**Table S4: Analysis of variance (ANOVA) of the four traits (DTH, DTM, SL, PH) in 260 wheat genotypes**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   |  | ***df*** | **DTH** | **DTM** | **SL** | **PH** |
| **Type III SS** | **Genotype** | 259 | 61054.9674 | 21644.7056 | 2893.3087 | 400470.4864 |
| **Enva** | 3 | 222087.1935 | 352703.9700 | 2072.4494 | 87164.7654 |
| **Rep** | 1 | 461.1456 | 26.8965 | 8.9236 | 3381.6064 |
| **Genotype\*Env** | 777 | 14847.2061 | 20082.4981 | 1848.7188 | 65355.3357 |
| **Genotype\*Env\*Rep** | 780 | 8589.6913 | 4567.3681 | 876.5471 | 30488.2173 |
| **Mean Square** | **Genotype** | 259 | 235.7335 | 83.5703 | 11.1711 | 1546.2181 |
| **Enva** | 3 | 74029.0645 | 117567.9900 | 690.8165 | 29054.9218 |
| **Rep** | 1 | 461.1456 | 26.8965 | 8.9236 | 3381.6064 |
| **Genotype\*Env** | 777 | 19.1084 | 25.8462 | 2.3824 | 84.1124 |
| **Genotype\*Env\*Rep** | 780 | 11.0124 | 5.8556 | 1.1281 | 39.0875 |
| **F Value** | **Genotype** | 259 | 13.5\*\* | 2.87\*\* | 5.15\*\* | 16.95\*\* |
| **Enva** | 3 | 3874.17\*\* | 4548.75\*\* | 290.01\*\* | 345.43\*\* |
| **Rep** | 1 | 47.29\*\* | 2.66 | 9.16\* | 69.96\*\* |
| **Genotype\*Env** | 777 | 1.74\*\* | 4.41\*\* | 2.11\*\* | 2.15\*\* |
| **Genotype\*Env\*Rep** | 780 | 0.53 | 0.24 | 0.72 | 0.38 |
|   | **Broad Sense heritability (H**2) |  | 0.83 | 0.41 | 0.61 | 0.85 |

*\*p<*0.05*, \*\*p<*0.0001*,* Env = Environment, Rep = replication, SS = sum of squares, *df* = degree of freedom, DTH =days to heading, DTM = days to maturity, SL = Spike length, PH = plant height.