.78405000 3 53.83810 55.40620 54.23013 54.62215  
## WT/BLK:MornLow 52.00000 1.00000000 3 51.00000 53.00000 51.50000 52.00000  
## WT/BR:MornHigh 56.01021 0.46436806 3 55.66755 56.53872 55.74596 55.82436  
## WT/BR:MornLow 54.33333 0.57735027 3 54.00000 55.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.66213  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.38053  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.22391  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.31657  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 55.01418  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.18154  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.31180 a  
## BL/BR:MornHigh 56.26838 a  
## BRN:MornHigh 56.03846 ab  
## BLK:MornHigh 56.02091 ab  
## WT/BR:MornHigh 56.01021 ab  
## WT/BLK:MornHigh 54.62215 abc  
## BL/BR:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.33333 abcd  
## WHT:MornLow 54.00000 abcd  
## BRN:MornLow 53.66667 bcd  
## BLK:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM63 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 11.177 2.235 1.9933 0.1161   
## THIregime 1 48.673 48.673 43.4026 8.175e-07 \*\*\*  
## Colour:THIregime 5 0.567 0.113 0.1011 0.9910   
## Residuals 24 26.914 1.121   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.121437   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.20523 1.505509 6 53 56.97430  
## BLK 54.71872 1.574510 6 53 56.48064  
## BRN 55.20191 1.316628 6 54 56.40804  
## WHT 55.75665 1.618040 6 53 57.53434  
## WT/BLK 54.11598 1.466119 6 52 55.92890  
## WT/BR 55.64480 1.996047 6 52 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.890412   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.75665 a  
## WT/BR 55.64480 a  
## BL/BR 55.20523 a  
## BRN 55.20191 a  
## BLK 54.71872 a  
## WT/BLK 54.11598 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.121437   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.26998 0.8300848 18 54.3608 57.53434  
## MornLow 53.94444 1.2589549 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7285418   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.26998 a  
## MornLow 53.94444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.121437 24 55.10721 1.921671 3.117618  
##   
## $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 56.41046 0.555562467 3 55.86356 56.97430 56.12854 56.39352  
## BL/BR:MornLow 54.00000 1.000000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.10410 0.326352844 3 55.90277 56.48064 55.91583 55.92890  
## BLK:MornLow 53.33333 0.577350269 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.40382 0.004361829 3 56.39933 56.40804 56.40171 56.40408  
## BRN:MornLow 54.00000 0.000000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.84663 0.804743702 3 55.96157 57.53434 56.50278 57.04399  
## WHT:MornLow 54.66667 1.527525232 3 53.00000 56.00000 54.00000 55.00000  
## WT/BLK:MornHigh 55.23197 0.798437439 3 54.36080 55.92890 54.88350 55.40620  
## WT/BLK:MornLow 53.00000 1.000000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.62293 1.325500433 3 55.09258 57.40988 56.22945 57.36633  
## WT/BR:MornLow 54.66667 2.309401077 3 52.00000 56.00000 54.00000 56.00000  
## Q75  
## BL/BR:MornHigh 56.68391  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.20477  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.40606  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.28916  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.38810  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.84663 a  
## WT/BR:MornHigh 56.62293 a  
## BL/BR:MornHigh 56.41046 ab  
## BRN:MornHigh 56.40382 ab  
## BLK:MornHigh 56.10410 abc  
## WT/BLK:MornHigh 55.23197 abc  
## WHT:MornLow 54.66667 abc  
## WT/BR:MornLow 54.66667 abc  
## BL/BR:MornLow 54.00000 abc  
## BRN:MornLow 54.00000 abc  
## BLK:MornLow 53.33333 bc  
## WT/BLK:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM64 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 17.799 3.560 2.5532 0.05467 .   
## THIregime 1 47.310 47.310 33.9313 5.247e-06 \*\*\*  
## Colour:THIregime 5 1.218 0.244 0.1747 0.96947   
## Residuals 24 33.463 1.394   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.394274   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.22367 1.523253 6 52 55.99424  
## BLK 55.01407 2.335564 6 51 57.61316  
## BRN 55.84314 1.552555 6 53 57.27921  
## WHT 55.97470 1.284558 6 54 57.49700  
## WT/BLK 54.33378 1.667525 6 52 56.45160  
## WT/BR 54.48883 1.334808 6 53 56.03344  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.107867   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.97470 a  
## BRN 55.84314 a  
## BLK 55.01407 a  
## WT/BR 54.48883 a  
## WT/BLK 54.33378 a  
## BL/BR 54.22367 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.394274   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.12606 0.9068264 18 54.8835 57.61316  
## MornLow 53.83333 1.5048940 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.812346   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.12606 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.394274 24 54.9797 2.14769 3.476237  
##   
## $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 55.44734 0.5555625 3 54.88350 55.99424 55.17389 55.46428  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.36148 1.3628299 3 54.90964 57.61316 55.73564 56.56164  
## BLK:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## BRN:MornHigh 56.68629 0.9451953 3 55.59627 57.27921 56.38983 57.18338  
## BRN:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WHT:MornHigh 56.94941 0.5244749 3 56.45160 57.49700 56.67561 56.89963  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.66755 0.7840500 3 54.88350 56.45160 55.27553 55.66755  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.64432 0.3397922 3 55.40620 56.03344 55.44976 55.49332  
## WT/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 55.72926  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.08740  
## BLK:MornLow 55.00000  
## BRN:MornHigh 57.23129  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.19831  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.76338  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.94941 a  
## BRN:MornHigh 56.68629 ab  
## BLK:MornHigh 56.36148 abc  
## WT/BLK:MornHigh 55.66755 abc  
## WT/BR:MornHigh 55.64432 abc  
## BL/BR:MornHigh 55.44734 abc  
## BRN:MornLow 55.00000 abc  
## WHT:MornLow 55.00000 abc  
## BLK:MornLow 53.66667 abc  
## WT/BR:MornLow 53.33333 bc  
## BL/BR:MornLow 53.00000 c  
## WT/BLK:MornLow 53.00000 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 21.251 4.250 3.2064 0.02341 \*   
## THIregime 1 45.599 45.599 34.3995 4.752e-06 \*\*\*  
## Colour:THIregime 5 1.252 0.250 0.1889 0.96395   
## Residuals 24 31.813 1.326   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.325558   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 56.13912 0.9656052 6 55 57.19831  
## BLK 55.03221 1.8572173 6 52 57.11949  
## BRN 55.69218 1.8802544 6 53 58.01970  
## WHT 55.79160 1.6473823 6 53 57.60901  
## WT/BLK 54.44236 1.6784132 6 52 56.62583  
## WT/BR 53.98852 1.5115622 6 52 55.53688  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.055268   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BL/BR 56.13912 a  
## WHT 55.79160 ab  
## BRN 55.69218 ab  
## BLK 55.03221 ab  
## WT/BLK 54.44236 ab  
## WT/BR 53.98852 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.325558   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.30644 0.950917 18 54.62215 58.0197  
## MornLow 54.05556 1.513555 18 52.00000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7920751   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.30644 a  
## MornLow 54.05556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.325558 24 55.181 2.086458 3.389493  
##   
## $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 56.94492 0.2230527 3 56.77829 57.19831 56.81822 56.85814  
## BL/BR:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BLK:MornHigh 56.39775 0.8340815 3 55.48461 57.11949 56.03688 56.58915  
## BLK:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## BRN:MornHigh 56.71770 1.1618949 3 55.78635 58.01970 56.06670 56.34706  
## BRN:MornLow 54.66667 2.0816660 3 53.00000 57.00000 53.50000 54.00000  
## WHT:MornHigh 56.91653 0.8092669 3 56.02691 57.60901 56.57030 57.11369  
## WHT:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WT/BLK:MornHigh 55.55139 1.0097018 3 54.62215 56.62583 55.01418 55.40620  
## WT/BLK:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.31037 0.3699126 3 54.88350 55.53688 55.19712 55.51074  
## WT/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 57.02823  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 56.85432  
## BLK:MornLow 54.50000  
## BRN:MornHigh 57.18338  
## BRN:MornLow 55.50000  
## WHT:MornHigh 57.36135  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.01602  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.52381  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BL/BR:MornHigh 56.94492 a  
## WHT:MornHigh 56.91653 a  
## BRN:MornHigh 56.71770 ab  
## BLK:MornHigh 56.39775 ab  
## WT/BLK:MornHigh 55.55139 abc  
## BL/BR:MornLow 55.33333 abc  
## WT/BR:MornHigh 55.31037 abc  
## BRN:MornLow 54.66667 abc  
## WHT:MornLow 54.66667 abc  
## BLK:MornLow 53.66667 abc  
## WT/BLK:MornLow 53.33333 bc  
## WT/BR:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM66 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.789 3.958 5.2178 0.002215 \*\*   
## THIregime 1 40.301 40.301 53.1298 1.573e-07 \*\*\*  
## Colour:THIregime 5 0.338 0.068 0.0892 0.993225   
## Residuals 24 18.205 0.759   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7585294   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.33508 1.175568 6 54 56.71295  
## BLK 55.67776 1.184941 6 54 56.89590  
## BRN 54.59152 1.439717 6 53 56.21401  
## WHT 55.36270 1.204007 6 54 56.77829  
## WT/BLK 53.41966 1.660503 6 51 55.58043  
## WT/BR 54.96155 1.644067 6 52 56.53872  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.554731   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.67776 a  
## WHT 55.36270 a  
## BL/BR 55.33508 a  
## WT/BR 54.96155 ab  
## BRN 54.59152 ab  
## WT/BLK 53.41966 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7585294   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.94942 0.9020261 18 53.57675 56.8959  
## MornLow 53.83333 1.2004901 18 51.00000 55.