**Table 1.** **Contribution of the nucleotype and plasmotype diversity to phenotypic differences between reciprocal hybrids.** Tiller height at two time points and the rate between them, Days to flowering (DTF), Average Spike dry weight (ASDW), Plant height (PH), Spike length (SL), spike length CV, Spikes dry weight (SpDW), Total dry matter (TDM) and Vegetative dry weight (VDW) in the nethouse under ambient temperature (AT) and high temperature (HT). For clock and Chl F traits: Amplitude, Period, delta Amplitude (dAMP), delta Period (dPeriod), Fv/Fm, F/Fmlss, NPQlss and Rfd in SensyPAN under optimal temperature of 22ºC (OT) or high temperature of 32ºC (HT) and the delta HT-OT.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Trait** | **Type** | **male parent Prob > F** | **male parent PVE [%]** | **Plasmotype Prob > F** | **Plasmotype PVE [%]** |
| TH\_1\_AT | Growth | 0.0068 | 24% | <.0001 | 41% |
| TH\_1\_HT | Growth | <.0001 | 37% | <.0001 | 36% |
| TH\_2\_AT | Growth | <.0001 | 34% | <.0001 | 38% |
| TH\_2\_HT | Growth | <.0001 | 36% | <.0001 | 46% |
| TH rate\_AT | Growth | <.0001 | 34% | 0.0002 | 32% |
| TH rate\_HT | Growth | <.0001 | 33% | <.0001 | 47% |
| ASDW\_AT | Reproductive | <.0001 | 43% | <.0001 | 35% |
| ASDW\_HT | Reproductive | <.0001 | 41% | 0.0037 | 27% |
| DTF\_AT | Reproductive | <.0001 | 43% | 0.0002 | 32% |
| DTF\_HT | Reproductive | <.0001 | 37% | 0.0008 | 28% |
| PH\_AT | Growth | 0.0007 | 30% | <.0001 | 39% |
| PH\_HT | Growth | 0.0266 | 21 | 0.0001 | 33% |
| SL\_AT | Reproductive | 0.0006 | 31% | <.0001 | 42% |
| SL\_HT | Reproductive | 0.0111 | 23% | 0.0007 | 30% |
| SLCV\_AT | Reproductive | 0.0215 | 22% | 0.0912 | 18% |
| SLCV\_HT | Reproductive | 0.2076 | 15% | 0.1434 | 16% |
| TDM\_AT | Reproductive | 0.0879 | 18% | <.0001 | 35% |
| TDM\_HT | Reproductive | 0.3174 | 13% | 0.0007 | 29% |
| VDW\_AT | Growth | 0.1108 | 17% | <.0001 | 35% |
| VDW\_HT | Growth | 0.1965 | 15% | 0.0003 | 31% |
| SpDW\_AT | Reproductive | 0.028 | 21% | <.0001 | 35% |
| SpDW\_HT | Reproductive | 0.0566 | 19% | 0.0094 | 23% |
| Amplitude\_OT | Clock | 0.1819 | 24% | 0.1325 | 26% |
| Amplitude\_HT | Clock | 0.2046 | 23% | 0.136 | 26% |
| Period\_OT | Clock | 0.2694 | 22% | 0.387 | 19% |
| Period\_HT | Clock | 0.2715 | 22% | 0.0184 | 34% |
| dAMP | Clock | 0.1892 | 24% | 0.0369 | 32% |
| dPeriod | Clock | 0.7274 | 13% | 0.3768 | 20% |
| Fv/Fm\_OT | Chl F | 0.736 | 14% | 0.2647 | 23% |
| Fv/Fm\_HT | Chl F | 0.4621 | 19% | 0.3934 | 20% |
| Fv/Fmlss\_OT | Chl F | 0.9231 | 9% | 0.0834 | 29% |
| Fv/Fmlss\_HT | Chl F | 0.8984 | 10% | 0.2307 | 24% |
| NPQlss\_OT | Chl F | 0.4743 | 18% | 0.0386 | 32% |
| NPQlss\_HT | Chl F | 0.1641 | 26% | 0.0551 | 31% |
| Rfd\_OT | Chl F | 0.1015 | 28% | 0.1697 | 25% |
| Rfd\_HT | Chl F | 0.0414 | 32% | 0.0327 | 33% |