Supplementary Figures

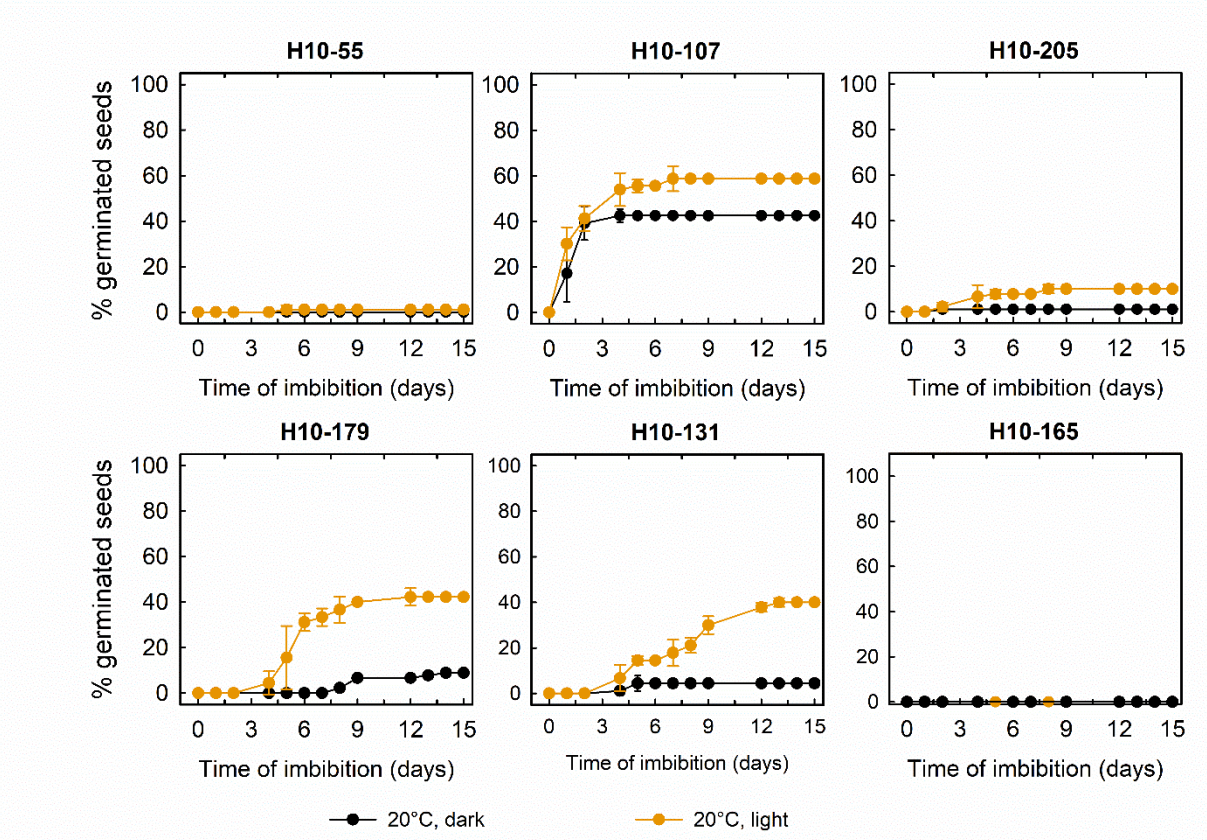

Figure S1. Germination time course of thermodormant seeds of the indicated genotypes at 20°C in darkness or continuous white light. Data are the average of triplicates of 30 seeds ± SD. The seeds originate from the winter culture.

