

Supplemental Table 1. Comprehensive drought resistance measurement value of maize inbred lines used in the study

ID	Genotype	Origin	Heterotic groups	D	Group
1	178	China	TST	0.39	2
2	273	China	NSS	0.37	2
3	288	China	NSS	0.48	3
4	81565	China	TST	0.61	3
5	18-599 (red)	China	NSS	0.44	3
6	18-599 (white)	China	NSS	0.64	3
7	20V-18	China	TST	0.42	3
8	48-2	China	NSS	0.24	2
9	5003 ^b	China	TST	0.11	1
10	622016-ZCN-2	China	NSS	0.57	3
11	634-11511	China	NSS	0.35	2
12	698-1	China	NSS	0.55	3
13	A318	China	TST	0.40	3
14	AS6103	USA	TST	0.33	2
15	B73	USA	SS	0.60	3
16	B97	USA	NSS	0.51	3
17	Chang7-2	China	SS	0.27	2
18	Chuan 29 Female Parent	China	TST	0.42	3
19	Cixibainuo	China	TST	0.37	2
20	CML133 ^b	CIMMYT	TST	0.15	1
21	CML192	CIMMYT	TST	0.26	2
22	CML202	CIMMYT	TST	0.53	3
23	CML206	CIMMYT	TST	0.31	2
24	CML228	CIMMYT	TST	0.54	3
25	CML247 ^a	CIMMYT	TST	1.73	4
26	CML277 ^a	CIMMYT	TST	0.84	4
27	CML312SR	CIMMYT	SS	0.41	3
28	CML330	CIMMYT	TST	0.25	2
29	CML333	CIMMYT	TST	0.49	3
30	CML411	CIMMYT	TST	0.34	2
31	CML418	CIMMYT	TST	0.36	2
32	CML479	CIMMYT	TST	0.36	2
33	CML504	CIMMYT	SS	0.28	2
34	CML505	CIMMYT	SS	0.36	2
35	CML511	CIMMYT	SS	0.28	2
36	CML52 ^a	CIMMYT	TST	0.73	4
37	CML69	CIMMYT	TST	0.61	3
38	CML84	CIMMYT	TST	0.41	3

39	CML85	CIMMYT	TST	0.38	2
40	CML96	CIMMYT	TST	0.31	2
41	CML99	CIMMYT	TST	0.35	2
42	CMT-L008	CIMMYT	TST	0.43	3
43	CMT-L094	CIMMYT	NSS	0.32	2
44	CMT-L107b	CIMMYT	NSS	0.22	2
45	CMT-L113	CIMMYT	NSS	0.46	3
46	CMT-L153	CIMMYT	TST	0.26	2
47	CMT-L189	CIMMYT	TST	0.59	3
48	CMT-L197	CIMMYT	TST	0.62	3
49	CMT-L217 ^a	CIMMYT	TST	0.97	4
50	CMT-L223	CIMMYT	TST	0.47	3
51	Dan598	China	NSS	0.21	2
52	ES40	China	SS	0.24	2
53	F42	USA	TST	0.39	2
54	FAPW	USA	TST	0.51	3
55	FR19 ^a	USA	TST	0.73	4
56	H-16	CIMMYT	TST	0.28	2
57	Han21	China	NSS	0.22	2
58	HP301	USA	mixed	0.39	2
59	Il14H ^a	USA	mixed	0.73	4
60	Ji853 ^b	China	NSS	0.14	1
61	Jiao51	China	TST	0.44	3
62	Ki11 ^a	USA	TST	0.79	4
63	Ki3	USA	TST	0.63	3
64	Ky21	USA	NSS	0.41	3
65	LH132	USA	TST	0.21	2
66	LH51	USA	TST	0.21	2
67	LX9801	China	SS	0.42	3
68	M162W	USA	NSS	0.38	2
69	M37W	USA	mixed	0.67	3
70	Mo17 ^a	USA	SS	0.76	4
71	Mo18W	USA	mixed	0.49	3
72	Ms71	USA	NSS	0.53	3
73	MS71	USA	NSS	0.21	2
74	Nan21-3	China	SS	0.47	3
75	NC350	USA	TST	0.61	3
76	NC358	USA	TST	0.61	3
77	NK764	USA	TST	0.27	2
78	NS701	USA	TST	0.26	2
79	Oh43	USA	NSS	0.42	3
80	Oh7B	USA	NSS	0.42	3
81	P1	CIMMYT	TST	0.35	2

82	P39	USA	mixed	0.51	3
83	PHG83	USA	TST	0.34	2
84	PHN47 ^b	USA	TST	0.14	1
85	Qi319 ^b	China	NSS	0.15	1
86	R08	China	NSS	0.47	3
87	R09 ^b	China	NSS	0.18	1
88	RP125	China	SS	0.48	3
89	SAML1001 ^a	China	TST	0.94	4
90	Si287	China	SS	0.27	2
91	Silunuo	China	SS	0.44	3
92	Teosinte (ssp.mexicana)	CIMMYT	TST	0.28	2
93	Tie7922	China	SS	0.40	3
94	Tx303	USA	mixed	0.69	3
95	Tzi 8	Nigeria	TST	0.62	3
96	VL054178	CIMMYT	SS	0.50	3
97	VL05610	CIMMYT	TST	0.30	2
98	VL056883	CIMMYT	TST	0.31	2
99	VL062784	CIMMYT	NSS	0.43	3
100	W8304	USA	TST	0.22	2
101	Ye478	China	SS	0.33	2
102	Zheng22 ^b	China	SS	0.19	1
103	Zheng58	China	TST	0.41	3

^a and ^b indicate drought tolerance lines and drought sensitive lines screened based on comprehensive drought resistance measurement value (D value)