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5991744   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.94942 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7585294 24 54.89138 1.586653 2.564021  
##   
## $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 56.33683 0.3332788 3 56.07824 56.71295 56.14877 56.21929  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 56.68885 0.3315866 3 56.30641 56.89590 56.58533 56.86426  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 55.84970 0.3154983 3 55.66755 56.21401 55.66755 55.66755  
## BRN:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WHT:MornHigh 56.39207 0.3345874 3 56.19025 56.77829 56.19896 56.20767  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 54.50599 1.0097018 3 53.57675 55.58043 53.96878 54.36080  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.92309 0.9918045 3 54.77896 56.53872 55.61528 56.45160  
## WT/BR:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.46612  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.88008  
## BLK:MornLow 55.00000  
## BRN:MornHigh 55.94078  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.49298  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.49516  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.68885 a  
## WHT:MornHigh 56.39207 ab  
## BL/BR:MornHigh 56.33683 ab  
## WT/BR:MornHigh 55.92309 ab  
## BRN:MornHigh 55.84970 abc  
## BLK:MornLow 54.66667 abcd  
## WT/BLK:MornHigh 54.50599 abcd  
## BL/BR:MornLow 54.33333 abcd  
## WHT:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.00000 bcd  
## BRN:MornLow 53.33333 cd  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM67 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 13.172 2.634 2.7804 0.04053 \*   
## THIregime 1 47.601 47.601 50.2399 2.508e-07 \*\*\*  
## Colour:THIregime 5 0.482 0.096 0.1017 0.99083   
## Residuals 24 22.740 0.947   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9474806   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.55593 1.403251 6 53 56.15291  
## BLK 56.24503 1.292054 6 54 57.52451  
## BRN 54.82220 1.677191 6 52 56.71295  
## WHT 55.15626 1.774201 6 52 56.86976  
## WT/BLK 54.61660 1.483758 6 53 56.45160  
## WT/BR 54.50335 1.537432 6 52 56.10313  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.737618   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.24503 a  
## WHT 55.15626 ab  
## BRN 54.82220 ab  
## WT/BLK 54.61660 ab  
## BL/BR 54.55593 ab  
## WT/BR 54.50335 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9474806   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.13312 0.7628566 18 54.8835 57.52451  
## MornLow 53.83333 1.2485285 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6696567   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.13312 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9474806 24 54.98323 1.770333 2.865633  
##   
## $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 55.77852 0.3244177 3 55.58043 56.15291 55.59132 55.60221  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 57.15674 0.5887111 3 56.47774 57.52451 56.97285 57.46796  
## BLK:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## BRN:MornHigh 55.97774 0.8326454 3 55.07357 56.71295 55.61013 56.14669  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.31252 0.9266307 3 55.24286 56.86976 56.03391 56.82496  
## WHT:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## WT/BLK:MornHigh 55.89986 0.4798012 3 55.58043 56.45160 55.62399 55.66755  
## WT/BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BR:MornHigh 55.67336 0.6849239 3 54.88350 56.10313 55.45847 56.03344  
## WT/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.87756  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.49624  
## BLK:MornLow 56.00000  
## BRN:MornHigh 56.42982  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.84736  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.06829  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.15674 a  
## WHT:MornHigh 56.31252 ab  
## BRN:MornHigh 55.97774 abc  
## WT/BLK:MornHigh 55.89986 abc  
## BL/BR:MornHigh 55.77852 abc  
## WT/BR:MornHigh 55.67336 abc  
## BLK:MornLow 55.33333 abc  
## WHT:MornLow 54.00000 bc  
## BRN:MornLow 53.66667 bc  
## BL/BR:MornLow 53.33333 c  
## WT/BLK:MornLow 53.33333 c  
## WT/BR:MornLow 53.33333 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 54.295 10.859 19.6814 8.676e-08 \*\*\*  
## THIregime 1 34.921 34.921 63.2929 3.482e-08 \*\*\*  
## Colour:THIregime 5 1.528 0.306 0.5538 0.734   
## Residuals 24 13.242 0.552   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5517434   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.79513 1.492711 6 52 55.66755  
## BLK 55.05608 1.358622 6 53 56.62583  
## BRN 55.69029 1.058971 6 54 56.92678  
## WHT 54.49728 1.341333 6 53 56.02691  
## WT/BLK 51.83132 1.352343 6 50 53.31540  
## WT/BR 54.70600 1.055813 6 53 56.03344  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.325982   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.69029 a  
## BLK 55.05608 ab  
## WT/BR 54.70600 ab  
## WHT 54.49728 ab  
## BL/BR 53.79513 b  
## WT/BLK 51.83132 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5517434   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.24759 1.223638 18 52.53135 56.92678  
## MornLow 53.27778 1.601674 18 50.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5110173   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.24759 a  
## MornLow 53.27778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5517434 24 54.26268 1.368886 2.186774  
##   
## $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 54.92360 0.6456126 3 54.51014 55.66755 54.55163 54.59311  
## BL/BR:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## BLK:MornHigh 56.11215 0.5184070 3 55.58915 56.62583 55.85531 56.12147  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.38059 0.6115834 3 55.71982 56.92678 56.10749 56.49516  
## BRN:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WHT:MornHigh 55.66122 0.3167002 3 55.47589 56.02691 55.47838 55.48087  
## WHT:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## WT/BLK:MornHigh 52.99597 0.4116973 3 52.53135 53.31540 52.83626 53.14117  
## WT/BLK:MornLow 50.66667 0.5773503 3 50.00000 51.00000 50.50000 51.00000  
## WT/BR:MornHigh 55.41201 0.5399360 3 55.05773 56.03344 55.10129 55.14485  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.13033  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.37365  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.71097  
## BRN:MornLow 55.50000  
## WHT:MornHigh 55.75389  
## WHT:MornLow 53.50000  
## WT/BLK:MornHigh 53.22828  
## WT/BLK:MornLow 51.00000  
## WT/BR:MornHigh 55.58915  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.38059 a  
## BLK:MornHigh 56.11215 ab  
## WHT:MornHigh 55.66122 ab  
## WT/BR:MornHigh 55.41201 abc  
## BRN:MornLow 55.00000 abcd  
## BL/BR:MornHigh 54.92360 abcd  
## BLK:MornLow 54.00000 bcde  
## WT/BR:MornLow 54.00000 bcde  
## WHT:MornLow 53.33333 cde  
## WT/BLK:MornHigh 52.99597 de  
## BL/BR:MornLow 52.66667 ef  
## WT/BLK:MornLow 50.66667 f  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM69 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 42.707 8.541 3.9328 0.0095575 \*\*   
## THIregime 1 38.049 38.049 17.5192 0.0003293 \*\*\*  
## Colour:THIregime 5 0.774 0.155 0.0712 0.9959873   
## Residuals 24 52.125 2.172   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.17187   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.98381 1.302623 6 53 56.56776  
## BLK 56.22134 1.790523 6 53 57.99219  
## BRN 55.03401 1.691769 6 53 57.19209  
## WHT 55.13256 1.897580 6 52 57.35761  
## WT/BLK 52.61476 1.662177 6 50 54.36080  
## WT/BR 55.18193 2.015203 6 52 57.36633  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.630789   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.22134 a  
## WT/BR 55.18193 ab  
## WHT 55.13256 ab  
## BRN 55.03401 ab  
## BL/BR 54.98381 ab  
## WT/BLK 52.61476 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 2.17187   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.88947 1.308477 18 52.96693 57.99219  
## MornLow 53.83333 1.977818 18 50.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 1.013874   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.88947 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 2.17187 24 54.8614 2.686272 4.338627  
##   
## $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 55.96762 0.5817449 3 55.40620 56.56776 55.66755 55.92890  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 57.10936 1.1471289 3 55.81274 57.99219 56.66794 57.52314  
## BLK:MornLow 55.33333 2.0816660 3 53.00000 57.00000 54.50000 56.00000  
## BRN:MornHigh 56.06802 0.9734839 3 55.50124 57.19209 55.50599 55.51074  
## BRN:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WHT:MornHigh 56.26513 1.0742051 3 55.21019 57.35761 55.71889 56.22759  
## WHT:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 53.89618 0.8047493 3 52.96693 54.36080 53.66387 54.36080  
## WT/BLK:MornLow 51.33333 1.1547005 3 50.00000 52.00000 51.00000 52.00000  
## WT/BR:MornHigh 56.03054 1.2879819 3 54.79638 57.36633 55.36264 55.92890  
## WT/BR:MornLow 54.33333 2.5166115 3 52.00000 57.00000 53.00000 54.00000  
## Q75  
## BL/BR:MornHigh 56.24833  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.75766  
## BLK:MornLow 56.50000  
## BRN:MornHigh 56.35142  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.79260  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.36080  
## WT/BLK:MornLow 52.00000  
## WT/BR:MornHigh 56.64761  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.10936 a  
## WHT:MornHigh 56.26513 a  
## BRN:MornHigh 56.06802 a  
## WT/BR:MornHigh 56.03054 a  
## BL/BR:MornHigh 55.96762 a  
## BLK:MornLow 55.33333 ab  
## WT/BR:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BRN:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BLK:MornHigh 53.89618 ab  
## WT/BLK:MornLow 51.