

Supplementary data

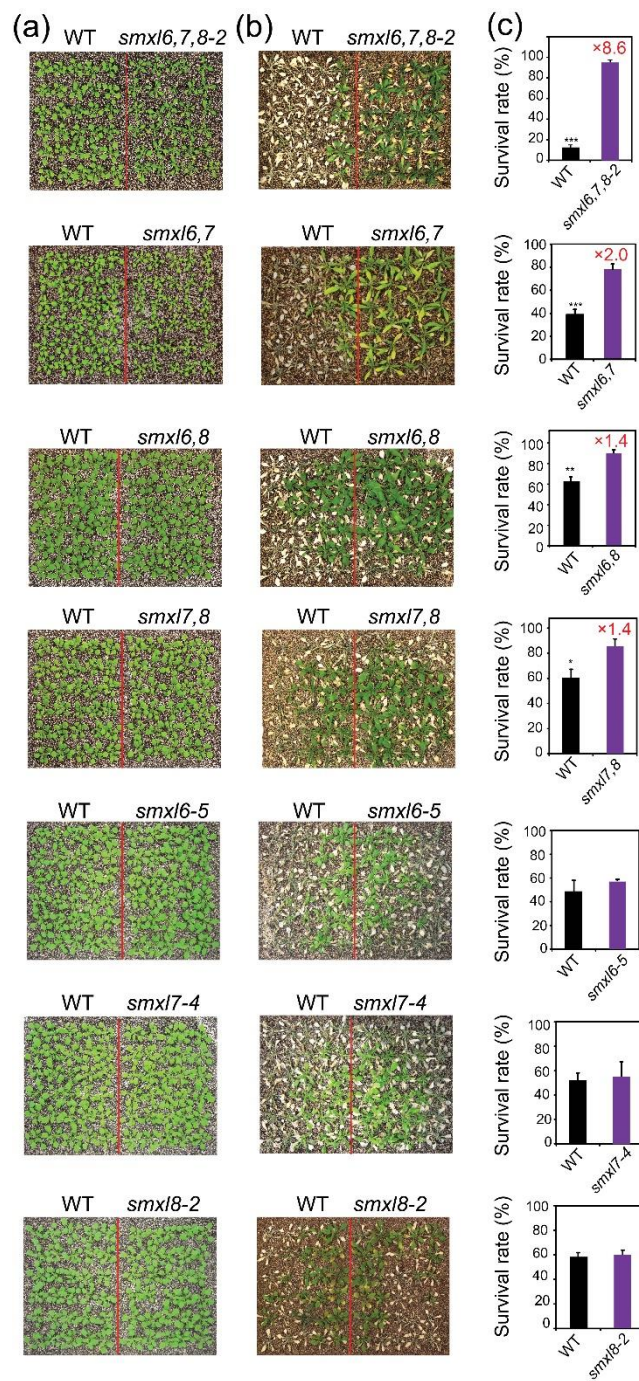


Figure S1. Drought-resistant phenotypes of various *smxl* single, double and triple mutant plants. Comparisons of different mutant and wild-type (WT) plants were performed using the ‘same tray’ method. (a) WT and different mutant plants were grown in pairs for 21 days under well-watered conditions in a tray. (b) Water was withheld until distinguishable differences were observed between the two genotypes, then re-watering was conducted. Pictures were taken five days after re-watering, and after inflorescences were removed. (c) Means and standard errors of three independent experiments ($n = 3$, 30 plants/genotype/experiment) were used to estimate the survival rates of investigated WT and

different mutant plants. Asterisks indicate significant difference between the two genotypes (Student's *t*-test; **p* < 0.05, ***p* < 0.01, ****p* < 0.001). Red numbers above the error bar indicate the fold-change in survival rate between the two genotypes.

