

## Supplementary Material

### The role of seed water content for the perception of temperature signals that drive dormancy changes in *Polygonum aviculare* buried seeds

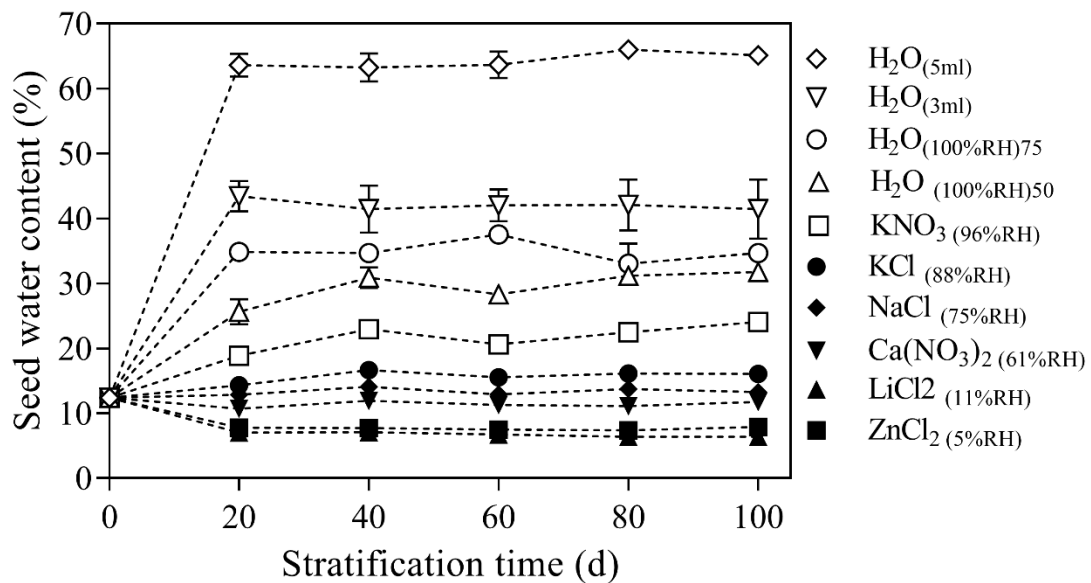
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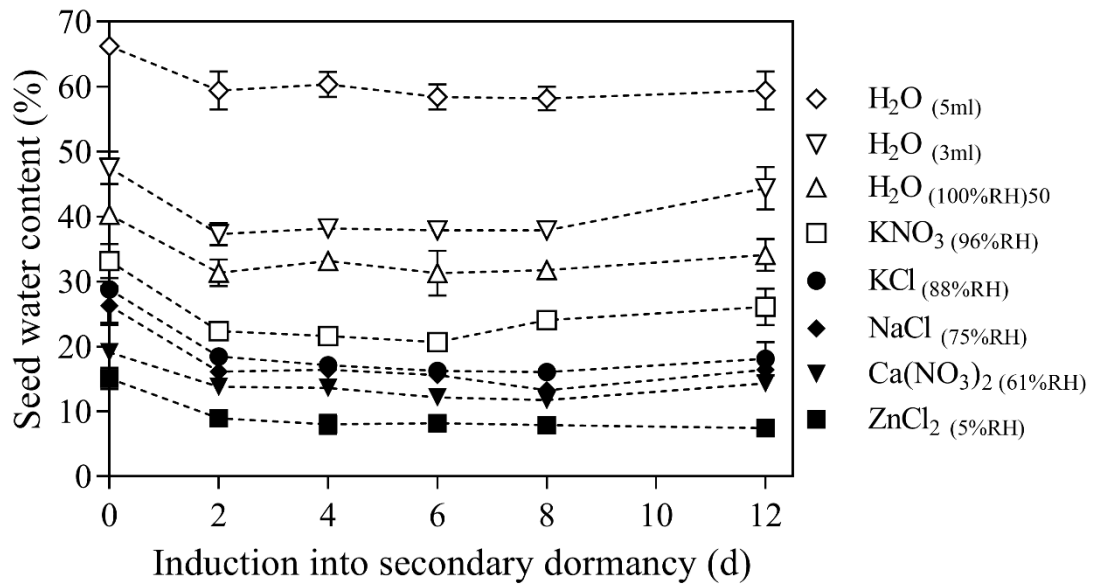
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**Fig. S1.** Seed water content (*SWC*%) in *P. aviculare* seeds during the stratification time (d) under different relative humidity (RH) conditions. The symbols (full and empty) correspond to the mean ( $\pm$  SE) values of *SWC* after different times of stratification at 5 °C under various RH conditions.



**Fig. S2.** Seed water content (*SWC*%) in *P. aviculare* seeds during secondary dormancy induction (d) under different relative humidity (RH) conditions. The symbols (full and empty) correspond to the mean values ( $\pm$  SE) of *SWC* after different times of warm stratification (20°C) under various RH conditions.

**Table S1. Estimated population-thermal parameters for *P. aviculare* seeds stratified during 100 days at 5°C under different *SWC* values**

Mean lower-limit temperature of the permissive thermal range for germination ( $T_{l(50)}$ ), standard deviation ( $\sigma_{Tl}$ ) and seed water content (*SWC*%) for different exhumations were estimated. Parameters were obtained by simulation of the germination time-course curves for seeds incubated at 15°C regime for each exhumation derived from Equation 4. The standard deviation  $\sigma_{Tl}$  varies little with the *SWC*. A dash means that estimation was not possible, due to the null germination observed.

<i>SWC</i> (%)	20 d (240°Cd)		40 d (480°Cd)		60 d (720°Cd)		80 d (960°Cd)		100 d (1200°Cd)	
	$T_{l(50)}$ (°C)	$\sigma_{Tl(50)}$	$T_{l(50)}$ (°C)	$\sigma_{Tl(50)}$	$T_{l(50)}$ (°C)	$\sigma_{Tl(50)}$	$T_{l(50)}$ (°C)	$\sigma_{Tl(50)}$	$T_{l(50)}$ (°C)	$\sigma_{Tl(50)}$
6.7	-	-	-	-	-	-	-	-	-	-
7.9	-	-	-	-	-	-	-	-	-	-
11.4	-	-	-	-	-	-	-	-	-	-
13.4	-	-	-	-	-	-	-	-	-	-
14.8	18.6	0.5	18.6	0.5	18.6	0.5	18.6	0.5	18.6	0.5
22.0	18.5	2.0	18.0	2.3	17.0	2.4	16.5	1.4	15.8	1.2
29.8	18.0	2.6	17.1	2.3	16.0	2.3	15.1	3.9	13.8	3.4
35.4	17.1	2.3	16.1	2.2	15.0	2.4	14.1	4.1	12.5	3.8
45.7	16.9	2.4	15.8	2.4	14.0	2.5	13.0	4.3	12.0	3.7
64.3	16.8	2.2	16.8	2.1	14.5	2.3	13.3	3.1	12.2	2.6
<b>Mean</b>		<b>2.3</b>	<b>Mean</b>	<b>2.3</b>	<b>Mean</b>	<b>2.4</b>	<b>Mean</b>	<b>2.8</b>	<b>Mean</b>	<b>2.5<sup>§</sup></b>

<sup>§</sup> The mean value of  $\sigma_{Tl}$  obtained at the end of stratification ( $S_u = 1200^\circ\text{Cd}$ ) was utilized during induction into secondary dormancy.