

Supplementary Table 1. Analysis of variance for the main traits

Analysis of Variance for **PLNT HT** (cm), using Adjusted SS for Tests

| Source | DF | Seq SS | Adj SS | Adj MS | F | P |
|--------|----|---------|---------|--------|-------|-------|
| LINE | 19 | 4547.58 | 4547.58 | 239.35 | 17.09 | 0.000 |
| Error | 40 | 560.07 | 560.07 | 14.00 | | |
| Total | 59 | 5107.65 | | | | |

S = 3.74190 R-Sq = 89.03% R-Sq(adj) = 83.83%

Analysis of Variance for **TILLERS**, using Adjusted SS for Tests

| Source | DF | Seq SS | Adj SS | Adj MS | F | P |
|--------|----|--------|--------|--------|------|-------|
| LINE | 19 | 2838.8 | 2838.8 | 149.4 | 1.10 | 0.383 |
| Error | 40 | 5410.9 | 5410.9 | 135.3 | | |
| Total | 59 | 8249.7 | | | | |

S = 11.6306 R-Sq = 34.41% R-Sq(adj) = 3.26%

Analysis of Variance for veg **biomass** (g), using Adjusted SS for Tests

| Source | DF | Seq SS | Adj SS | Adj MS | F | P |
|--------|----|---------|---------|--------|------|-------|
| LINE | 19 | 4733977 | 4733977 | 249157 | 1.91 | 0.042 |
| Error | 40 | 5221833 | 5221833 | 130546 | | |
| Total | 59 | 9955809 | | | | |

S = 361.311 R-Sq = 47.55% R-Sq(adj) = 22.64%

Analysis of Variance for **100 seed wt** (g), using Adjusted SS for Tests

| Source | DF | Seq SS | Adj SS | Adj MS | F | P |
|--------|----|-----------|-----------|-----------|------|-------|
| LINE | 19 | 0.0010252 | 0.0010252 | 0.0000540 | 2.34 | 0.012 |
| Error | 40 | 0.0009237 | 0.0009237 | 0.0000231 | | |
| Total | 59 | 0.0019489 | | | | |

S = 0.00480543 R-Sq = 52.60% R-Sq(adj) = 30.09%

Analysis of Variance for yield (g), using Adjusted SS for Tests

| Source | DF | Seq SS | Adj SS | Adj MS | F | P |
|--------|----|---------|--------|--------|------|-------|
| LINE | 19 | 5877.8 | 5877.8 | 309.4 | 2.38 | 0.011 |
| Error | 40 | 5206.7 | 5206.7 | 130.2 | | |
| Total | 59 | 11084.5 | | | | |

S = 11.4091 R-Sq = 53.03% R-Sq(adj) = 30.72%