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM70 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 22.301 4.460 3.9926 0.008898 \*\*   
## THIregime 1 41.130 41.130 36.8187 2.884e-06 \*\*\*  
## Colour:THIregime 5 0.472 0.094 0.0845 0.994020   
## Residuals 24 26.811 1.117   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.117108   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.24693 1.487793 6 53 57.10498  
## BLK 55.21660 1.513606 6 53 56.97430  
## BRN 55.61391 1.321583 6 54 57.23565  
## WHT 55.19744 1.945160 6 52 57.45966  
## WT/BLK 53.37611 1.485435 6 51 55.05773  
## WT/BR 54.09566 1.200551 6 53 55.23197  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.88676   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 55.61391 a  
## BL/BR 55.24693 ab  
## BLK 55.21660 ab  
## WHT 55.19744 ab  
## WT/BR 54.09566 ab  
## WT/BLK 53.37611 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.117108   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.85999 1.028199 18 53.3154 57.45966  
## MornLow 53.72222 1.363626 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7271342   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.85999 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.117108 24 54.79111 1.929023 3.111594  
##   
## $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 56.16052 0.83458479 3 55.52236 57.10498 55.68829 55.85423  
## BL/BR:MornLow 54.33333 1.52752523 3 53.00000 56.00000 53.50000 54.00000  
## BLK:MornHigh 56.43321 0.53584685 3 55.90277 56.97430 56.16266 56.42256  
## BLK:MornLow 54.00000 1.00000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.56116 0.58421299 3 56.21401 57.23565 56.22391 56.23381  
## BRN:MornLow 54.66667 1.15470054 3 54.00000 56.00000 54.00000 54.00000  
## WHT:MornHigh 56.39487 1.07590219 3 55.30819 57.45966 55.86247 56.41675  
## WHT:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.41888 0.95960238 3 53.31540 55.05773 54.09945 54.88350  
## WT/BLK:MornLow 52.33333 1.15470054 3 51.00000 53.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.19131 0.04384776 3 55.14485 55.23197 55.17099 55.19712  
## WT/BR:MornLow 53.00000 0.00000000 3 53.00000 53.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.47960  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.69843  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.73473  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.93821  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.21454  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 56.56116 a  
## BLK:MornHigh 56.43321 a  
## WHT:MornHigh 56.39487 a  
## BL/BR:MornHigh 56.16052 a  
## WT/BR:MornHigh 55.19131 ab  
## BRN:MornLow 54.66667 ab  
## WT/BLK:MornHigh 54.41888 ab  
## BL/BR:MornLow 54.33333 ab  
## BLK:MornLow 54.00000 ab  
## WHT:MornLow 54.00000 ab  
## WT/BR:MornLow 53.00000 b  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM71 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 19.351 3.870 5.2996 0.002028 \*\*   
## THIregime 1 41.800 41.800 57.2389 8.355e-08 \*\*\*  
## Colour:THIregime 5 0.668 0.134 0.1829 0.966321   
## Residuals 24 17.527 0.730   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7302734   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.96176 1.479336 6 52 55.48087  
## BLK 55.62722 1.339860 6 54 57.30443  
## BRN 55.26390 1.507772 6 53 57.14853  
## WHT 54.81510 1.668564 6 52 56.69553  
## WT/BLK 53.50678 1.361435 6 52 55.14485  
## WT/BR 54.95719 1.050839 6 54 56.01602  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.525499   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.62722 a  
## BRN 55.26390 ab  
## WT/BR 54.95719 abc  
## WHT 54.81510 abc  
## BL/BR 53.96176 bc  
## WT/BLK 53.50678 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7302734   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.76621 0.8141198 18 54.3608 57.30443  
## MornLow 53.61111 1.2432826 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5879086   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.76621 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7302734 24 54.68866 1.562591 2.515812  
##   
## $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 55.25686 0.3254852 3 54.88350 55.48087 55.14485 55.40620  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.58778 0.6218733 3 56.19025 57.30443 56.22945 56.26866  
## BLK:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## BRN:MornHigh 56.19447 0.8673082 3 55.45372 57.14853 55.71744 55.98117  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 55.96354 0.8186650 3 55.07951 56.69553 55.59755 56.11558  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.68023 0.4116973 3 54.36080 55.14485 54.44792 54.53503  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.91438 0.1096194 3 55.79823 56.01602 55.86356 55.92890  
## WT/BR:MornLow 54.00000 0.0000000 3 54.00000 54.00000 54.00000 54.00000  
## Q75  
## BL/BR:MornHigh 55.44354  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.78654  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.56485  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.40555  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 54.83994  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.97246  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.58778 a  
## BRN:MornHigh 56.19447 ab  
## WHT:MornHigh 55.96354 abc  
## WT/BR:MornHigh 55.91438 abc  
## BL/BR:MornHigh 55.25686 abc  
## WT/BLK:MornHigh 54.68023 abcd  
## BLK:MornLow 54.66667 abcd  
## BRN:MornLow 54.33333 abcd  
## WT/BR:MornLow 54.00000 bcd  
## WHT:MornLow 53.66667 cd  
## BL/BR:MornLow 52.66667 d  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM72 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 17.773 3.555 4.4528 0.005192 \*\*   
## THIregime 1 43.879 43.879 54.9657 1.181e-07 \*\*\*  
## Colour:THIregime 5 0.594 0.119 0.1489 0.978432   
## Residuals 24 19.159 0.798   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7982996   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.43412 1.276803 6 54 56.90896  
## BLK 56.31829 1.156105 6 55 57.66206  
## BRN 55.48750 1.511457 6 53 57.02182  
## WHT 55.76832 1.461989 6 54 57.57167  
## WT/BLK 54.00739 1.748922 6 52 56.45160  
## WT/BR 55.60850 1.509656 6 53 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.594969   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 56.31829 a  
## WHT 55.76832 a  
## WT/BR 55.60850 a  
## BRN 55.48750 ab  
## BL/BR 55.43412 ab  
## WT/BLK 54.00739 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7982996   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.54138 0.8234287 18 54.70927 57.66206  
## MornLow 54.33333 1.2366939 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6146813   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.54138 a  
## MornLow 54.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7982996 24 55.43736 1.611686 2.630379  
##   
## $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 56.53491 0.3271339 3 56.30226 56.90896 56.34789 56.39352  
## BL/BR:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BLK:MornHigh 57.30325 0.3125267 3 57.09046 57.66206 57.12385 57.15725  
## BLK:MornLow 55.33333 0.5773503 3 55.00000 56.00000 55.00000 55.00000  
## BRN:MornHigh 56.64167 0.6177364 3 55.92890 57.02182 56.45160 56.97430  
## BRN:MornLow 54.33333 1.1547005 3 53.00000 55.00000 54.00000 55.00000  
## WHT:MornHigh 56.86997 0.6076974 3 56.51694 57.57167 56.51912 56.52129  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.34812 0.9596024 3 54.70927 56.45160 54.79638 54.88350  
## WT/BLK:MornLow 52.66667 1.1547005 3 52.00000 54.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.55033 0.8385554 3 55.61528 57.23565 56.20767 56.80007  
## WT/BR:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## Q75  
## BL/BR:MornHigh 56.65124  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.40965  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.99806  
## BRN:MornLow 55.00000  
## WHT:MornHigh 57.04648  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.66755  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.01786  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 57.30325 a  
## WHT:MornHigh 56.86997 ab  
## BRN:MornHigh 56.64167 ab  
## WT/BR:MornHigh 56.55033 ab  
## BL/BR:MornHigh 56.53491 ab  
## WT/BLK:MornHigh 55.34812 ab  
## BLK:MornLow 55.33333 ab  
## WHT:MornLow 54.66667 bc  
## WT/BR:MornLow 54.66667 bc  
## BL/BR:MornLow 54.33333 bc  
## BRN:MornLow 54.33333 bc  
## WT/BLK:MornLow 52.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM73 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.182 2.436 2.0444 0.1083   
## THIregime 1 53.949 53.949 45.2691 5.852e-07 \*\*\*  
## Colour:THIregime 5 1.048 0.210 0.1759 0.9690   
## Residuals 24 28.602 1.192   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.191739   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.78490 1.644103 6 52 55.60221  
## BLK 55.58591 1.807429 6 53 57.78449  
## BRN 54.25088 1.370284 6 53 55.51074  
## WHT 54.55048 1.727599 6 52 56.67561  
## WT/BLK 54.70371 1.952751 6 52 57.49700  
## WT/BR 55.13578 1.440250 6 53 56.86976  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.948766   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.58591 a  
## WT/BR 55.13578 a  
## WT/BLK 54.70371 a  
## WHT 54.55048 a  
## BRN 54.25088 a  
## BL/BR 53.78490 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.191739   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.89278 0.8184282 18 54.99966 57.78449  
## MornLow 53.44444 1.3382263 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7510307   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.89278 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.191739 24 54.66861 1.996883 3.213853  
##   
## $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 55.23646 0.321308445 3 54.99966 55.60221 55.05358 55.10751  
## BL/BR:MornLow 52.33333 0.577350269 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 56.50514 1.139589507 3 55.59877 57.78449 55.86547 56.13217  
## BLK:MornLow 54.66667 2.081665999 