**Table S1.** Estimation of genotypic, season, genotype x season variance components based on combined of two rainy seasons and two postrainy seasons.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Season and trait |  | Variance component  | Wald's statistics for Year | Mean | SE(d) | LSD (P≤0.05) | CV (%) |
|  | Genotype  | Genotype × Year |
| Rainy season (combined of 2010 & 2011) |
| Days to 50% flowering |  | 756.46\*\* | 15.13\*\* | 277.28\*\* | 83 | 2.45 | 4.8 | 4.18 |
| Cumulative growing degree days (CGDD) |  | 185081.00\*\* | 4074.0\*\* | 152.38\*\* | 1371 | 39.88 | 78.17 | 4.11 |
| Plant height (cm) |  | 3938.6\*\* | 682.10\*\* | 191.08\*\* | 301 | 16 | 31.36 | 7.51 |
|  |  |  |  |  |  |  |  |  |
| Postrainy (combined of 2010-1 & 2011-12) |
| Group 1 (33 accessions) |  |  |  |  |  |  |  |  |
| Days to 50% flowering |  | 41.54\*\* | 11.99\*\* | 7.24\* | 62 | 1.44 | 2.83 | 2.31 |
| Cumulative growing degree days (CGDD) |  | 4184.6\*\* | 1223.7\*\* | 227.59\*\* | 767 | 15.09 | 29.57 | 1.97 |
| Plant height (cm) |  | 1670.71\*\* | 189.57\*\* | 167.53\*\* | 197 | 9.3 | 18.24 | 4.73 |
| Grain yield per plant (g) |  | 73.47\*\* | 28.00\*\* | 45.77\*\* | 21 | 3.73 | 7.32 | 18.02 |
| 100-seed weight |  | 0.33\*\* | 0.06\*\* | 0.01ns | 2.67 | 0.23 | 0.46 | 8.72 |
|  |  |  |  |  |  |  |  |  |
| Group 2 (82 accessions) |  |  |  |  |  |  |  |  |
| Days to 50% flowering |  | 18.09\*\* | 10.79\*\* | 25.15\*\* | 67 | 1.49 | 2.91 | 2.21 |
| Cumulative growing degree days (CGDD) |  | 2051.7\*\* | 135.1\*\* | 589.69\*\* | 815 | 15.64 | 30.65 | 1.92 |
| Plant height (cm) |  | 1369.7\*\* | 144.0\*\* | 323.18\*\* | 220 | 11.44 | 22.42 | 5.21 |
| Grain yield per plant (g) |  | 47.68\*\* | 18.90\*\* | 46.57\*\* | 23 | 4 | 7.85 | 17.39 |
| 100-seed weight |  | 0.54\*\* | 0.07\*\* | 13.68\*\* | 2.47 | 0.22 | 0.44 | 9.07 |
|  |  |  |  |  |  |  |  |  |
| Group 3 (88 accessions) |  |  |  |  |  |  |  |  |
| Days to 50% flowering |  | 18.09\*\* | 10.79\*\* | 25.15\*\* | 75 | 1.49 | 2.91 | 2.21 |
| Cumulative growing degree days (CGDD) |  | 2051.7\*\* | 135.1\*\* | 589.69\*\* | 903 | 15.64 | 30.65 | 1.92 |
| Plant height (cm) |  | 1369.7\*\* | 144.0\*\* | 323.18\*\* | 247 | 11.44 | 22.42 | 5.21 |
| Grain yield per plant (g) |  | 47.68\*\* | 18.90\*\* | 46.57\*\* | 25 | 4 | 7.85 | 17.39 |
| 100-seed weight |  | 0.54\*\* | 0.07\*\* | 13.68\*\* | 2.43 | 0.22 | 0.44 | 9.07 |
|  |  |  |  |  |  |  |  |  |
| Group 4 (31 accessions) |  |  |  |  |  |  |  |  |
| Days to 50% flowering |  | 38.56\*\* | 13.01\*\* | 62.30\*\* | 86 | 1.57 | 3.07 | 1.82 |
| Cumulative growing degree days (CGDD) |  | 5323.8\*\* | 1997.2\*\* | 366.69\*\* | 1030 | 18.12 | 35.51 | 1.76 |
| Plant height (cm) |  | 2252.8\*\* | 103.8\*\* | 138.2\*\* | 275 | 11.32 | 22.19 | 4.12 |
| Grain yield per plant (g) |  | 81.38\*\* | 15.71\*\* | 22.55\*\* | 23 | 4.74 | 9.28 | 20.75 |
| 100-seed weight |  | 0.41\*\* | 0.03\*\* | 6.47\* | 2.19 | 0.14 | 0.28 | 6.46 |
|  |  |  |  |  |  |  |  |  |
| Group 5 (8 accessions) |  |  |  |  |  |  |  |  |
| Days to 50% flowering |  | 161.49\* | 33.40\* | 14.44\*\* | 97 | 1.39 | 2.72 | 1.43 |
| Cumulative growing degree days (CGDD) |  | 26105.0\* | 5565.8\* | 55.89\*\* | 1165 | 16.91 | 33.15 | 1.45 |
| Plant height (cm) |  | 1663.5\* | 153.6ns | 81.77\*\* | 271 | 13.93 | 27.31 | 5.13 |
| Grain yield per plant (g) |  | 88.75\* | 4.24ns | 20.46\*\* | 21 | 7.18 | 14.08 | 33.46 |
| 100-seed weight |  | 0.42\* | 0.09ns | 0.19ns | 1.97 | 0.16 | 0.31 | 8.03 |

\*,\*\* Significant at P≤0.05 and P≤0.01, respectively