

Table S1. Supplementary data; (Fig. 1: Mean performance for 12 parents (9 lines and 3 testers))

Lines	DTM	GDD	Tp⁻¹	SD	GWTsp⁻¹	×1000-GWT
9730	126.033	1512.117	7.663	1.511259703	3.193	43.967
9731	127.66	1519.933	10.663	1.500941882	2.82	46.4
9733	131.55	1541.917	8.773	1.4398165	3.34	43.433
9859	129.623	1519.2	8.777	1.562579487	3.027	51.667
9860	135.183	1670.267	9.997	1.669381375	2.907	44.267
9861	130.367	1604.2	8.887	1.470024857	3.067	41.8
AARI-11	129.403	1542.183	8.44	1.884457878	2.62	37.433
AAS-11	132.107	1519.2	8.33	1.485794838	2.953	40.233
PB-11	128.33	1629.45	8.327	1.548037994	2.833	34.133
Mean	130.02844	1562.0519	8.873	1.56358828	2.9733333	42.592556
LSD_(0.05)	1.11	37.94163	1.588746	0.914682676	0.532549	2.288256
Testers						
E-108	133.44	1612.15	6.44	1.707198361	2.833	42.833
E-113	128.923	1549.333	9.443	1.682928816	2.353	41.767
E-114	134.183	1696.4	9.667	1.658420065	3.067	45.667
Mean	132.182	1619.2943	8.5166667	1.68284908	2.751	43.422333
LSD_(0.05)	2.08	70.79331	2.964358	2.706658654	0.993655	4.269538

Table S2. Supplementary data; (Fig. 2: Mean performance for 27 F1)

Crosses	DTM	GDD	Tp⁻¹	SD	GWTsp⁻¹	×1000- GWT
9730 × E-108	130	1556.25	8.443	1.689965222	3.24	53.867
9730 × E-113	129	1526.367	7.443	1.610884465	3.187	50.433
9730 × E-114	130	1548.433	7.44	1.635953455	2.92	49.2
9731 × E-108	130	1563.333	7.553	1.560505219	3.027	49.567
9731 × E-113	128	1492.1	6.553	1.604058555	2.753	49.567
9731 × E-114	127.4	1489.3	9.887	1.526200544	2.807	49.7
9733 × E-108	129.623	1563.333	8.883	1.473582124	2.627	44.1
9733 × E-113	131.66	1604.2	10.043	1.591705209	2.747	44.367
9733 × E-114	130.66	1556.35	8.667	1.62006079	3	47.867
9859 × E-108	133.033	1542.183	8.883	1.594226941	2.64	49.6
9859 × E-113	128.107	1534.833	12	1.604241025	2.66	43.933
9859 × E-114	135.18	1563.7	9.22	1.559111591	2.493	43.8
9860 × E-108	136.367	1612.15	9.773	1.63475378	2.693	48.267
9860 × E-113	128.587	1563.7	7.553	1.757661519	2.947	46
9860 × E-114	134.033	1612.15	6.883	1.621236133	3.273	42.167
9861 × E-108	129.117	1579.217	9.107	1.603124257	2.973	49
9861 × E-113	131.33	1596.033	8.773	1.608208955	2.773	44.467
9861 × E-114	137.143	1678.55	9.55	1.729851659	2.707	42.7
AARI-11 × E-108	136.11	1579.217	9	1.776011828	2.66	46.3
AARI-11 × E-113	131.253	1534.833	6.997	1.735202222	2.36	41.933
AARI-11 × E-114	127.993	1519.933	9.33	1.742180332	3.067	49.333
PB-11 × E-108	129.107	1653.633	7.44	1.68773265	2.487	48.867
PB-11 × E-113	124.667	1645.683	9.777	1.542964991	2.707	43.7
PB-11 × E-114	125.667	1612.15	9.33	1.673730574	2.507	42.7
AAS-11 × E-108	138.333	1628.75	9.55	1.704879625	2.36	45.967
AAS-11 × E-113	128	1496.8	8.773	1.609913793	2.807	45.4
AAS-11 × E-114	127	1604.2	7.883	1.619965238	2.947	42.2
Mean	130.6433	1572.496	8.693852	1.633996766	2.791444	46.48156
LSD (0.05)	0.99	33.82047	1.416179	0.794365182	0.474704	2.03971