3 53.00000 57.00000 53.50000 54.00000  
## BRN:MornHigh 55.50176 0.008723658 3 55.49332 55.51074 55.49728 55.50124  
## BRN:MornLow 53.00000 0.000000000 3 53.00000 53.00000 53.00000 53.00000  
## WHT:MornHigh 55.76763 0.826930137 3 55.05773 56.67561 55.31364 55.56954  
## WHT:MornLow 53.33333 1.527525232 3 52.00000 55.00000 52.50000 53.00000  
## WT/BLK:MornHigh 56.07409 1.251370599 3 55.14485 57.49700 55.36264 55.58043  
## WT/BLK:MornLow 53.33333 1.527525232 3 52.00000 55.00000 52.50000 53.00000  
## WT/BR:MornHigh 56.27156 0.561975655 3 55.75467 56.86976 55.97246 56.19025  
## WT/BR:MornLow 54.00000 1.000000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.35486  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.95833  
## BLK:MornLow 55.50000  
## BRN:MornHigh 55.50599  
## BRN:MornLow 53.00000  
## WHT:MornHigh 56.12258  
## WHT:MornLow 54.00000  
## WT/BLK:MornHigh 56.53872  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.53001  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.50514 a  
## WT/BR:MornHigh 56.27156 a  
## WT/BLK:MornHigh 56.07409 ab  
## WHT:MornHigh 55.76763 ab  
## BRN:MornHigh 55.50176 abc  
## BL/BR:MornHigh 55.23646 abc  
## BLK:MornLow 54.66667 abc  
## WT/BR:MornLow 54.00000 abc  
## WHT:MornLow 53.33333 abc  
## WT/BLK:MornLow 53.33333 abc  
## BRN:MornLow 53.00000 bc  
## BL/BR:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM74 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 20.485 4.097 8.1191 0.0001337 \*\*\*  
## THIregime 1 56.564 56.564 112.0941 1.594e-10 \*\*\*  
## Colour:THIregime 5 1.262 0.252 0.5001 0.7730607   
## Residuals 24 12.111 0.505   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5046141   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.97415 1.492227 6 54 57.49700  
## BLK 55.61739 1.466799 6 54 57.26469  
## BRN 55.14005 1.951975 6 52 57.27921  
## WHT 55.35393 1.649176 6 53 57.25307  
## WT/BLK 54.89942 1.422936 6 53 56.45160  
## WT/BR 57.20265 1.026839 6 56 58.28105  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.268086   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 57.20265 a  
## BL/BR 55.97415 ab  
## BLK 55.61739 b  
## WHT 55.35393 b  
## BRN 55.14005 b  
## WT/BLK 54.89942 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.5046141   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.95142 0.7441173 18 55.66755 58.28105  
## MornLow 54.44444 1.1991282 18 52.00000 57.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.488705   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.95142 a  
## MornLow 54.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.5046141 24 55.69793 1.275383 2.091294  
##   
## $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 57.28163 0.3240418 3 56.90896 57.49700 57.17394 57.43892  
## BL/BR:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BLK:MornHigh 56.90145 0.3146510 3 56.71295 57.26469 56.71983 56.72671  
## BLK:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## BRN:MornHigh 56.61343 0.8244006 3 55.69131 57.27921 56.28053 56.86976  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.70787 0.5477637 3 56.15758 57.25307 56.43527 56.71295  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.13217 0.4116973 3 55.66755 56.45160 55.97246 56.27737  
## WT/BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BR:MornHigh 58.07197 0.1884622 3 57.91516 58.28105 57.96743 58.01970  
## WT/BR:MornLow 56.33333 0.5773503 3 56.00000 57.00000 56.00000 56.00000  
## Q75  
## BL/BR:MornHigh 57.46796  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.99570  
## BLK:MornLow 54.50000  
## BRN:MornHigh 57.07448  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.98301  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 58.15038  
## WT/BR:MornLow 56.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 58.07197 a  
## BL/BR:MornHigh 57.28163 a  
## BLK:MornHigh 56.90145 a  
## WHT:MornHigh 56.70787 ab  
## BRN:MornHigh 56.61343 ab  
## WT/BR:MornLow 56.33333 abc  
## WT/BLK:MornHigh 56.13217 abc  
## BL/BR:MornLow 54.66667 bcd  
## BLK:MornLow 54.33333 cd  
## WHT:MornLow 54.00000 d  
## BRN:MornLow 53.66667 d  
## WT/BLK:MornLow 53.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM75 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 8.696 1.739 2.7998 0.03952 \*   
## THIregime 1 49.990 49.990 80.4721 3.923e-09 \*\*\*  
## Colour:THIregime 5 0.589 0.118 0.1897 0.96362   
## Residuals 24 14.909 0.621   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6212104   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.55593 1.403251 6 53 56.15291  
## BLK 54.73250 1.589173 6 53 56.50968  
## BRN 55.36884 1.575977 6 53 57.28792  
## WHT 55.70345 1.407200 6 54 57.46215  
## WT/BLK 54.24666 1.561418 6 52 56.19025  
## WT/BR 54.79633 1.304279 6 53 56.13798  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.406982   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.70345 a  
## BRN 55.36884 ab  
## WT/BR 54.79633 ab  
## BLK 54.73250 ab  
## BL/BR 54.55593 ab  
## WT/BLK 54.24666 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.6212104   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.07901 0.6223019 18 54.8835 57.46215  
## MornLow 53.72222 1.0178152 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5422336   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.07901 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.6212104 24 54.90062 1.435629 2.320357  
##   
## $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 55.77852 0.3244177 3 55.58043 56.15291 55.59132 55.60221  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.13166 0.3276595 3 55.92890 56.50968 55.94266 55.95641  
## BLK:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.40435 0.8118521 3 55.69131 57.28792 55.96256 56.23381  
## BRN:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WHT:MornHigh 56.74023 0.6264648 3 56.33959 57.46215 56.37926 56.41893  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.49332 0.6577164 3 54.88350 56.19025 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.92600 0.3018229 3 55.58043 56.13798 55.82000 56.05958  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.87756  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.23304  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.76086  
## BRN:MornLow 55.00000  
## WHT:MornHigh 56.94054  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.79823  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 56.09878  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.74023 a  
## BRN:MornHigh 56.40435 ab  
## BLK:MornHigh 56.13166 ab  
## WT/BR:MornHigh 55.92600 abc  
## BL/BR:MornHigh 55.77852 abc  
## WT/BLK:MornHigh 55.49332 abcd  
## WHT:MornLow 54.66667 abcde  
## BRN:MornLow 54.33333 bcde  
## WT/BR:MornLow 53.66667 cde  
## BL/BR:MornLow 53.33333 de  
## BLK:MornLow 53.33333 de  
## WT/BLK:MornLow 53.00000 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM76 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.290 2.058 2.7030 0.04486 \*   
## THIregime 1 48.632 48.632 63.8740 3.212e-08 \*\*\*  
## Colour:THIregime 5 0.525 0.105 0.1379 0.98179   
## Residuals 24 18.273 0.761   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.761371   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.52015 1.546596 6 52 56.10313  
## BLK 55.92719 1.237979 6 54 57.35181  
## BRN 54.56908 1.745729 6 52 56.71295  
## WHT 55.09803 1.398616 6 53 56.71295  
## WT/BLK 54.89942 1.422936 6 53 56.45160  
## WT/BR 54.29312 1.591515 6 52 56.10313  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.557641   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.92719 a  
## WHT 55.09803 ab  
## WT/BLK 54.89942 ab  
## BRN 54.56908 ab  
## BL/BR 54.52015 ab  
## WT/BR 54.29312 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.761371   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.04677 0.6631744 18 54.95817 57.35181  
## MornLow 53.72222 1.1274936 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6002957   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.04677 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.761371 24 54.8845 1.589822 2.56882  
##   
## $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 55.70696 0.6488355 3 54.95817 56.10313 55.50887 56.05958  
## BL/BR:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## BLK:MornHigh 56.85437 0.5024457 3 56.34706 57.35181 56.60566 56.86426  
## BLK:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## BRN:MornHigh 55.80482 0.8392762 3 55.05773 56.71295 55.35076 55.64379  
## BRN:MornLow 53.33333 1.5275252 3 52.00000 55.00000 52.50000 53.00000  
## WHT:MornHigh 56.19606 0.5227968 3 55.66755 56.71295 55.93761 56.20767  
## WHT:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WT/BLK:MornHigh 56.13217 0.4116973 3 55.66755 56.45160 55.97246 56.27737  
## WT/BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## WT/BR:MornHigh 55.58624 0.5619757 3 54.98804 56.10313 55.32780 55.66755  
## WT/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.08135  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 57.10803  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.17837  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.46031  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.36448  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.88534  
## WT/BR:MornLow 53.