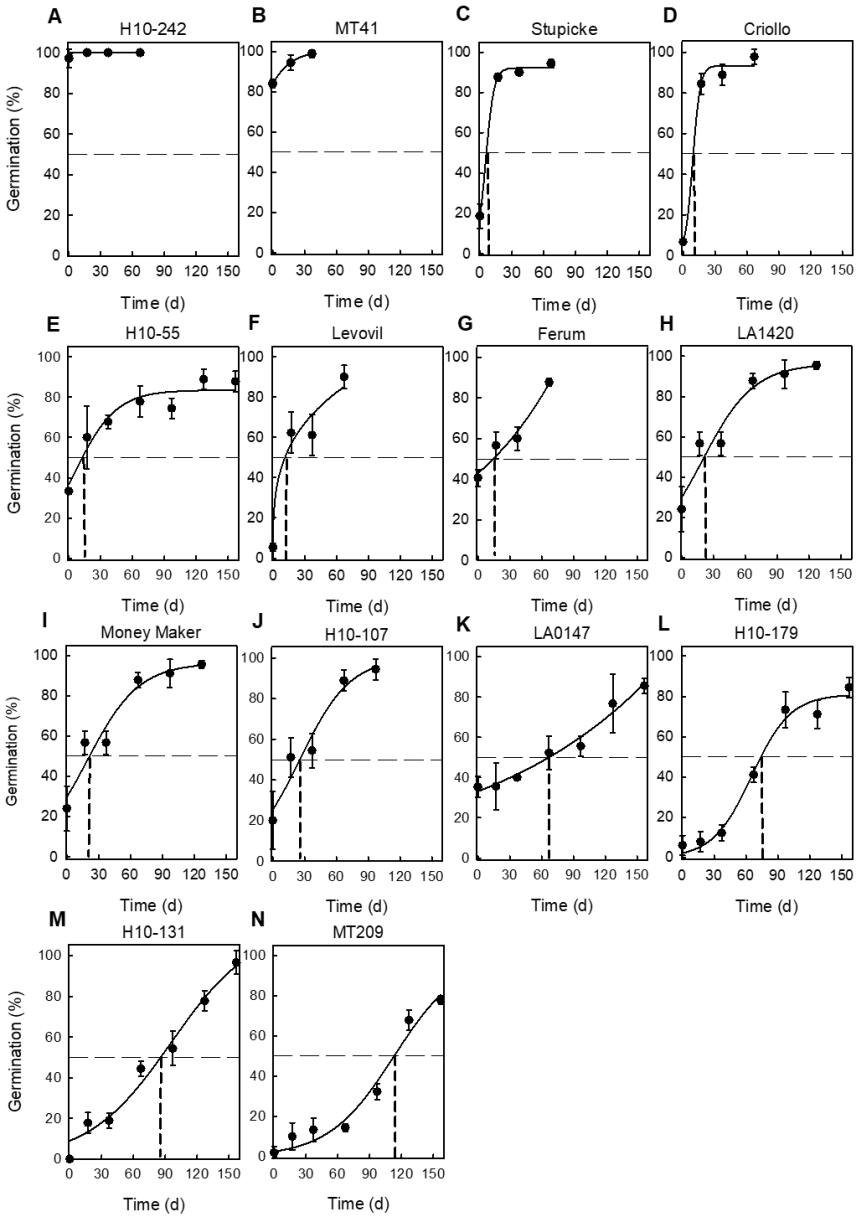

Figure S2. After-ripening of primary dormant seeds. Changes in percentages of germinated seeds retrieved as a function of time of dry hermetic storage at 20°C. Germination was performed at 20°C in the dark. Data are the average of triplicates of 30 seeds (± SD) and were fitted with a logistic regression to assess the number of days of seed dry storage required to reach 50 % of germination ($DSDS50_{PD}$).

