

Table S1 Statistical analysis of plant height (cm) for parents and the RILs at different environments.

| Environments | Parents | | | | RILs | | | | |
|--------------|----------|----------|-------|--------|-------|--------|------|----------|----------|
| | ZP | ZH | Min | Max | Mean | Var | Std | Skewness | Kurtosis |
| CP09 | 72.2±4.8 | 60.7±3.3 | 44.00 | 101.60 | 67.31 | 99.22 | 0.64 | 0.57 | 0.19 |
| SYa09 | 24.3±1.2 | 23.4±1.6 | 15.00 | 43.10 | 25.86 | 24.67 | 0.32 | 0.63 | 0.17 |
| SYi10 | 69.9±4.1 | 65.1±3.9 | 48.32 | 100.17 | 68.83 | 120.46 | 0.71 | 0.59 | 0.08 |
| CP10 | 66.0±3.7 | 61.4±2.9 | 42.33 | 100.91 | 66.76 | 130.82 | 0.74 | 0.71 | 0.33 |
| SYa10 | 19.8±1.2 | 17.1±0.8 | 12.21 | 31.13 | 19.28 | 11.78 | 0.22 | 0.67 | 0.47 |
| CP11 | 82.1±3.7 | 71.0±2.3 | 55.50 | 122.50 | 79.33 | 180.17 | 0.87 | 0.76 | 0.28 |