

Table S4. Comparison of *mtlD* gene expressing plant species reported in the literature with their corresponding wild-type plants for their abiotic stress tolerance.

	Increase in tolerance level (%) over wild-type*					
Plant species	Parameter used for assessing tolerance level**	Drought stress	Salinity stress	Oxidative stress	Treatment details, possible mechanism and other comments	Reference
C3 plant species						
Tobacco	Stem length CO ₂ assimilation Membrane leakage	54	-	2.8 37.5	<ul style="list-style-type: none"> Increased osmotic adjustment played a role in drought tolerance High light induced oxidative stress Methylviologen-mediated oxidative stress Increase in chilling tolerance was 10.4 	[1]
Tobacco	CO ₂ assimilation	33	-	-	Oxidative stress by methylviologen coupled with drought stress also showed similar results	[2]
Tobacco	Plant growth (biomass)	-	53.3	-	One of the earliest reports demonstrating possibility of increasing abiotic stress tolerance in plants by expressing <i>mtlD</i> gene	[3]

Tobacco (var. KST19)	Total chlorophyll reduction	-	-	13.9	Plant level experiment	[4] (this study)
Egg plant	Seedling weight	66.6-82.3	50-88.8	-	10% PEG was used 200 mMNaCl was used	[5]
Arabidopsis	Seed germination	-	45	-	200 mMNaCl was used	[6]
Tomato	Biomass Seed germination	28.5	42	-	10% PEG was used 50 mMNaCl was used	[7]
Potato		-	59.2	-	<ul style="list-style-type: none"> • 100 mMNaCl was used • Cellular protection (via free radical removal or macro molecules protection) might be reason for increased tolerance of transgenic seedlings 	[8]
Petunia	Root/shoot dry weight	-	-	-	Increase in chilling stress tolerance was 5.19-16.33; Increased osmotic adjustment played a role	[9]
Wheat	Shoot dry weight	54.1	50	-	<ul style="list-style-type: none"> • Osmotic adjustment did not play role in drought tolerance • Protection from free radical might be reason for increased tolerance 	[10]

Rice	Shoot height	-	77-141	-	-	[11]
	Biomass		17-50			
C4 plant species						
Sorghum	Leaf water content	2.6		-	• PEG assay	[12]
	Biomass		17-23		• 200 mMNaCl stress	
Finger millet	Seedling growth	8-10	4-7	5-6	Seedling experiment [mtID-5-1 T2]	[4] (this study)

*calculated value

**also indicate the experimental data in the manuscript considered for calculations of increased tolerance

References

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