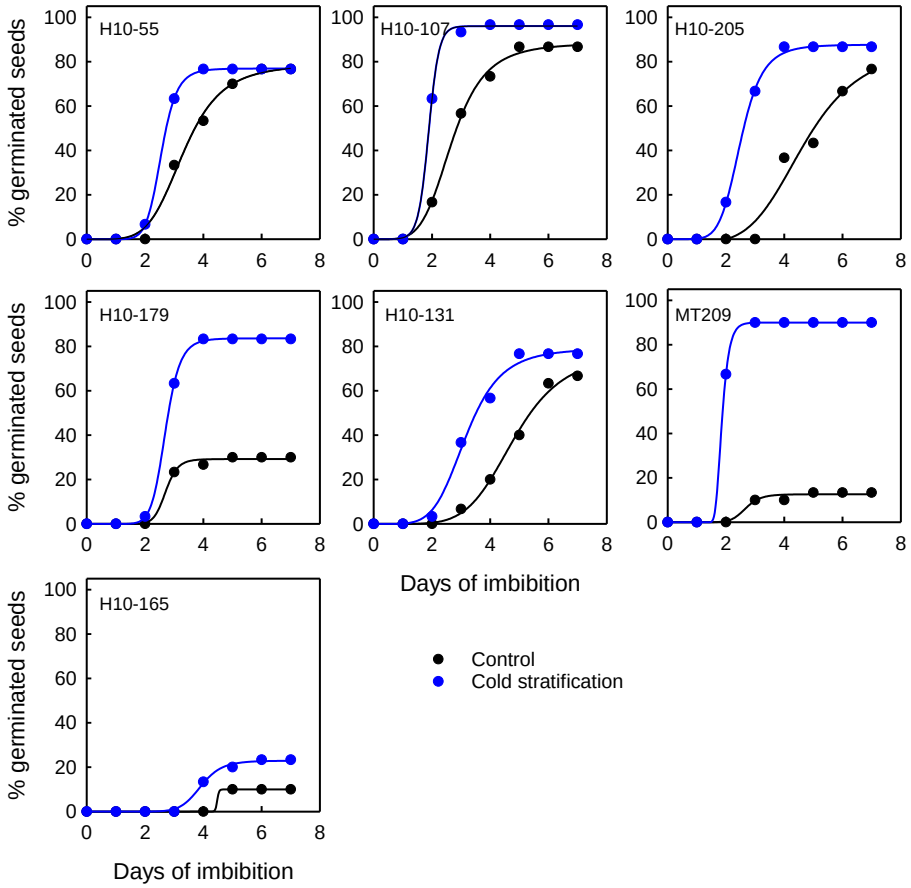

Figure S3. Germination of primary dormant seeds obtained from the winter culture after an incipient 5 days of cold stratification at 4°C. Germination was assayed at 20°C in the dark. Control represent seeds that were not stratified. Data represent a single batch of 30 seeds.

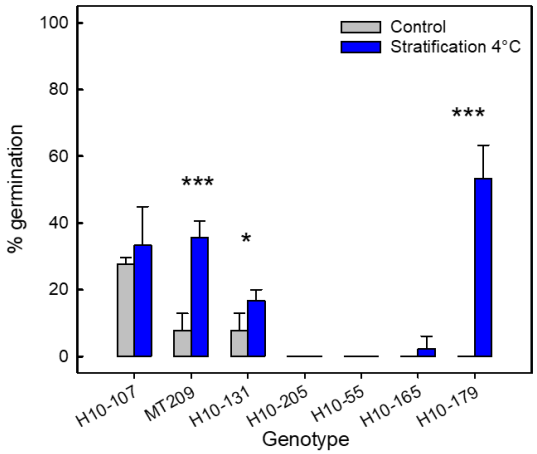

Figure S4. Germination response of thermodormant seeds after 5 days stratification at 4°C in the dark. Germination was tested at 20°C in the dark. Control represent thermodormant seeds that were not stratified. Data are the mean (± SD) of triplicates of 30 seeds. Stars indicate significance between control and stratification assessed by t-test on probit values (* P<0.1; *** P<0.001). Seeds were obtained from the winter culture

