Supplementary Table 1. Regional climate change projection data sets used in the study. Presented are the model abbreviation, the driving global climate model and the regional climate model (RCM). SRES A1B emission scenario; spatial resolution: 25 km × 25 km.

Model abbreviation	Global Climate Model	Regional Climate Model
E0	HadCM3Q	RCA3
E2	ARPEGE RM4.5	ALADIN
E3	ARPEGE RM5.1	ALADIN
E4	ECHAM5r3	DMI-HIRHAM5
E5	ARPEGE	HIRHAM5
E6	BCM	HIRHAM5
E7	HadCM3Q0	CLM
E10	HadCM3Q3	HadRM3Q3
E11	HadCM3Q16	HadRM3Q16
E12	ECHAM5	RegCM

Supplementary Table 2. Average cumulative degree days (CDD) after BBCH 09 until reaching the BBCH stages 11 to 89 in the Müller-Thurgau (Molitor et al. 2014b), Riesling (Molitor et al. 2016) and Pinot noir cultivars. Lower case numbers following "CDD" represent the optimized threshold temperature triplet for the respective cultivars (see **Erreur ! Source du renvoi introuvable.**).

BBCH stage	Cumulative degree days		
	Müller-Thurgau $CDD_{5;20;22}$	Riesling $CDD_{7;18;24}$	Pinot noir $CDD_{3;20;24}$
11	34.9	32.3	44.7
12	58.6	49.1	70.1
13	80.8	66.2	94.1
14	110.2	89.6	126.5
15	144.4	113.7	162.5
16	173.6	143.7	195.4
17	213.5	168.1	248.0
18	248.8	192.2	275.9
19	285.2	218.2	337.2
53	178.1	157.6	226.4
55	253.2	202.0	277.3
57	375.5	294.5	449.9
61	463.3	370.2	555.9
63	494.5	385.0	593.4
65	517.5	407.2	606.8
68	548.4	428.0	643.5
69	569.6	452.0	674.1
71	603.5	475.7	719.9
73	659.0	507.8	763.8
75	774.9	608.7	905.6
77	870.0	664.0	1006.8
79	999.4	755.1	1115.3
81	1160.2	1026.8	1519.7
83	1219.4	1060.6	1589.8
85	1287.8	1111.5	1664.8
89	1719.8	1374.5	2169.8

Supplementary Table 3. Days of year reaching BBCH 09 in the cultivars Müller-Thurgau, Riesling and Pinot noir in Remich/Luxembourg in the years 2012 to 2018 as well as on average of those years.

Year	Müller-Thurgau	Riesling	Pinot noir
2012	122	123	122
2013	125	125	125
2014	104	106	102
2015	119	118	114
2016	123	125	122
2017	108	116	108
2018	113	116	114
Average	116.3	118.4	115.3