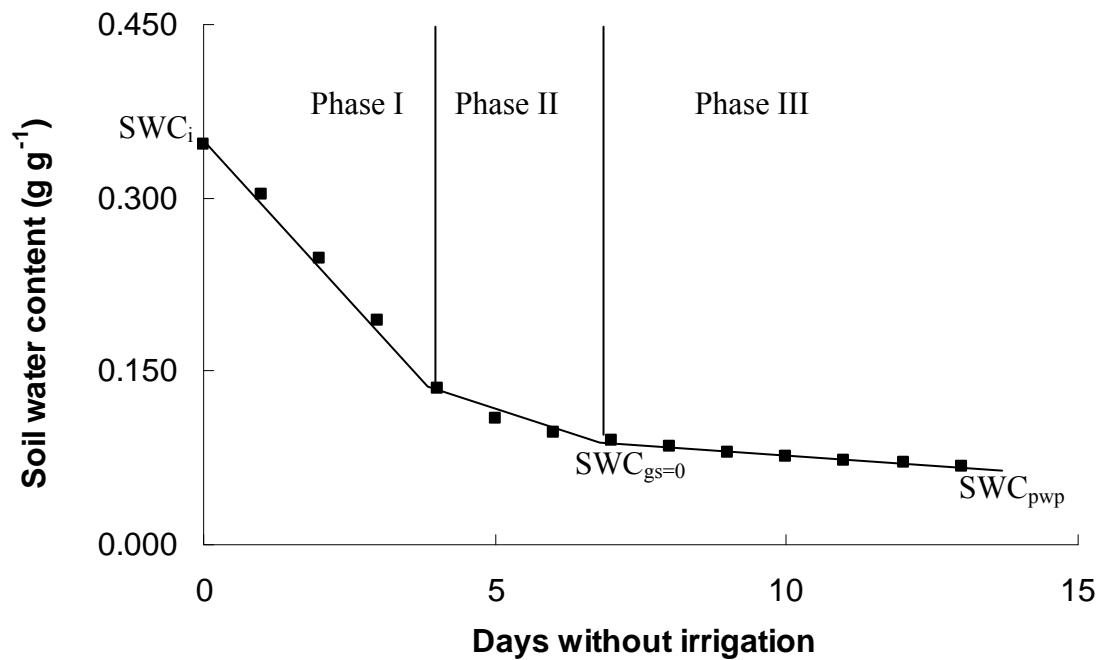


**Supplementary material**

**Fig. S1.** Changes in soil water content over time, during the drought cycle. Three stages of soil water depletion as a function of soil water content changes due to plant water extraction rate are illustrated (Phase I, maximal transpiration rate; Phase II, stomatal regulation; Phase III, epidermal conductance). Each point indicates the daily soil water content for one plant. SWC<sub>i</sub>: the upper limit of soil water content measured at the beginning of the drought cycle; SWC<sub>gs=0</sub>, the soil water content at full stomatal closure; SWC<sub>ppp</sub>, the soil water content at permanent plant wilting point.

**Table 2.** Variance components and heritability of the lower limit of soil water content for plant water extraction  $SWC_{gs=0}$

GCA, General Combining Ability; SCA, Specific Combining Ability;  $H^2$ , heritability in broad sense;  $h^2$ , heritability in narrow sense

Expt	Variance				$H^2$	$h^2$
	GCAmale	GCAfemale	SCA	residual		
Expt4	0.000006	0.000013	0.000059	0.000019	0.81	0.20
Expt5	0.000215	0.000340	0.000378	0.000277	0.77	0.46
Expt4&5	0.000116	0.000095	0.000119	0.000305	0.52	0.33