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.85437 a  
## WHT:MornHigh 56.19606 ab  
## WT/BLK:MornHigh 56.13217 ab  
## BRN:MornHigh 55.80482 abc  
## BL/BR:MornHigh 55.70696 abc  
## WT/BR:MornHigh 55.58624 abc  
## BLK:MornLow 55.00000 abcd  
## WHT:MornLow 54.00000 bcd  
## WT/BLK:MornLow 53.66667 bcd  
## BL/BR:MornLow 53.33333 cd  
## BRN:MornLow 53.33333 cd  
## WT/BR:MornLow 53.00000 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 29.181 5.836 5.1173 0.00247 \*\*   
## THIregime 1 45.382 45.382 39.7921 1.605e-06 \*\*\*  
## Colour:THIregime 5 1.966 0.393 0.3447 0.88054   
## Residuals 24 27.371 1.140   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.140476   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.83036 1.698448 6 52 55.77956  
## BLK 55.64126 1.145224 6 54 56.81749  
## BRN 54.51839 1.985500 6 51 56.59415  
## WHT 54.79768 1.656144 6 52 56.64761  
## WT/BLK 53.55034 1.606813 6 51 55.40620  
## WT/BR 56.06525 1.216826 6 54 57.40988  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.906392   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.06525 a  
## BLK 55.64126 ab  
## WHT 54.79768 abc  
## BRN 54.51839 abc  
## BL/BR 53.83036 bc  
## WT/BLK 53.55034 c  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.140476   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.85665 0.9774027 18 53.8381 57.40988  
## MornLow 53.61111 1.5769997 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7347   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.85665 a  
## MornLow 53.61111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.140476 24 54.73388 1.951133 3.14397  
##   
## $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 55.32738 0.3940119 3 55.05773 55.77956 55.10129 55.14485  
## BL/BR:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## BLK:MornHigh 56.61585 0.3098887 3 56.25903 56.81749 56.51503 56.77103  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 55.70345 1.1441551 3 54.41307 56.59415 55.25810 56.10313  
## BRN:MornLow 53.33333 2.0816660 3 51.00000 55.00000 52.50000 54.00000  
## WHT:MornHigh 55.92869 0.8283286 3 55.02289 56.64761 55.56923 56.11558  
## WHT:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WT/BLK:MornHigh 54.76734 0.8233946 3 53.83810 55.40620 54.44792 55.05773  
## WT/BLK:MornLow 52.33333 1.1547005 3 51.00000 53.00000 52.00000 53.00000  
## WT/BR:MornHigh 56.79716 0.8724869 3 55.79823 57.40988 56.49080 57.18338  
## WT/BR:MornLow 55.33333 1.1547005 3 54.00000 56.00000 55.00000 56.00000  
## Q75  
## BL/BR:MornHigh 55.46220  
## BL/BR:MornLow 52.50000  
## BLK:MornHigh 56.79426  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.34864  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.38160  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.23197  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 57.29663  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.79716 a  
## BLK:MornHigh 56.61585 a  
## WHT:MornHigh 55.92869 ab  
## BRN:MornHigh 55.70345 ab  
## WT/BR:MornLow 55.33333 abc  
## BL/BR:MornHigh 55.32738 abc  
## WT/BLK:MornHigh 54.76734 abc  
## BLK:MornLow 54.66667 abc  
## WHT:MornLow 53.66667 abc  
## BRN:MornLow 53.33333 bc  
## BL/BR:MornLow 52.33333 c  
## WT/BLK:MornLow 52.33333 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM78 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 26.368 5.274 4.3982 0.005529 \*\*   
## THIregime 1 42.507 42.507 35.4502 3.816e-06 \*\*\*  
## Colour:THIregime 5 0.780 0.156 0.1300 0.984020   
## Residuals 24 28.777 1.199   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.199062   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.72035 1.227415 6 53 55.98698  
## BLK 55.40174 1.601409 6 53 57.35181  
## BRN 53.94061 1.776067 6 51 55.92890  
## WHT 55.31105 1.529159 6 53 57.16098  
## WT/BLK 52.94114 1.853638 6 50 55.40620  
## WT/BR 54.87153 1.188707 6 53 56.19025  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.954745   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BLK 55.40174 a  
## WHT 55.31105 a  
## WT/BR 54.87153 ab  
## BL/BR 54.72035 ab  
## BRN 53.94061 ab  
## WT/BLK 52.94114 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.199062   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.61769 1.014043 18 53.05405 57.35181  
## MornLow 53.44444 1.503808 18 50.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7533346   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.61769 a  
## MornLow 53.44444 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.199062 24 54.53107 2.008061 3.223712  
##   
## $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 55.77403 0.3198675 3 55.40620 55.98698 55.66755 55.92890  
## BL/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BLK:MornHigh 56.47014 0.8083767 3 55.76384 57.35181 56.02931 56.29479  
## BLK:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## BRN:MornHigh 55.21454 0.8270121 3 54.30853 55.92890 54.85737 55.40620  
## BRN:MornLow 52.66667 1.5275252 3 51.00000 54.00000 52.00000 53.00000  
## WHT:MornHigh 56.28877 0.8029128 3 55.58043 57.16098 55.85267 56.12491  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.21561 1.1763438 3 53.05405 55.40620 53.62031 54.18657  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 55.74305 0.5038728 3 55.19712 56.19025 55.51945 55.84178  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 55.95794  
## BL/BR:MornLow 54.00000  
## BLK:MornHigh 56.82330  
## BLK:MornLow 55.00000  
## BRN:MornHigh 55.66755  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.64295  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.79638  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.01602  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BLK:MornHigh 56.47014 a  
## WHT:MornHigh 56.28877 a  
## BL/BR:MornHigh 55.77403 ab  
## WT/BR:MornHigh 55.74305 ab  
## BRN:MornHigh 55.21454 ab  
## BLK:MornLow 54.33333 abc  
## WHT:MornLow 54.33333 abc  
## WT/BLK:MornHigh 54.21561 abc  
## WT/BR:MornLow 54.00000 abc  
## BL/BR:MornLow 53.66667 abc  
## BRN:MornLow 52.66667 bc  
## WT/BLK:MornLow 51.66667 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM79 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.245 2.449 1.4278 0.2502   
## THIregime 1 49.062 49.062 28.6033 1.725e-05 \*\*\*  
## Colour:THIregime 5 0.898 0.180 0.1047 0.9902   
## Residuals 24 41.166 1.715   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.715245   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.43265 2.008011 6 52 56.97430  
## BLK 55.24417 1.540443 6 53 57.02932  
## BRN 54.89163 1.736003 6 52 56.83175  
## WHT 55.47336 1.316110 6 54 56.97430  
## WT/BLK 54.31169 2.078014 6 52 57.14853  
## WT/BR 55.98425 1.660108 6 53 57.58412  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.337934   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 55.98425 a  
## WHT 55.47336 a  
## BLK 55.24417 a  
## BRN 54.89163 a  
## BL/BR 54.43265 a  
## WT/BLK 54.31169 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.715245   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.22369 0.9860977 18 54.3608 57.58412  
## MornLow 53.88889 1.4907120 18 52.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9010111   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.22369 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.715245 24 55.05629 2.37879 3.855658  
##   
## $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 55.86529 0.9606539 3 55.29004 56.97430 55.31079 55.33153  
## BL/BR:MornLow 53.00000 1.7320508 3 52.00000 55.00000 52.00000 52.00000  
## BLK:MornHigh 56.48833 0.5371843 3 55.95504 57.02932 56.21784 56.48064  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.11660 0.8362491 3 55.19712 56.83175 55.75902 56.32093  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.61339 0.3131159 3 56.41426 56.97430 56.43293 56.45160  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.29004 1.6094986 3 54.36080 57.14853 54.36080 54.36080  
## WT/BLK:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## WT/BR:MornHigh 56.96849 0.9918045 3 55.82436 57.58412 56.66068 57.49700  
## WT/BR:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## Q75  
## BL/BR:MornHigh 56.15291  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.75498  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.57634  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.71295  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 55.75467  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 57.54056  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 56.96849 a  
## WHT:MornHigh 56.61339 ab  
## BLK:MornHigh 56.48833 ab  
## BRN:MornHigh 56.11660 ab  
## BL/BR:MornHigh 55.86529 ab  
## WT/BLK:MornHigh 55.29004 ab  
## WT/BR:MornLow 55.00000 ab  
## WHT:MornLow 54.33333 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornLow 53.66667 ab  
## WT/BLK:MornLow 53.33333 ab  
## BL/BR:MornLow 53.00000 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM80 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.204 3.241 4.3650 0.005745 \*\*   
## THIregime 1 50.369 50.369 67.8428 1.876e-08 \*\*\*  
## Colour:THIregime 5 1.009 0.202 0.2719 0.923991   
## Residuals 24 17.818 0.742   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7424359   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.72100 1.580104 6 53 56.52627  
## BLK 55.25820 1.554294 6 53 57.06142  
## BRN 55.18528 1.486044 6 53 56.93074  
## WHT 56.01007 1.316894 6 54 57.53434  
## WT/BLK 54.33378 1.667525 6 52 56.45160  
## WT/BR 56.25545 1.484466 6 54 58.01970  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.53815   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WT/BR 56.25545 a  
## WHT 56.01007 a  
## BLK 55.25820 ab  
## BRN 55.18528 ab  
## BL/BR 54.72100 ab  
## WT/BLK 54.33378 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.7424359   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.47681 0.7377959 18 54.8835 58.0197  
## MornLow 54.11111 1.2313975 18 52.0000 57.0000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.5927841   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.47681 a  
## MornLow 54.11111 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.7424359 24 55.29396 1.558303 2.536676  
##   
## $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 56.10866 0.3628221 3 55.87082 56.52627 55.89986 55.92890  
## BL/BR:MornLow 53.33333 0.5773503 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 56.51640 0.5388571 3 55.98392 57.06142 56.24390 56.50387  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 56.37056 0.5533235 3 55.82436 56.93074 56.09046 56.35656  
## BRN:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## WHT:MornHigh 57.02014 0.5242165 3 56.48645 57.53434 56.76304 57.03964  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.66755 0.7840500 3 54.88350 56.45160 55.27553 55.66755  
## WT/BLK:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 57.17757 0.7904767 3 56.45160 58.01970 56.75651 57.06142  
## WT/BR:MornLow 55.33333 1.5275252 3 54.00000 57.00000 54.