

Table S1 Mean and standard error of grain yield (GY, t/ha), anthesis date (AD, days after sowing) and anthesis-silking interval (ASI, days) in Experiments 1 estimated across and within breeding populations.

| | g [†] | GY | AD | ASI |
|---------------------------|----------------|-----------|------------|-----------|
| Across populations | 255 | 6.88±0.03 | 71.35±0.07 | 2.03±0.03 |
| Zimbabwe | 36 | 6.37±0.02 | 72.03±0.09 | 2.24±0.04 |
| Entomology | 39 | 6.60±0.04 | 70.59±0.06 | 2.31±0.03 |
| Colombia acid tolerant | 24 | 6.72±0.02 | 70.71±0.03 | 2.52±0.02 |
| DTPY C9 | 15 | 6.86±0.01 | 70.22±0.05 | 1.48±0.01 |
| Mexico Subtropical | 37 | 6.94±0.04 | 71.40±0.05 | 2.14±0.02 |
| DTPW C9 | 17 | 7.03±0.02 | 70.89±0.07 | 1.65±0.03 |
| Mexico Tropical | 38 | 7.04±0.02 | 71.32±0.09 | 2.29±0.03 |
| La Posta Sequía C7 | 39 | 7.52±0.03 | 72.12±0.05 | 1.36±0.03 |

[†]Number of genotypes