Table S2 Analysis of variance and broad-sense heritabilities (*h2*) for grain yield and related traits

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Trait | Mean square | | | | | *h2* |
| Line (L) | Environment (E) | Replicate | L×E | Error |
| GY | 10,296,769\*\* | 986,178,880\*\* | 5,298,114\*\* | 1,813,629\*\* | 264,245 | 0.72 |
| SN | 82,536.2\*\* | 2,376,391.0\*\* | 45,276.1\*\* | 7159.2\*\* | 1106.1 | 0.89 |
| KNS | 593.5\*\* | 792.7\*\* | 290.7\*\* | 25.2\*\* | 8.9 | 0.93 |
| TKW | 451.3\*\* | 8282.6\*\* | 97.3\*\* | 14.2\*\* | 4.7 | 0.95 |
| KL | 2.03\*\* | 51.98\*\* | 0.43\*\* | 0.05\*\* | 0.03 | 0.97 |
| KW | 0.51\*\* | 13.41\*\* | 0.21\*\* | 0.03\*\* | 0.02 | 0.93 |
| SL | 13.4\*\* | 72.4\*\* | 5.7\*\* | 0.6\*\* | 0.3 | 0.93 |
| SDW | 1.01\*\* | 28.37\*\* | 0.04 | 0.10\*\* | 0.05 | 0.89 |
| HD | 121.1\*\* | 20935.5\*\* | 16.6\*\* | 3.9\*\* | 0.5 | 0.94 |
| PH | 2048.8\*\* | 11235.2\*\* | 46.7\* | 43.5\*\* | 10.7 | 0.96 |
| UIL | 209.8\*\* | 225.9\*\* | 63.4\*\* | 7.7\*\* | 4.1 | 0.96 |
| FLL | 61.1\*\* | 617.4\*\* | 14.9\*\* | 5.2\*\* | 3.0 | 0.89 |
| FLW | 0.36\*\* | 6.20\*\* | 0.02 | 0.02\*\* | 0.01 | 0.94 |

GY, grain yield; SN, spike number per square meter; KNS, kernel number per spike; TKW, thousand-kernel weight; KL, kernel length; KW, kernel width; SL, spike length; SDW, spike dry weight; HD, heading date; PH, plant height; UIL, uppermost internode length; FLL, flag leaf length; FLW, flag leaf width