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.22759  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.78264  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.64365  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.28699  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.05958  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 57.54056  
## WT/BR:MornLow 56.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WT/BR:MornHigh 57.17757 a  
## WHT:MornHigh 57.02014 a  
## BLK:MornHigh 56.51640 ab  
## BRN:MornHigh 56.37056 ab  
## BL/BR:MornHigh 56.10866 ab  
## WT/BLK:MornHigh 55.66755 abc  
## WT/BR:MornLow 55.33333 abcd  
## WHT:MornLow 55.00000 abcd  
## BLK:MornLow 54.00000 bcd  
## BRN:MornLow 54.00000 bcd  
## BL/BR:MornLow 53.33333 cd  
## WT/BLK:MornLow 53.00000 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM81 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 28.778 5.756 5.7816 0.001221 \*\*   
## THIregime 1 40.309 40.309 40.4911 1.404e-06 \*\*\*  
## Colour:THIregime 5 0.681 0.136 0.1368 0.982120   
## Residuals 24 23.892 0.996   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9955087   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 53.89573 1.409872 6 52 55.33153  
## BLK 55.07857 1.384831 6 53 56.71295  
## BRN 54.14661 1.449286 6 52 55.83386  
## WHT 55.51122 1.244111 6 54 57.07884  
## WT/BLK 52.81046 1.708847 6 50 54.70927  
## WT/BR 54.90637 1.581942 6 52 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.781114   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.51122 a  
## BLK 55.07857 a  
## WT/BR 54.90637 a  
## BRN 54.14661 ab  
## BL/BR 53.89573 ab  
## WT/BLK 52.81046 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.9955087   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.44965 1.010274 18 52.7927 57.07884  
## MornLow 53.33333 1.455214 18 50.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6864194   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.44965 a  
## MornLow 53.33333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.9955087 24 54.39149 1.834389 2.937365  
##   
## $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 55.12480 0.3228063 3 54.75283 55.33153 55.02143 55.29004  
## BL/BR:MornLow 52.66667 0.5773503 3 52.00000 53.00000 52.50000 53.00000  
## BLK:MornHigh 56.15714 0.5517840 3 55.60947 56.71295 55.87923 56.14898  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 55.29321 0.5540400 3 54.72669 55.83386 55.02289 55.31908  
## BRN:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## WHT:MornHigh 56.35577 0.6295950 3 55.92890 57.07884 55.99424 56.05958  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 53.95426 1.0209142 3 52.79270 54.70927 53.57675 54.36080  
## WT/BLK:MornLow 51.66667 1.5275252 3 50.00000 53.00000 51.00000 52.00000  
## WT/BR:MornHigh 55.81274 0.8898418 3 54.79638 56.45160 55.49332 56.19025  
## WT/BR:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## Q75  
## BL/BR:MornHigh 55.31079  
## BL/BR:MornLow 53.00000  
## BLK:MornHigh 56.43097  
## BLK:MornLow 54.50000  
## BRN:MornHigh 55.57647  
## BRN:MornLow 53.50000  
## WHT:MornHigh 56.56921  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.53503  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.32093  
## WT/BR:MornLow 55.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.35577 a  
## BLK:MornHigh 56.15714 a  
## WT/BR:MornHigh 55.81274 ab  
## BRN:MornHigh 55.29321 abc  
## BL/BR:MornHigh 55.12480 abc  
## WHT:MornLow 54.66667 abc  
## BLK:MornLow 54.00000 abcd  
## WT/BR:MornLow 54.00000 abcd  
## WT/BLK:MornHigh 53.95426 abcd  
## BRN:MornLow 53.00000 bcd  
## BL/BR:MornLow 52.66667 cd  
## WT/BLK:MornLow 51.66667 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 22.472 4.494 4.1607 0.007292 \*\*   
## THIregime 1 43.922 43.922 40.6605 1.36e-06 \*\*\*  
## Colour:THIregime 5 0.841 0.168 0.1558 0.976191   
## Residuals 24 25.925 1.080   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080215   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.84265 1.155024 6 54 57.12364  
## BLK 55.27631 2.004259 6 52 57.63455  
## BRN 54.86127 1.373213 6 53 56.24252  
## WHT 55.96890 1.061636 6 55 56.97430  
## WT/BLK 54.11598 1.945931 6 51 56.45160  
## WT/BR 53.89559 1.409655 6 52 55.31908  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.855343   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.96890 a  
## BL/BR 55.84265 a  
## BLK 55.27631 ab  
## BRN 54.86127 ab  
## WT/BLK 54.11598 ab  
## WT/BR 53.89559 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.080215   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.09801 0.9536527 18 53.8381 57.63455  
## MornLow 53.88889 1.4095844 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7150264   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.09801 a  
## MornLow 53.88889 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.080215 24 54.99345 1.889923 3.059782  
##   
## $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 56.68529 0.45281085 3 56.21929 57.12364 56.46612 56.71295  
## BL/BR:MornLow 55.00000 1.00000000 3 54.00000 56.00000 54.50000 55.00000  
## BLK:MornHigh 56.55262 1.07504129 3 55.48461 57.63455 56.01166 56.53872  
## BLK:MornLow 54.00000 2.00000000 3 52.00000 56.00000 53.00000 54.00000  
## BRN:MornHigh 56.05588 0.31575697 3 55.69131 56.24252 55.96256 56.23381  
## BRN:MornLow 53.66667 0.57735027 3 53.00000 54.00000 53.50000 54.00000  
## WHT:MornHigh 56.93779 0.03736336 3 56.89963 56.97430 56.91954 56.93945  
## WHT:MornLow 55.00000 0.00000000 3 55.00000 55.00000 55.00000 55.00000  
## WT/BLK:MornHigh 55.23197 1.31543282 3 53.83810 56.45160 54.62215 55.40620  
## WT/BLK:MornLow 53.00000 2.00000000 3 51.00000 55.00000 52.00000 53.00000  
## WT/BR:MornHigh 55.12452 0.32201758 3 54.75283 55.31908 55.02724 55.30166  
## WT/BR:MornLow 52.66667 0.57735027 3 52.00000 53.00000 52.50000 53.00000  
## Q75  
## BL/BR:MornHigh 56.91830  
## BL/BR:MornLow 55.50000  
## BLK:MornHigh 57.08663  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.23816  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.95688  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 55.31037  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.93779 a  
## BL/BR:MornHigh 56.68529 ab  
## BLK:MornHigh 56.55262 ab  
## BRN:MornHigh 56.05588 abc  
## WT/BLK:MornHigh 55.23197 abcd  
## WT/BR:MornHigh 55.12452 abcd  
## BL/BR:MornLow 55.00000 abcd  
## WHT:MornLow 55.00000 abcd  
## BLK:MornLow 54.00000 abcd  
## BRN:MornLow 53.66667 bcd  
## WT/BLK:MornLow 53.00000 cd  
## WT/BR:MornLow 52.66667 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM83 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.576 2.515 1.7569 0.1601   
## THIregime 1 44.834 44.834 31.3181 9.267e-06 \*\*\*  
## Colour:THIregime 5 0.407 0.081 0.0568 0.9976   
## Residuals 24 34.358 1.432   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.431583   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.03584 1.847405 6 52 57.17031  
## BLK 55.20766 1.504780 6 53 56.94526  
## BRN 54.81283 1.957917 6 52 57.23565  
## WHT 55.43919 1.631589 6 53 57.42233  
## WT/BLK 53.59390 1.460220 6 52 55.40620  
## WT/BR 54.93977 1.270751 6 53 56.53872  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.135883   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.43919 a  
## BLK 55.20766 a  
## BL/BR 55.03584 a  
## WT/BR 54.93977 a  
## BRN 54.81283 a  
## WT/BLK 53.59390 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.431583   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95417 0.8986808 18 54.53503 57.42233  
## MornLow 53.72222 1.4061025 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.823143   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95417 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.431583 24 54.8382 2.181851 3.522441  
##   
## $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 56.07167 1.1460325 3 54.88350 57.17031 55.52236 56.16121  
## BL/BR:MornLow 54.00000 2.0000000 3 52.00000 56.00000 53.00000 54.00000  
## BLK:MornHigh 56.41533 0.5343694 3 55.87663 56.94526 56.15036 56.42409  
## BLK:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BRN:MornHigh 55.95899 1.1441953 3 55.02605 57.23565 55.32067 55.61528  
## BRN:MornLow 53.66667 2.0816660 3 52.00000 56.00000 52.50000 53.00000  
## WHT:MornHigh 56.54504 0.8081623 3 55.83089 57.42233 56.10640 56.38191  
## WHT:MornLow 54.33333 1.5275252 3 53.00000 56.00000 53.50000 54.00000  
## WT/BLK:MornHigh 54.85446 0.4798012 3 54.53503 55.40620 54.57859 54.62215  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.87953 0.6225236 3 55.30166 56.53872 55.54994 55.79823  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.66576  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.68468  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.42547  
## BRN:MornLow 54.50000  
## WHT:MornHigh 56.90212  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.01418  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 56.16847  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.54504 a  
## BLK:MornHigh 56.41533 a  
## BL/BR:MornHigh 56.07167 a  
## BRN:MornHigh 55.95899 a  
## WT/BR:MornHigh 55.87953 a  
## WT/BLK:MornHigh 54.85446 ab  
## WHT:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 54.00000 ab  
## WT/BR:MornLow 54.00000 ab  
## BRN:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM84 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 21.235 4.247 2.4736 0.06077 .   
