

Supplementary Files

Figure S1: Climate variation between 1896 and 2019. Black dots represent monthly means, red and blue lines link the monthly means during the experiment scoring period.

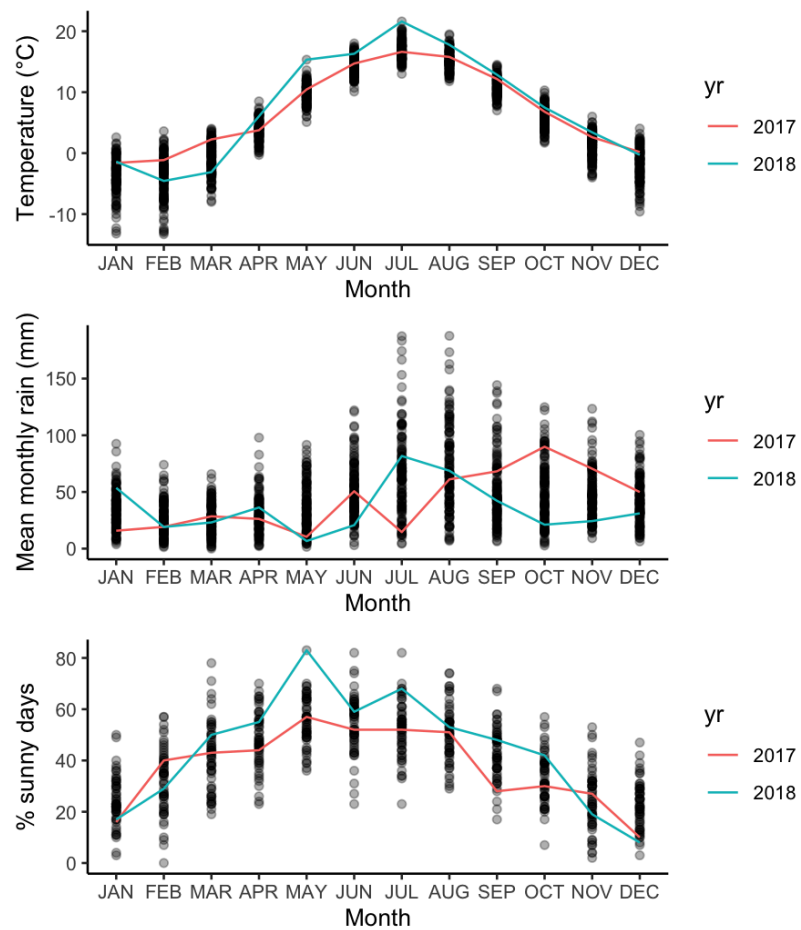


Figure S2: Smoothed fits used to extract transition dates (x axis) for developmental stages (y axis). Random individual trees are shown to illustrate the difference between smoothed/imputed data (orange) and raw data (red). Orange fit produce more reliable data and are used throughout the analyses.

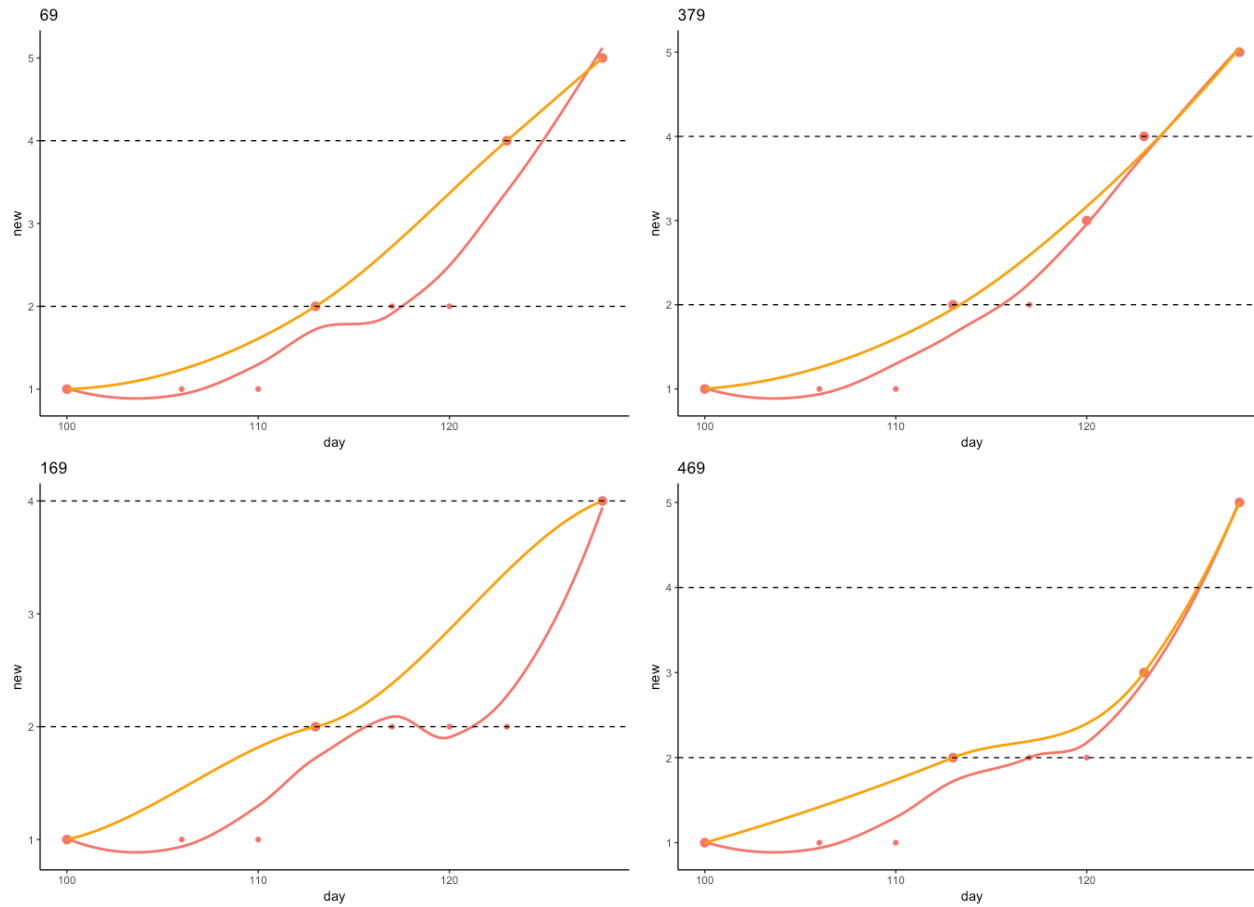


Table S1: Crossing scheme, and parental information for experimental trees

		Fathers										
		Region	Alaska		BC	Idaho	Oregon	Washington x Oregon	Washington	OP, Koster, Holland	-	
Mothers	Lat (alt.)	Klon	58°30' (15)	60°00'	49°15'	48°25'	45°35'		45°50' (75)			
Region	Lat (alt.)	Klon	293	278	193	214	159	236	299	187	209	290
	58°30'	216			5		1		5			5
Alaska	59°20' (500)	291						2		1		
	60°37' (400)	265	3	3		1			2	2		
BC	49°00'	230	7	4		3		2	6			
	-	96							1			
Idaho x Oregon	-	237	2	1		3			3	1		3
	-	240		4				1	21		2	
Oregon	44°30'	271	1	2				1	4			1
-		301								2		1