

Appendix 1

Table A1. Measures of model fit for top models from model selection procedures. Parameters for each model described in the text and in Table 1.

Model	Cost	MSE	R ²	Adjusted R ²	AIC	BIC
A	.	0.77	0.48	0.43	-12.91	-9.25
B	.	0.76	0.51	0.44	-12.75	-8.01
1	5	0.75	0.52	0.45	-13.49	-8.82
	10	0.74	0.55	0.48	-14.92	-10.69
	20	0.73	0.56	0.49	-15.78	-11.90
	40	0.73	0.56	0.49	-15.77	-12.25
	60	0.74	0.54	0.48	-14.91	-11.34
	80	0.74	0.54	0.47	-14.63	-11.01
	100	0.74	0.54	0.47	-14.53	-10.88
	150	0.74	0.54	0.47	-14.45	-10.78
	200	0.74	0.54	0.47	-14.47	-10.80
2	5	0.76	0.54	0.45	-12.55	-6.85
	10	0.73	0.57	0.48	-14.37	-9.04
	20	0.72	0.58	0.50	-15.33	-10.40
	40	0.72	0.58	0.50	-15.52	-10.95
	60	0.73	0.57	0.49	-14.71	-10.07
	80	0.73	0.57	0.48	-14.39	-9.69
	100	0.74	0.56	0.48	-14.27	-9.54
	150	0.74	0.56	0.48	-14.16	-9.42
	200	0.74	0.56	0.48	-14.18	-9.45
3	5	0.75	0.54	0.46	-12.44	-7.77
	10	0.74	0.56	0.48	-13.89	-9.32
	20	0.73	0.58	0.50	-14.75	-10.24
	40	0.72	0.58	0.50	-14.91	-10.50
	60	0.73	0.57	0.49	-14.18	-9.82
	80	0.73	0.57	0.48	-13.92	-9.55
	100	0.74	0.56	0.48	-13.82	-9.44
	150	0.74	0.56	0.48	-13.75	-9.36
	200	0.74	0.56	0.48	-13.77	-9.38
4	5	0.75	0.56	0.46	-11.53	-5.77
	10	0.73	0.59	0.49	-13.37	-7.61
	20	0.72	0.60	0.51	-14.35	-8.59
	40	0.71	0.61	0.51	-14.76	-9.00
	60	0.72	0.60	0.50	-14.16	-8.40
	80	0.72	0.60	0.50	-13.86	-8.10
	100	0.72	0.59	0.50	-13.75	-7.98
	150	0.73	0.59	0.50	-13.64	-7.88
	200	0.72	0.59	0.50	-13.67	-7.90

Table A2. Standardized regression coefficients for top models from model selection procedures. λ = connectivity, C= canopy cover class (1–4), RH = average number of daily hours at optimal relative humidity for growth of *P. ramorum* (>95%), PSI = potential solar radiation, TMI = topographic moisture index, T = average number of daily hours at optimal growth temperature for *P. ramorum* (10–25°C), and H-DBH = total DBH for all *P. ramorum* hosts.

Model	Cost	Variables				
A	NA	canopy 0.40	RH 0.46	PSI −0.36		
B	NA	canopy 0.41	RH 0.44	PSI −0.39	TMI 0.18	
1	5	canopy 0.35	RH 0.44	PSI −0.32	λ 0.21	
1	10	canopy 0.35	RH 0.45	PSI −0.33	λ 0.26	
1	20	canopy 0.35	RH 0.46	PSI −0.34	λ 0.29	
1	40	canopy 0.36	RH 0.47	PSI −0.35	λ 0.29	
1	60	canopy 0.37	RH 0.47	PSI −0.35	0.26	
1	80	canopy 0.37	RH 0.47	PSI −0.35	λ 0.26	
1	100	canopy 0.37	RH 0.47	PSI −0.35	λ 0.25	
1	150	canopy 0.37	RH 0.47	PSI −0.35	λ 0.25	
1	200	canopy 0.37	RH 0.47	PSI −0.35	λ 0.25	
2	5	canopy 0.35	RH 0.39	PSI −0.29	λ 0.26	temp 0.14
2	10	canopy 0.35	RH 0.40	PSI −0.30	λ 0.31	temp 0.16
2	20	canopy 0.35	RH 0.41	PSI −0.31	λ 0.33	temp 0.16
2	40	canopy 0.37	RH 0.42	PSI −0.32	λ 0.34	temp 0.17

2	60	canopy 0.38	RH 0.42	PSI -0.32	λ 0.32	temp 0.17	
2	80	canopy 0.38	RH 0.42	PSI -0.32	λ 0.31	temp 0.17	
2	100	canopy 0.38	RH 0.42	PSI -0.32	λ 0.31	temp 0.17	
2	150	canopy 0.39	RH 0.42	PSI -0.32	λ 0.30	temp 0.17	
2	200	canopy 0.39	RH 0.42	PSI -0.32	λ 0.30	temp 0.17	
3	5	canopy 0.38	RH 0.42	PSI -0.29	λ 0.21	host_dbh -0.13	
3	10	canopy 0.38	RH 0.43	PSI -0.30	λ 0.26	host_dbh -0.13	
3	20	canopy 0.37	RH 0.44	PSI -0.30	λ 0.29	host_dbh -0.10	
3	40	canopy 0.39	RH 0.45	PSI -0.31	λ 0.29	host_dbh -0.14	
3	60	canopy 0.40	RH 0.45	PSI -0.31	λ 0.27	host_dbh -0.15	
3	80	canopy 0.41	RH 0.45	PSI -0.31	λ 0.26	host_dbh -0.15	
3	100	canopy 0.41	RH 0.45	PSI -0.31	λ 0.26	host_dbh -0.15	
3	150	canopy 0.41	RH 0.45	PSI -0.31	λ 0.26	host_dbh -0.15	
3	200	canopy 0.41	RH 0.45	PSI -0.31	λ 0.26	host_dbh -0.15	
4	5	canopy 0.39	RH 0.38	PSI -0.26	λ 0.25	host_dbh -0.13	temp 0.14
4	10	canopy 0.38	RH 0.39	PSI -0.27	λ 0.31	host_dbh -0.13	temp 0.16
4	20	canopy	RH	PSI	λ	host_dbh	temp

			0.38	0.40	-0.28	0.33	-0.13	0.16
4	40	canopy	RH	PSI	λ	host_dbh	temp	
		0.40	0.41	-0.28	0.34	-0.14		0.17
4	60	canopy	RH	PSI	λ	host_dbh	temp	
		0.42	0.40	-0.28	0.33	-0.15		0.18
4	80	canopy	RH	PSI	λ	host_dbh	temp	
		0.42	0.40	-0.28	0.32	-0.16		0.18
4	100	canopy	RH	PSI	λ	host_dbh	temp	
		0.42	0.40	-0.28	0.32	-0.16		0.18
4	150	canopy	RH	PSI	λ	host_dbh	temp	
		0.42	0.40	-0.28	0.32	-0.16		0.18
4	200	canopy	RH	PSI	λ	host_dbh	temp	
		0.42	0.40	-0.28	0.32	-0.16		0.18