Differences in flowering phenology among populations

**Fit Y by X Group**

**Oneway Analysis of most\_adv\_all By Pop\_simpl**



Missing Rows

1

**Oneway Anova**

**Summary of Fit**

|  |  |
| --- | --- |
| Rsquare | 0,071436 |
| Adj Rsquare | 0,054553 |
| Root Mean Square Error | 1,258942 |
| Mean of Response | 3,128114 |
| Observations (or Sum Wgts) | 281 |

**Analysis of Variance**

| **Source** | **DF** | **Sum of Squares** | **Mean Square** | **F Ratio** | **Prob > F** |
| --- | --- | --- | --- | --- | --- |
| Pop\_simpl | 5 | 33,53102 | 6,70620 | 4,2312 | 0,0010 |
| Error | 275 | 435,85688 | 1,58493 |  |  |
| C. Total | 280 | 469,38790 |  |  |  |

**Means for Oneway Anova**

| **Level** | **Number** | **Mean** | **Std Error** | **Lower 95%** | **Upper 95%** |
| --- | --- | --- | --- | --- | --- |
| Her003 | 33 | 3,48485 | 0,21915 | 3,0534 | 3,9163 |
| Her005 | 23 | 2,47826 | 0,26251 | 1,9615 | 2,9950 |
| Sve011 | 50 | 3,52000 | 0,17804 | 3,1695 | 3,8705 |
| Tra002 | 29 | 2,75862 | 0,23378 | 2,2984 | 3,2188 |
| Vår004 | 82 | 3,29268 | 0,13903 | 3,0190 | 3,5664 |
| Vår009 | 64 | 2,82813 | 0,15737 | 2,5183 | 3,1379 |

Std Error uses a pooled estimate of error variance

**Means Comparisons**

**Comparisons for all pairs using Tukey-Kramer HSD**

| **q\*** | **Alpha** |
| --- | --- |
| 2,86993 | 0,05 |

| Abs(Dif)-LSD | **Sve011** | **Her003** | **Vår004** | **Vår009** | **Tra002** | **Her005** |
| --- | --- | --- | --- | --- | --- | --- |
| Sve011 | -0,7226 | -0,7752 | -0,4210 | 0,0099 | -0,0820 | 0,1314 |
| Her003 | -0,7752 | -0,8895 | -0,5527 | -0,1176 | -0,1934 | 0,0252 |
| Vår004 | -0,4210 | -0,5527 | -0,5643 | -0,1381 | -0,2465 | -0,0381 |
| Vår009 | 0,0099 | -0,1176 | -0,1381 | -0,6387 | -0,7393 | -0,5285 |
| Tra002 | -0,0820 | -0,1934 | -0,2465 | -0,7393 | -0,9488 | -0,7285 |
| Her005 | 0,1314 | 0,0252 | -0,0381 | -0,5285 | -0,7285 | -1,0654 |

Positive values show pairs of means that are significantly different.

| **Level** |  |  |  | **Mean** |
| --- | --- | --- | --- | --- |
| Sve011 | A |  |  | 3,5200000 |
| Her003 | A | B |  | 3,4848485 |
| Vår004 | A | B | C | 3,2926829 |
| Vår009 |  | B | C | 2,8281250 |
| Tra002 | A | B | C | 2,7586207 |
| Her005 |  |  | C | 2,4782609 |

Levels not connected by same letter are significantly different.

| **Level** | **- Level** | **Difference** | **Lower CL** | **Upper CL** | **Difference** |
| --- | --- | --- | --- | --- | --- |
| Sve011 | Her005 | 1,041739 | 0,131429 | 1,952049 |  |
| Her003 | Her005 | 1,006588 | 0,025179 | 1,987997 |  |
| Vår004 | Her005 | 0,814422 | -0,038090 | 1,666934 |  |
| Sve011 | Tra002 | 0,761379 | -0,081968 | 1,604727 |  |
| Her003 | Tra002 | 0,726228 | -0,193410 | 1,645865 |  |
| Sve011 | Vår009 | 0,691875 | 0,009922 | 1,373828 |  |
| Her003 | Vår009 | 0,656723 | -0,117588 | 1,431035 |  |
| Vår004 | Tra002 | 0,534062 | -0,246545 | 1,314669 |  |
| Vår004 | Vår009 | 0,464558 | -0,138080 | 1,067196 |  |
| Vår009 | Her005 | 0,349864 | -0,528516 | 1,228244 |  |
| Tra002 | Her005 | 0,280360 | -0,728465 | 1,289184 |  |
| Sve011 | Vår004 | 0,227317 | -0,420977 | 0,875611 |  |
| Her003 | Vår004 | 0,192166 | -0,552673 | 0,937004 |  |
| Vår009 | Tra002 | 0,069504 | -0,739274 | 0,878282 |  |
| Sve011 | Her003 | 0,035152 | -0,775201 | 0,845504 |  |