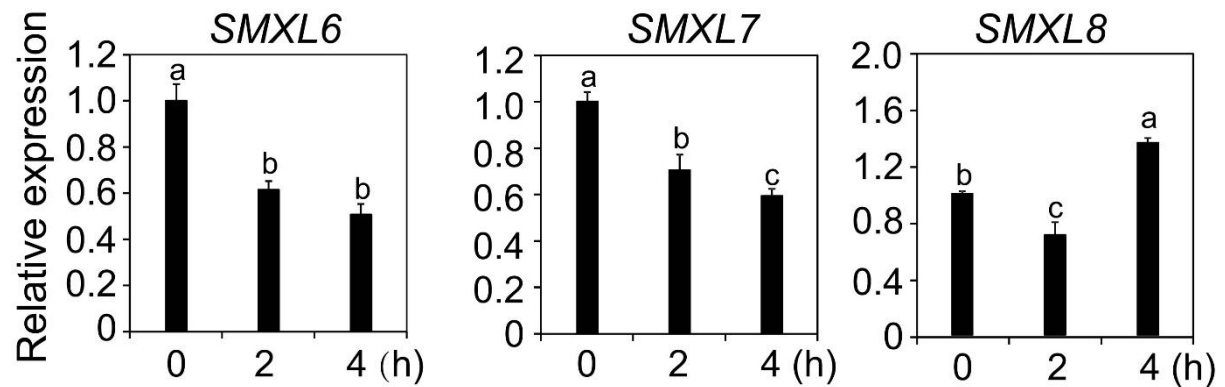


Figure S2. Expression of *SMXL6*, 7 and 8 genes in wild-type plants under normal and dehydration conditions. Rosette leaves of 24-day-old soil-grown plants were used for qRT-PCR analysis. Relative transcript levels were normalized to a value of 1 in the non-dehydrated sample. Data are means and standard errors (*n* = 3 biological replicates). Letters above the error bars show significant differences in all combinations (Tukey's honest significant difference test; *p* < 0.05).

Table S1. Primers used for qRT-PCR

Gene name	AGI code	Prime name	Primer pair (5'-3' sequence)
<i>F3'H</i>	AT5G07990	F3'H-F	AGACATCGCTCAGCTTCCTT
		F3'H-R	TGGTGGATGAAGCCTGAAAT
<i>WSD1</i>	AT5G37300	WSD1-F	GCTTGGTGGTTGTTTGTGTTGG
		WSD1-R2	TCGGGTTACCCATAAGAGGG
<i>SAG29</i>	AT5G13170	SAG29-F	GCCACCAGGGAGAAAAGG
		SAG29-R	CCACGAAATGTGTTACCATTAGAA
<i>ABI5</i>	AT2G36270	ABI5-F	GCCACCGGTTTTTAGACACA
		ABI5-R	AGTAAACGGATGATTCTCACCAC
<i>PDH1</i>	AT3G30775	PDH1-F	AGCTGCCAAATCTTTACCAACATC
		PDH1-R	GCTTCCATGAGAGTTTGAAGTTGCG
<i>PDH2</i>	AT5G38710	PDH2-F	GTGCTTTAGACCGCCAACTT
		PDH2-R	TGTGTCTTCACCAAGCCATAA
<i>WRKY46</i>	AT2G46400	WRKY46-F	ACATCACATCCCCGAAGACG
		WRKY46-R	ACTTCTTCGGACTTGGTCGG
<i>QQS</i>	AT3G30720	QQS-F	TTCTCCACAGCGACCAGTTG
		QQS-R	CCCTCATTTTGAGCCTTGCG
<i>LEA/ABR</i>	AT3G02480	LEA/ABR-F	AGACTCCTTGCAACAGACTGGAC
		LEA/ABR-R	TCCTTGACGACATCAGCAGCTC
<i>LEA18</i>	AT2G35300	LEA18-F	GGTCATGCGGAGAAGACGAT
		LEA18-R	GCATGCTCAGCCTTGGATTG
<i>LEA76</i>	AT3G15670	LEA670-F	TTATCGGAGACAGGCGAAGC
		LEA670-R	CACCCGTCTTGTCTCTACCG
<i>SMXL6</i>	AT1G07200	SMXL6-F	CGGGCTATTGAGACCAAAGA
		SMXL6-R	GGACTCACCGACTGAAAACC
<i>SMXL7</i>	AT2G29970	SMXL7-F	AGCCCTTAAGTCTCAGCGTTCG
		SMXL7-R	TACGCTTCGTCTTCGTTTGCTTC
<i>SMXL8</i>	AT2G40130	SMXL8-F	GCCACCTTGGTTACAAATGACCAC
		SMXL8-R	ACCCTTCTTTGGTCTGCACTTGG
<i>UBQ10</i>	AT4G05320	UBQ10-F	GAAGTTCAATGTTTCGTTTCATGT
		UBQ10-R	GGATTATACAAGGCCCCCAAAA