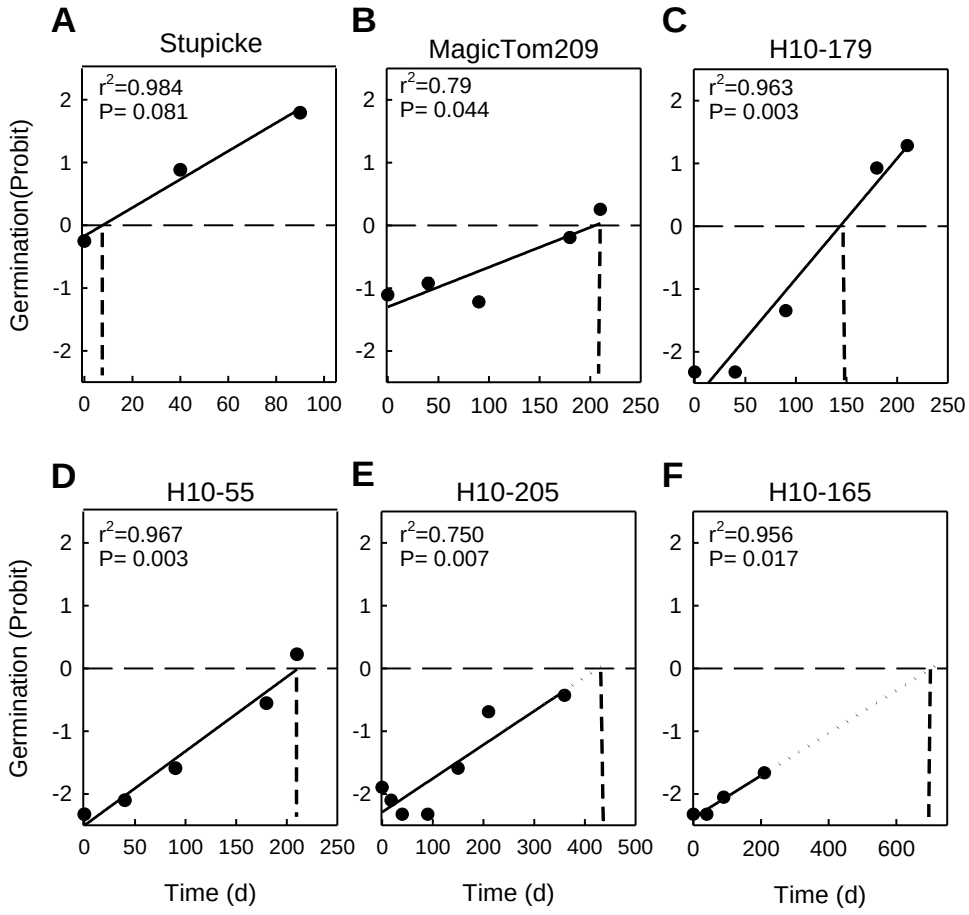

Figure S5. Release of thermodormancy during dry storage. Changes in percentages of germination (expressed in probit) of thermodormant seeds as a function of dry hermetic storage at 20°C. Data are the average of triplicates of 30 seeds and were fitted with a linear regression to assess the number of days of seed dry storage required to reach 50 % of germination ($DSDS50_{TD}$). r^2 and P values of the regression are indicated. Broken lines indicate the extrapolated curve to calculate DSDS50. Seeds were obtained from the winter culture.

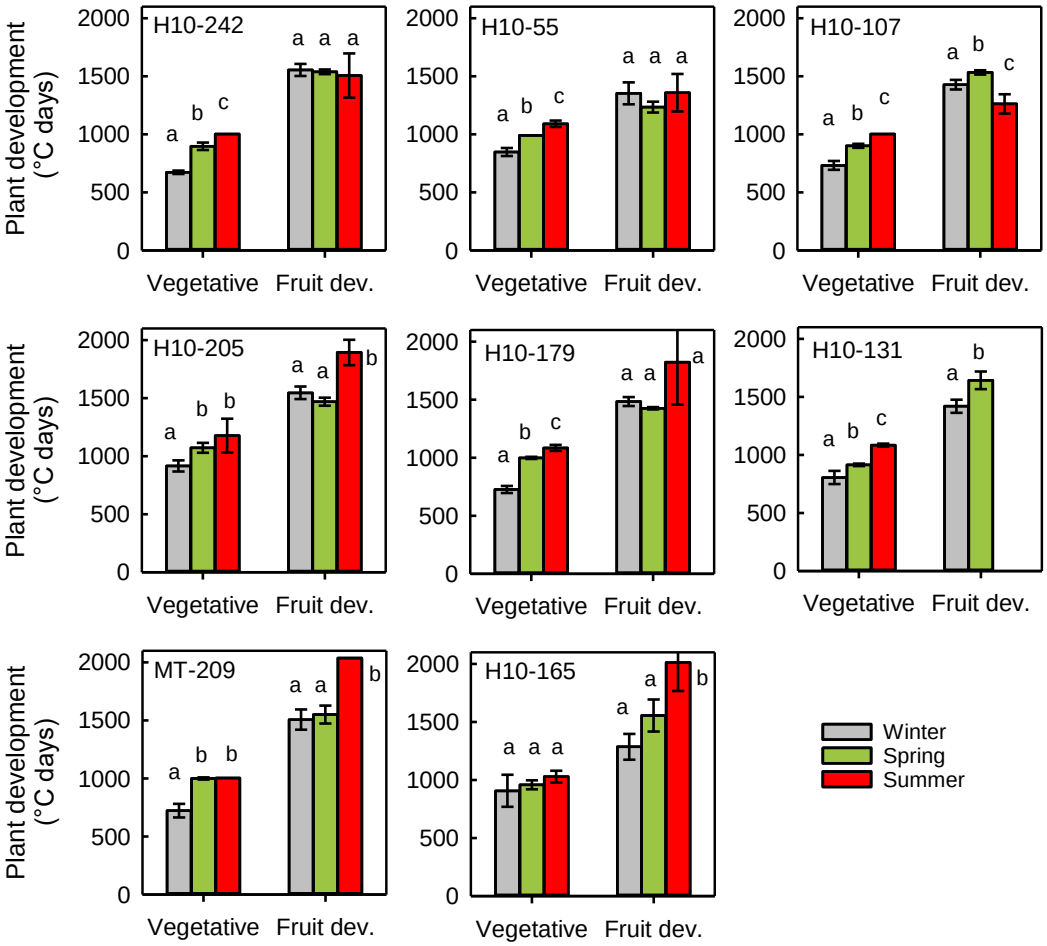

Figure S6. Accumulated thermal times necessary to reach flowering stage (vegetative) and fruit maturity (fruit development) during the indicated cultures. Data are the mean of 4-6 plants (± SD). Letters indicate significant differences ($p<0.05$). The statistical comparison was performed for each developmental stage separately.