## THIregime 1 40.884 40.884 23.8121 5.639e-05 \*\*\*  
## Colour:THIregime 5 0.564 0.113 0.0657 0.99668   
## Residuals 24 41.206 1.717   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.716932   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.01803 1.320841 6 53 56.52627  
## BLK 54.97683 2.308119 6 51 57.55202  
## BRN 55.59728 1.101219 6 54 56.75651  
## WHT 55.69800 1.571804 6 53 57.46215  
## WT/BLK 53.46322 1.315323 6 52 55.05773  
## WT/BR 54.30733 2.011328 6 52 56.88718  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.339084   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.69800 a  
## BRN 55.59728 a  
## BL/BR 55.01803 a  
## BLK 54.97683 a  
## WT/BR 54.30733 a  
## WT/BLK 53.46322 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.716932   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.90912 1.081792 18 54.3608 57.55202  
## MornLow 53.77778 1.592466 18 51.0000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9014541   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.90912 a  
## MornLow 53.77778 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.716932 24 54.84345 2.389196 3.857554  
##   
## $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 56.03607 0.5023706 3 55.52236 56.52627 55.79097 56.05958  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.28700 1.3548483 3 54.85737 57.55202 55.65448 56.45160  
## BLK:MornLow 53.66667 2.5166115 3 51.00000 56.00000 52.50000 54.00000  
## BRN:MornHigh 56.52789 0.3166298 3 56.16649 56.75651 56.41359 56.66068  
## BRN:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WHT:MornHigh 56.72934 0.8075464 3 55.86356 57.46215 56.36293 56.86229  
## WHT:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## WT/BLK:MornHigh 54.59311 0.4023746 3 54.36080 55.05773 54.36080 54.36080  
## WT/BLK:MornLow 52.33333 0.5773503 3 52.00000 53.00000 52.00000 52.00000  
## WT/BR:MornHigh 55.28133 1.3907688 3 54.46534 56.88718 54.47841 54.49148  
## WT/BR:MornLow 53.33333 2.3094011 3 52.00000 56.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 56.29292  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.00181  
## BLK:MornLow 55.00000  
## BRN:MornHigh 56.70859  
## BRN:MornLow 55.00000  
## WHT:MornHigh 57.16222  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 54.70927  
## WT/BLK:MornLow 52.50000  
## WT/BR:MornHigh 55.68933  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.72934 a  
## BRN:MornHigh 56.52789 a  
## BLK:MornHigh 56.28700 a  
## BL/BR:MornHigh 56.03607 ab  
## WT/BR:MornHigh 55.28133 ab  
## BRN:MornLow 54.66667 ab  
## WHT:MornLow 54.66667 ab  
## WT/BLK:MornHigh 54.59311 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 53.66667 ab  
## WT/BR:MornLow 53.33333 ab  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM85 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 10.149 2.030 1.8008 0.1508   
## THIregime 1 46.991 46.991 41.6912 1.12e-06 \*\*\*  
## Colour:THIregime 5 0.789 0.158 0.1400 0.9812   
## Residuals 24 27.051 1.127   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.127112   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.38062 1.680687 6 52 56.37693  
## BLK 55.73795 1.602353 6 53 57.49700  
## BRN 54.84385 1.697098 6 52 56.73671  
## WHT 55.92269 1.236583 6 54 57.34766  
## WT/BLK 55.05157 1.763465 6 53 57.49700  
## WT/BR 54.91829 1.433422 6 53 56.36448  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.89519   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.92269 a  
## BLK 55.73795 a  
## WT/BLK 55.05157 a  
## WT/BR 54.91829 a  
## BRN 54.84385 a  
## BL/BR 54.38062 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.127112   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.28499 0.7665141 18 55.09258 57.497  
## MornLow 54.00000 1.2833779 18 52.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7303829   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.28499 a  
## MornLow 54.00000 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.127112 24 55.1425 1.925294 3.125496  
##   
## $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 55.76123 0.5860508 3 55.21019 56.37693 55.45339 55.69659  
## BL/BR:MornLow 53.00000 1.0000000 3 52.00000 54.00000 52.50000 53.00000  
## BLK:MornHigh 56.80924 0.8015908 3 55.92890 57.49700 56.46536 57.00181  
## BLK:MornLow 54.66667 1.5275252 3 53.00000 56.00000 54.00000 55.00000  
## BRN:MornHigh 56.02103 0.8424638 3 55.09258 56.73671 55.66319 56.23381  
## BRN:MornLow 53.66667 1.5275252 3 52.00000 55.00000 53.00000 54.00000  
## WHT:MornHigh 56.84539 0.5184133 3 56.31221 57.34766 56.59425 56.87629  
## WHT:MornLow 55.00000 1.0000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 56.10313 1.2071239 3 55.40620 57.49700 55.40620 55.40620  
## WT/BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## WT/BR:MornHigh 56.16992 0.3220176 3 55.79823 56.36448 56.07264 56.34706  
## WT/BR:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.03676  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 57.24941  
## BLK:MornLow 55.50000  
## BRN:MornHigh 56.48526  
## BRN:MornLow 54.50000  
## WHT:MornHigh 57.11198  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 56.45160  
## WT/BLK:MornLow 54.50000  
## WT/BR:MornHigh 56.35577  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.84539 a  
## BLK:MornHigh 56.80924 a  
## WT/BR:MornHigh 56.16992 ab  
## WT/BLK:MornHigh 56.10313 abc  
## BRN:MornHigh 56.02103 abc  
## BL/BR:MornHigh 55.76123 abc  
## WHT:MornLow 55.00000 abc  
## BLK:MornLow 54.66667 abc  
## WT/BLK:MornLow 54.00000 abc  
## BRN:MornLow 53.66667 bc  
## WT/BR:MornLow 53.66667 bc  
## BL/BR:MornLow 53.00000 c  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM86 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 6.051 1.210 0.6163 0.6885   
## THIregime 1 52.318 52.318 26.6461 2.759e-05 \*\*\*  
## Colour:THIregime 5 0.522 0.104 0.0532 0.9980   
## Residuals 24 47.122 1.963   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.963425   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.16098 1.781737 6 52 56.90896  
## BLK 54.43809 2.673789 6 50 57.49700  
## BRN 54.88437 1.572433 6 53 56.83175  
## WHT 55.42094 1.261822 6 54 56.86976  
## WT/BLK 54.24666 1.917073 6 51 56.45160  
## WT/BR 55.08206 1.388807 6 53 56.76522  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.501361   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.42094 a  
## BL/BR 55.16098 a  
## WT/BR 55.08206 a  
## BRN 54.88437 a  
## BLK 54.43809 a  
## WT/BLK 54.24666 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.963425   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.07770 0.897554 18 54.09945 57.497  
## MornLow 53.66667 1.533930 18 50.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9639937   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.07770 a  
## MornLow 53.66667 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.963425 24 54.87218 2.553612 4.125177  
##   
## $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 56.32196 0.9448978 3 55.23197 56.90896 56.02846 56.82496  
## BL/BR:MornLow 54.00000 1.7320508 3 52.00000 55.00000 53.50000 55.00000  
## BLK:MornHigh 55.87617 1.6335835 3 54.23013 57.49700 55.06576 55.90139  
## BLK:MornLow 53.00000 3.0000000 3 50.00000 56.00000 51.50000 53.00000  
## BRN:MornHigh 56.10208 0.6321513 3 55.71982 56.83175 55.73724 55.75467  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.50854 0.3138796 3 56.30226 56.86976 56.32793 56.35359  
## WHT:MornLow 54.33333 0.5773503 3 54.00000 55.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.49332 1.2350919 3 54.09945 56.45160 55.01418 55.92890  
## WT/BLK:MornLow 53.00000 1.7320508 3 51.00000 54.00000 52.50000 54.00000  
## WT/BR:MornHigh 56.16412 0.5562520 3 55.66755 56.76522 55.86356 56.05958  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.86696  
## BL/BR:MornLow 55.00000  
## BLK:MornHigh 56.69919  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.29321  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.61168  
## WHT:MornLow 54.50000  
## WT/BLK:MornHigh 56.19025  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.41240  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.50854 a  
## BL/BR:MornHigh 56.32196 a  
## WT/BR:MornHigh 56.16412 a  
## BRN:MornHigh 56.10208 a  
## BLK:MornHigh 55.87617 a  
## WT/BLK:MornHigh 55.49332 a  
## WHT:MornLow 54.33333 a  
## BL/BR:MornLow 54.00000 a  
## WT/BR:MornLow 54.00000 a  
## BRN:MornLow 53.66667 a  
## BLK:MornLow 53.00000 a  
## WT/BLK:MornLow 53.00000 a  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM87 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 14.049 2.810 6.0053 0.0009714 \*\*\*  
## THIregime 1 46.528 46.528 99.4415 5.192e-10 \*\*\*  
## Colour:THIregime 5 0.881 0.176 0.3767 0.8596835   
## Residuals 24 11.229 0.468   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4678922   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 54.43355 1.277791 6 53 55.92890  
## BLK 54.63119 1.480881 6 53 56.28654  
## BRN 55.01078 1.107533 6 54 56.05958  
## WHT 55.87571 1.203111 6 54 57.33366  
## WT/BLK 54.29022 1.628678 6 52 56.45160  
## WT/BR 53.91302 1.604757 6 52 55.92890  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.221074   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.87571 a  
## BRN 55.01078 ab  
## BLK 54.63119 b  
## BL/BR 54.43355 b  
## WT/BLK 54.29022 b  
## WT/BR 53.91302 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.4678922   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.82927 0.673680 18 54.75283 57.33366  
## MornLow 53.55556 1.041618 18 52.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.4705871   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.82927 a  
## MornLow 53.55556 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.4678922 24 54.69241 1.250679 2.013763  
##   
## $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 55.53376 0.34222991 3 55.33153 55.92890 55.33620 55.34086  
## BL/BR:MornLow 53.33333 0.57735027 3 53.00000 54.00000 53.00000 53.00000  
## BLK:MornHigh 55.92905 0.30962087 3 55.74596 56.28654 55.75031 55.75467  
## BLK:MornLow 53.33333 0.57735027 3 53.00000 54.00000 53.00000 53.00000  
## BRN:MornHigh 56.02156 0.03925646 3 55.98117 56.05958 56.00255 56.02394  
## BRN:MornLow 54.00000 0.00000000 3 54.00000 54.00000 54.00000 54.00000  
## WHT:MornHigh 56.75143 0.56397670 3 56.20767 57.33366 56.46031 56.71295  
## WHT:MornLow 55.00000 1.00000000 3 54.00000 56.00000 54.50000 55.00000  
## WT/BLK:MornHigh 55.58043 0.79843744 3 54.88350 56.45160 55.14485 55.40620  
## WT/BLK:MornLow 53.00000 1.00000000 3 52.00000 54.00000 52.50000 53.00000  
## WT/BR:MornHigh 55.15937 0.66678879 3 54.75283 55.92890 54.77460 54.79638  
## WT/BR:MornLow 52.66667 1.15470054 3 52.00000 54.00000 52.00000 52.00000  
## Q75  
## BL/BR:MornHigh 55.63488  
## BL/BR:MornLow 53.50000  
## BLK:MornHigh 56.02060  
## BLK:MornLow 53.50000  
## BRN:MornHigh 56.04176  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.02330  
## WHT:MornLow 55.50000  
## WT/BLK:MornHigh 55.92890  
## WT/BLK:MornLow 53.50000  
## WT/BR:MornHigh 55.36264  
## WT/BR:MornLow 53.