

Supplementary Table S1. Climate variables including: maximum temperature (Tmax), minimum temperature (Tmin), maximum humidity (Hmax), minimum humidity (Hmin), Radiation (Rad), rain and Evapotranspiration (ETo) during different growing stages pre-flowering (Pre), flowering (Flow) and post-flowering (Post) characterizing the 17 environments (combination of location and season) of the trials.

Environm.	PreT max	PreT min	PreH max	PreH min	PreRa d	Pre Rai n	PreET o	FlowTm ax	Flow Tmin	Flow Hmax	Flow Hmin	Flow Rad	Flo wR ain	Flo wE To	PostT max	PostT min	PostH max	PostH min	PostR ad	Pos tRa in	Pos tET o
ALM17	17.15	6.54	80.69	42.32	1327	263	178	24.63	8.83	91.13	25.92	241	0	41	26.65	12.50	89.18	30.93	875	110	175
ALM18	16.23	5.65	91.72	48.80	1166	324	167	19.89	7.72	85.50	35.89	209	15	35	21.95	10.37	85.60	39.99	483	61	90
CAMP08	15.57	5.01	93.86	49.44	1493	117	230	19.88	8.19	85.41	34.55	673	100	128	20.83	10.26	92.79	40.64	727	47	136
CORB17	17.30	5.61	94.84	49.00	1392	224	211	24.54	6.46	96.22	23.94	266	0	46	26.60	11.42	92.54	30.50	1001	114	203
CORB18	15.73	4.24	98.70	54.70	861	297	125	15.23	4.47	99.52	51.33	185	68	28	22.22	9.24	99.13	41.47	913	77	166
CORC09	16.13	4.78	90.22	47.71	1245	245	207	20.94	7.34	85.90	31.21	674	30	120	28.00	11.33	79.17	22.45	846	5	182
CORC10	15.46	6.09	90.75	54.06	883	803	185	23.22	10.62	88.55	36.79	588	45	115	25.58	11.61	82.85	28.65	777	33	163
CORP16	18.72	6.32	94.98	44.71	1326	188	227	25.80	11.71	82.60	27.45	295	14	62	24.88	12.87	88.38	38.06	566	79	118
ESC08	17.79	8.10	84.83	48.04	1456	182	224	21.86	10.41	81.17	37.99	660	165	121	22.47	11.93	86.96	41.49	683	44	129
ESC09	16.14	6.63	86.51	49.43	1330	214	208	21.15	8.58	83.78	31.05	711	34	120	26.82	13.00	78.29	26.20	844	4	171
ESC10	15.33	7.72	93.69	60.58	1126	859	177	22.27	11.14	86.77	40.80	622	25	117	25.10	12.63	80.82	30.87	827	2	164
ESC11	15.91	7.54	91.85	55.94	1285	399	192	23.53	12.58	89.86	42.79	589	94	115	26.79	15.32	87.03	39.22	757	42	153
ESC12	17.32	5.86	83.63	37.62	1547	90	224	19.44	9.50	90.38	43.31	591	52	105	28.86	14.91	76.83	27.38	804	22	170
ESP16	14.59	2.52	96.39	47.47	882	75	140	17.09	5.71	95.18	47.35	203	48	34	21.43	8.54	94.31	42.16	957	104	180
ESP17	15.37	2.28	95.97	49.89	1351	138	214	26.02	5.10	88.13	20.55	323	0	60	23.46	9.10	87.56	33.40	741	84	153
ESP18	14.14	2.75	94.73	46.85	1108	287	180	20.21	6.88	95.58	43.51	244	27	43	21.87	8.49	95.38	40.39	830	60	149
TOM09	16.90	5.15	91.00	49.67	1287	193	257	22.51	6.45	89.54	28.54	706	22	138	28.37	10.92	83.33	24.43	846	4	192