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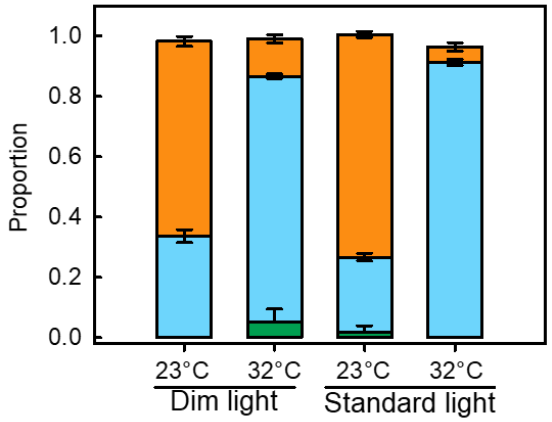
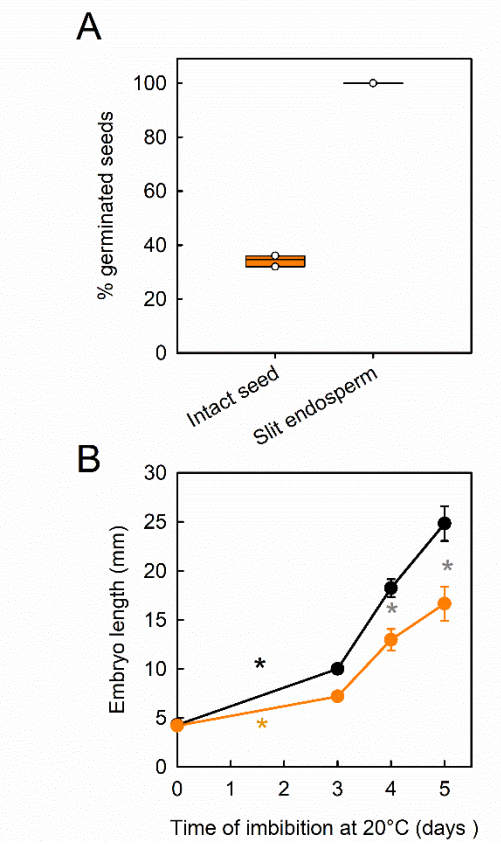


Factor	d.f.	SSq	F	P
Temperature	1	11.534	181.203	<0.001
Light	1	0.0651	1.023	0.341
Temp x Light	1	0.508	7.978	0.022
Residual	8	0.509		

Figure S7. Impact of light and temperature during fruit ripening on the germination response to heat in MoneyMaker seeds. Fruits were harvested at Breaker stage and incubated for 14 d at the indicated environmental conditions. Letters indicate significant differences between conditions. Data are the means (± SD) of triplicated of 50 seeds. Seeds were obtained from the winter culture. The table shows the type III ANOVA analysis on the effect of temperature and light and their interaction on thermodormancy.



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H of pre-incubation before dissection	Non dormant		Thermodormant	
	Growth rate (mm/d)	P value	Growth rate (mm/d)	P value
6	2.5 ± 0.7	0.066	1.2 ± 0.3	0.045
16	3.9 ± 1.0	0.060	3.0 ± 0.8	0.062

Figure S8. A) Germination of primary dormant seeds after slitting the endosperm. Germination was performed at 20°C in darkness. Data represent two replicates of 30 seeds. B) Length of naked embryos isolated from 16 h imbibed non-dormant and thermodormant seeds as a function of incubation time at 20°C in the dark. Data represent the average of 5 embryos ± SE. Stars indicate significant differences ($p<0.05$) between factors as follows : black and orange, between 0 and 3 d of incubation of non-dormant and thermodormant embryos, respectively; grey between non dormant and thermodormant at 4 and 5 days of incubation. C) Growth rate (± SE and p-value) calculated from the linear regression between incubation time and length of naked embryos. Seeds were obtained from the winter culture.