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.75143 a  
## BRN:MornHigh 56.02156 a  
## BLK:MornHigh 55.92905 ab  
## WT/BLK:MornHigh 55.58043 ab  
## BL/BR:MornHigh 55.53376 ab  
## WT/BR:MornHigh 55.15937 abc  
## WHT:MornLow 55.00000 abcd  
## BRN:MornLow 54.00000 bcde  
## BL/BR:MornLow 53.33333 cde  
## BLK:MornLow 53.33333 cde  
## WT/BLK:MornLow 53.00000 de  
## WT/BR:MornLow 52.66667 e  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM88 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 32.669 6.534 7.8364 0.0001714 \*\*\*  
## THIregime 1 37.308 37.308 44.7461 6.42e-07 \*\*\*  
## Colour:THIregime 5 0.548 0.110 0.1315 0.9836174   
## Residuals 24 20.010 0.834   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8337692   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.09651 1.7299654 6 53 57.27299  
## BLK 55.78365 1.2908021 6 54 57.08434  
## BRN 56.44403 0.9601139 6 55 57.49700  
## WHT 55.76209 1.2681450 6 54 57.04399  
## WT/BLK 53.41966 1.6605027 6 51 55.58043  
## WT/BR 54.93541 1.2755692 6 53 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.630017   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## BRN 56.44403 a  
## BLK 55.78365 a  
## WHT 55.76209 a  
## BL/BR 55.09651 a  
## WT/BR 54.93541 ab  
## WT/BLK 53.41966 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 0.8337692   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.25823 1.087803 18 53.57675 57.497  
## MornLow 54.22222 1.395605 18 51.00000 56.000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.6281885   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.25823 a  
## MornLow 54.22222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 0.8337692 24 55.24023 1.65298 2.68818  
##   
## $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 56.19302 0.9353942 3 55.63851 57.27299 55.65303 55.66755  
## BL/BR:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BLK:MornHigh 56.90063 0.2985598 3 56.55614 57.08434 56.80878 57.06142  
## BLK:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## BRN:MornHigh 57.22139 0.3979063 3 56.76522 57.49700 57.08359 57.40196  
## BRN:MornLow 55.66667 0.5773503 3 55.00000 56.00000 55.50000 56.00000  
## WHT:MornHigh 56.85752 0.2953984 3 56.51694 57.04399 56.76429 57.01164  
## WHT:MornLow 54.66667 0.5773503 3 54.00000 55.00000 54.50000 55.00000  
## WT/BLK:MornHigh 54.50599 1.0097018 3 53.57675 55.58043 53.96878 54.36080  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.87082 0.6653645 3 55.14485 56.45160 55.58043 56.01602  
## WT/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## Q75  
## BL/BR:MornHigh 56.47027  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 57.07288  
## BLK:MornLow 55.00000  
## BRN:MornHigh 57.44948  
## BRN:MornLow 56.00000  
## WHT:MornHigh 57.02781  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 54.97062  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 56.23381  
## WT/BR:MornLow 54.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## BRN:MornHigh 57.22139 a  
## BLK:MornHigh 56.90063 ab  
## WHT:MornHigh 56.85752 ab  
## BL/BR:MornHigh 56.19302 abc  
## WT/BR:MornHigh 55.87082 abc  
## BRN:MornLow 55.66667 abc  
## BLK:MornLow 54.66667 abcd  
## WHT:MornLow 54.66667 abcd  
## WT/BLK:MornHigh 54.50599 bcd  
## BL/BR:MornLow 54.00000 cd  
## WT/BR:MornLow 54.00000 cd  
## WT/BLK:MornLow 52.33333 d  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM89 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 16.167 3.233 1.7509 0.1614   
## THIregime 1 46.242 46.242 25.0396 4.115e-05 \*\*\*  
## Colour:THIregime 5 0.591 0.118 0.0640 0.9969   
## Residuals 24 44.322 1.847   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.846769   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.10342 1.413501 6 53 56.80007  
## BLK 54.98144 1.499390 6 53 56.48064  
## BRN 54.61620 1.633609 6 52 56.29479  
## WHT 55.98674 1.642022 6 53 57.53185  
## WT/BLK 53.78960 2.271256 6 50 56.27737  
## WT/BR 55.32277 1.860504 6 52 57.23565  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 2.425914   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.98674 a  
## WT/BR 55.32277 a  
## BL/BR 55.10342 a  
## BLK 54.98144 a  
## BRN 54.61620 a  
## WT/BLK 53.78960 a  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.846769   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 56.10006 1.045461 18 53.05405 57.53185  
## MornLow 53.83333 1.581139 18 50.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.9349176   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 56.10006 a  
## MornLow 53.83333 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.846769 24 54.9667 2.472331 4.000753  
##   
## $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 56.20684 0.5851027 3 55.63021 56.80007 55.91023 56.19025  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.29622 0.3181063 3 55.92890 56.48064 56.20401 56.47911  
## BLK:MornLow 53.66667 0.5773503 3 53.00000 54.00000 53.50000 54.00000  
## BRN:MornHigh 55.89907 0.6333314 3 55.16861 56.29479 55.70121 56.23381  
## BRN:MornLow 53.33333 1.1547005 3 52.00000 54.00000 53.00000 54.00000  
## WHT:MornHigh 56.97347 0.9053441 3 55.92890 57.53185 56.69428 57.45966  
## WHT:MornLow 55.00000 1.7320508 3 53.00000 56.00000 54.50000 56.00000  
## WT/BLK:MornHigh 54.91254 1.6673987 3 53.05405 56.27737 54.23013 55.40620  
## WT/BLK:MornLow 52.66667 2.5166115 3 50.00000 55.00000 51.50000 53.00000  
## WT/BR:MornHigh 56.31221 1.1761718 3 54.98804 57.23565 55.85050 56.71295  
## WT/BR:MornLow 54.33333 2.0816660 3 52.00000 56.00000 53.50000 55.00000  
## Q75  
## BL/BR:MornHigh 56.49516  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.47987  
## BLK:MornLow 54.00000  
## BRN:MornHigh 56.26430  
## BRN:MornLow 54.00000  
## WHT:MornHigh 57.49576  
## WHT:MornLow 56.00000  
## WT/BLK:MornHigh 55.84178  
## WT/BLK:MornLow 54.00000  
## WT/BR:MornHigh 56.97430  
## WT/BR:MornLow 55.50000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.97347 a  
## WT/BR:MornHigh 56.31221 ab  
## BLK:MornHigh 56.29622 ab  
## BL/BR:MornHigh 56.20684 ab  
## BRN:MornHigh 55.89907 ab  
## WHT:MornLow 55.00000 ab  
## WT/BLK:MornHigh 54.91254 ab  
## WT/BR:MornLow 54.33333 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 53.66667 ab  
## BRN:MornLow 53.33333 ab  
## WT/BLK:MornLow 52.66667 b  
##   
## attr(,"class")  
## [1] "group"  
## [1] "---- RECTEM90 ----"  
## Analysis of Variance Table  
##   
## Response: data1[[i]]  
## Df Sum Sq Mean Sq F value Pr(>F)   
## Colour 5 12.955 2.591 2.1825 0.08981 .   
## THIregime 1 44.783 44.783 37.7223 2.406e-06 \*\*\*  
## Colour:THIregime 5 0.604 0.121 0.1018 0.99082   
## Residuals 24 28.492 1.187   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Study: Colour  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.187169   
##   
## Colour, means  
##   
## data1..i.. std r Min Max  
## BL/BR 55.05105 1.352754 6 53 56.60094  
## BLK 55.18494 1.796610 6 53 57.43892  
## BRN 54.81270 1.506600 6 53 56.68919  
## WHT 55.62852 1.335412 6 54 57.27299  
## WT/BLK 53.68101 1.933700 6 51 56.45160  
## WT/BR 54.66711 1.387676 6 53 56.45160  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 4.372651   
##   
## Minimun Significant Difference: 1.945026   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## WHT 55.62852 a  
## BLK 55.18494 ab  
## BL/BR 55.05105 ab  
## BRN 54.81270 ab  
## WT/BR 54.66711 ab  
## WT/BLK 53.68101 b  
##   
## Study: THIregime  
##   
## HSD Test for data1[[i]]   
##   
## Mean Square Error: 1.187169   
##   
## THIregime, means  
##   
## data1..i.. std r Min Max  
## MornHigh 55.95289 0.8554225 18 54.09945 57.43892  
## MornLow 53.72222 1.3197841 18 51.00000 56.00000  
##   
## Alpha: 0.05 ; DF Error: 24   
## Critical Value of Studentized Range: 2.918793   
##   
## Minimun Significant Difference: 0.7495891   
##   
## Treatments with the same letter are not significantly different.  
##   
## data1[[i]] groups  
## MornHigh 55.95289 a  
## MornLow 53.72222 b  
## $statistics  
## MSerror Df Mean CV MSD  
## 1.187169 24 54.83755 1.98691 3.207684  
##   
## $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 56.10210 0.5106372 3 55.58043 56.60094 55.85267 56.12491  
## BL/BR:MornLow 54.00000 1.0000000 3 53.00000 55.00000 53.50000 54.00000  
## BLK:MornHigh 56.36988 0.9258800 3 55.82436 57.43892 55.83536 55.84637  
## BLK:MornLow 54.00000 1.7320508 3 53.00000 56.00000 53.00000 53.00000  
## BRN:MornHigh 55.95873 0.6333314 3 55.56301 56.68919 55.59350 55.62399  
## BRN:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## WHT:MornHigh 56.59036 0.5912035 3 56.24252 57.27299 56.24905 56.25559  
## WHT:MornLow 54.66667 1.1547005 3 54.00000 56.00000 54.00000 54.00000  
## WT/BLK:MornHigh 55.02869 1.2513706 3 54.09945 56.45160 54.31724 54.53503  
## WT/BLK:MornLow 52.33333 1.5275252 3 51.00000 54.00000 51.50000 52.00000  
## WT/BR:MornHigh 55.66755 0.6914671 3 55.14485 56.45160 55.27553 55.40620  
## WT/BR:MornLow 53.66667 1.1547005 3 53.00000 55.00000 53.00000 53.00000  
## Q75  
## BL/BR:MornHigh 56.36293  
## BL/BR:MornLow 54.50000  
## BLK:MornHigh 56.64265  
## BLK:MornLow 54.50000  
## BRN:MornHigh 56.15659  
## BRN:MornLow 54.00000  
## WHT:MornHigh 56.76429  
## WHT:MornLow 55.00000  
## WT/BLK:MornHigh 55.49332  
## WT/BLK:MornLow 53.00000  
## WT/BR:MornHigh 55.92890  
## WT/BR:MornLow 54.00000  
##   
## $comparison  
## NULL  
##   
## $groups  
## data1[[i]] groups  
## WHT:MornHigh 56.59036 a  
## BLK:MornHigh 56.36988 a  
## BL/BR:MornHigh 56.10210 a  
## BRN:MornHigh 55.95873 a  
## WT/BR:MornHigh 55.66755 a  
## WT/BLK:MornHigh 55.02869 ab  
## WHT:MornLow 54.66667 ab  
## BL/BR:MornLow 54.00000 ab  
## BLK:MornLow 54.00000 ab  
## BRN:MornLow 53.66667 ab  
## WT/BR:MornLow 53.66667 ab  
## WT/BLK:MornLow 52.33333 b  
##   
## attr(,"class")  
## [1] "group"