

**Table S1.** Potential candidate genes and transcriptional factors conferring drought tolerance in other model plants.

Sl. N.	Candidate genes	Isolated/ expressed	Stress condition	References
1	AtDREB1A, AtDREB2A	<i>Arabidopsis thaliana</i>	Drought	[1,2]
2	<i>AtbZIP36</i>	<i>A. thaliana</i>	Drought	[3]
3	<i>ABF2</i>	<i>A. thaliana</i>	Drought	[4,5]
4	<i>ABF3</i>	<i>A. thaliana</i>	Drought	[6]
5	<i>ABF4</i>	<i>A. thaliana</i>	Drought	[6]
6	<i>AtMYC2, AtMYB2</i>	<i>Arabidopsis thaliana</i>	Osmotic stress	[7]
7	OsDREB1A	<i>A. thaliana</i>	Drought	[8]
8	AtNAC2, AtNAC019, AtNAC055, CBF4, AtNAC019, AtNAC055, AtNAC072	<i>A. thaliana</i>	Drought	[9]
9	OsMYB4	<i>A. thaliana</i>	Drought	[10]
10	Zat12	<i>A. thaliana</i>	Osmotic stress	[11]
11	MYB15	<i>A. thaliana</i>	Drought	[12]
12	OsMYB3R-2	<i>A. thaliana</i>	Drought	[13]
13	ZmDREB2A	<i>A. thaliana</i>	Drought	[14]
14	AtAF1	<i>A. thaliana</i>	Drought	[15]
15	OsDREB1F	<i>A. thaliana</i>	Drought	[16]
16	OsWRKY45	<i>A. thaliana</i>	Drought	[17]
17	OsDREB2B	<i>A. thaliana</i>	Drought	[18]
18	<i>AtHsfA3, AtHsfA39</i>	<i>A. thaliana</i>	Drought	[19]
19	<i>HSP70</i>	<i>A. thaliana</i>	Drought	[20]
20	CDPK	<i>Glycine max</i>	Enhance water permeability	[21]
21	<i>GmDREBa, GmDREBb, GmDREBc</i>	<i>G. max</i>	Drought	[22]
22	<i>GmCaM4</i>	<i>G. max</i>	Drought	[23]
23	<i>GmDREB2</i>	<i>G. max</i>	Drought	[24]
24	<i>GmbZIP44, GmbZIP62, GmbZIP78</i>	<i>G. max</i>	Drought	[25]
25	<i>GmbZIP132</i>	<i>G. max</i>	Drought	[26]
26	<i>GmMYB177</i>	<i>G. max</i>	Drought	[27]
27	<i>GmDREB2</i>	<i>G. max</i>	Drought	[28]
28	<i>GmFDL19</i>	<i>G. max</i>	Drought	[29]
29	<i>GmSK1</i>	<i>G. max</i>	Drought	[30]
30	<i>PgTIP1</i>	<i>G. max</i>	Drought	[31]
31	<i>GmRACK1</i>	<i>G. max</i>	Drought tolerance during vegetative growth	[32]
32	<i>AtABF3</i>	<i>G. max</i>	Drought	[33]
33	<i>GmBIN2</i>	<i>G. max</i>	Drought	[34]

34	NAC-Phvul.0, NAC-Phvul.005G084500, 06G188900, NAC-Phvul.009G15630	Common bean	Drought	[35]
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