

Supplemental table 1. Statistical analyses of establishment, cover, and SPAD chlorophyll absorbance. Factors include planting site (S), Ecotype (E), for cover and SPAD also includes Growing Degree Day (GDD, both linear and quadratic) and all possible interactions.

FACTOR	ESTABLISHMENT		COVER		SPAD	
	F, Df _n , Df _d	P>F	F, Df _n , Df _d	P>F	F, Df _n , Df _d	P>F
S	25.46, 3, 10.42	<0.0001	7.93, 3, 30.92	0.0005	6.99, 3, 12	0.0056
E	8.73, 2, 21.94	0.0016	0.76, 2, 59.45	0.4716	0.46, 2, 24	0.6395
E*S	0.46, 6, 19.59	0.8322	4.33, 6, 58.56	0.0011	0.56, 6, 24	0.7609
GDD			0.05, 1, 36	0.8287	37.66, 1, 18	<0.0001
GDD*S			5.39, 3, 36	0.0036	11.59, 3, 118	<0.0001
GDD*E			4.68, 2, 36.01	0.0156	0.50, 2, 118	0.6096
GDD*S*E			1.17, 6, 36.01	0.3424	0.66, 6, 118	0.6846
GDD2					60.08, 1, 118	<0.0001
GDD2*S					11.42, 3, 118	<0.0001
GDD2*E					0.62, 2, 118	0.5389
GDD2*S*E					0.76, 6, 118	0.6016

Supplemental-Table 2. Statistical analyses of photosynthesis, conductance, internal CO₂, transpiration, and WUE. Factors include planting site (S), Ecotype (E), Growing Degree Day (GDD, both linear and quadratic) and all possible interactions.

FACTOR	PHOTOSYNTHESIS		CONDUCTANCE		INTERNAL CO ₂		TRANSPIRATION		WUE	
	F, Df _n , Df _d	P	F, Df _n , Df _d	P	F, Df _n , Df _d	P	F, Df _n , Df _d	P	F, Df _n , Df _d	P
S	5.68, 3, 12	0.011	18.91, 3, 75.99	<0.0001	7.54, 3, 42.45	0.0004	10.55, 3, 104.2	<0.0001	26.37, 3, 42.01	<0.0001
E	0.36, 2, 24	0.698	0.91, 2, 75.14	0.40	1.08, 2, 60.49	0.3467	2.32, 2, 100.3	0.1039	1.70, 2, 56.48	0.19
E*S	1.47, 6, 24	0.229	1.72, 6, 75.46	0.1290	0.27, 6, 49.1	0.9487	0.58, 6, 99.64	0.74	0.38, 6, 47.37	0.88
GDD	19.42, 1, 72	<0.0001	118.6, 1, 72.84	<0.0001	33.60, 1, 57.64	<0.0001	19.97, 1, 96.41	<0.0001	71.11, 1, 60.55	<0.0001
GDD*S	4.06, 3, 72	0.010	10.27, 3, 72.62	<0.0001	6.57, 3, 43.16	0.0009	9.65, 3, 96.25	<0.0001	19.67, 3, 42.51	<0.0001
GDD*E	0.63, 2, 72	0.533	0.64, 2, 73.13	0.53	0.96, 2, 57.64	0.3874	1.51, 2, 98.89	0.22	1.53, 2, 59.7	0.22
GDD*S*E	1.19, 6, 72	0.319	1.28, 6, 72.83	0.27	0.29, 6, 49.88	0.9396	0.49, 6, 98.07	0.81	0.47, 6, 48.94	0.82
GDD2	10.51, 1, 72	0.0018	98.33, 1, 72.79	<0.0001	35.76, 1, 49.48	<0.0001	14.55, 1, 96.37	0.0002	67.43, 1, 55.21	<0.0001
GDD2*S	4.44, 3, 72	0.0064	5.99, 3, 72.65	0.0011	3.51, 3, 44.02	0.0229	5.51, 3, 96.27	0.0016	9.49, 3, 43.88	<0.0001
GDD2*E	0.73, 2, 72	0.48	0.59, 2, 73.06	0.5577	0.82, 2, 49.48	0.4447	1.17, 2, 98.69	0.31	1.31, 2, 54.75	0.27
GDD2*S*E	0.98, 6, 72	0.44	1.00, 6, 72.87	0.4294	0.26, 6, 50.86	0.9525	0.53, 6, 98.17	0.78	0.43, 6, 50.5	0.85