Supplemental Table 2. Mean and standard of covariates by hop cultivar susceptibility to two strains of Podosphaera macularis<sup>a</sup>

	Susceptibility to R6-virulent strains						Susceptibility to non-R6-virulent strains				
	0	1	2	3	4	5	0	1	2	3	4
Pruning	2.63 ± 1.45	2.83 ± 1.45	3.01 ± 1.56	3.18 ± 1.46	2.73 ± 1.38	3.1 ± 1.42	2.37 ± 1.3	2.84 ± 1.45	3.44 ± 1.38	3.18 ± 1.46	3.42 ± 1.35
Area R6	0.22 ± 0.01	0.22 ± 0.01	0.78 ± 0.01	0.78 ± 0.01	0.78 ± 0.01	0.78 ± 0.01	±	±	±	±	±
Area nonR6	-	-	-	-	-	-	0.52 ± 0.03	0.52 ± 0.03	0.48 ± 0.03	0.48 ± 0.03	0.48 ± 0.03
Mildew May	0	0.000 ± 0.0006	0.006 ± 0.02	0.006 ± 0.02	0.007 ± 0.04	0.01 ± 0.02	0.006 ± 0.02	0.000 ± 0.0006	0.007 ± 0.02	0.006 ± 0.02	0.009 ± 0.05
First spray date	117 ± 15.16	120.23 ± 15.96	116.34 ± 14.85	121 ± 16.17	118.34 ± 16.25	122.32 ± 13.02	119.8 ± 14	120.35 ± 15.9	119.38 ± 8.71	121 ± 16.17	114.01 ± 20.17
Interval	15.13 ± 11.85	18.11 ± 10.76	16.93 ± 10.17	17.63 ± 10.58	15.06 ± 9.8	13.97 ± 7.25	14.1 ± 9.17	17.99 ± 10.64	16.42 ± 8.83	17.63 ± 10.58	17.51 ± 11.60
Initial interval after change	7.3 ± 11.86	6.77 ± 10.83	6.73 ± 11.43	7.2 ± 10.73	6.43 ± 10.09	7.42 ± 9.82	6.12 ± 9.7	6.8 ± 10.85	5.78 ± 9.27	7.2 ± 10.73	7.9 ± 12.12
Degree centrality	0.48 ± 0.27	0.49 ± 0.35	0.37 ± 0.35	0.52 ± 0.34	0.5 ± 0.33	0.61 ± 0.36	0.56 ± 0.34	0.49 ± 0.35	0.25 ± 0.16	0.52 ± 0.34	0.41 ± 0.28
Synthetic	1.09 ± 0.71	1.00 ± 1.00	1.34 ± 1.22	0.83 ± 0.83	0.72 ± 0.93	1.32 ± 0.90	0.64 ± 0.88	1.01 ± 1.00	1.40 ± 1.24	0.83 ± 0.83	1.17 ± 0.95
Nonsynthetic	4.30 ± 2.12	3.17 ± 1.93	3.47 ± 2.14	3.33 ± 1.71	3.49 ± 1.81	3.51 ± 2.04	3.89 ± 1.87	3.17 ± 1.93	3.42 ± 2.42	3.33 ± 1.71	2.95 ± 1.64
Mixture	0.30 ± 0.77	0.70 ± 1.03	0.65 ± 0.88	0.56 ± 0.93	1.36 ± 1.19	1.19 ± 1.64	1.19 ± 1.26	0.70 ± 1.03	0.82 ± 0.95	0.56 ± 0.93	1.18 ± 1.12
Disease incidence	0	0.005 ± 0.02	0.03 ± 0.08	0.04 ± 0.15	0.17 ± 0.28	0.36 ± 0.32	0.19 ± 0.29	0.005 ± 0.02	0.05 ± 0.09	0.04 ± 0.15	0.07 ± 0.21
Annual costs	398.58 ± 325.94	524.41 ± 306.08	526.86 ± 293.71	467.84 ± 262.43	594.67 ± 293.59	908.53 ± 519.4	558.04 ± 328.02	523.5 ± 306.56	592.28 ± 283.23	467.84 ± 262.43	626.45 ± 328.16
Na (Sprays)	63	204	88	338	450	31	386	203	64	338	183
N <sup>b</sup> (Hop yards)	20	76	27	133	136	10	117	75	19	133	58

760 <sup>a</sup> Variable descriptions are given in Table 1.

761 <sup>b</sup> Total number of sprays: 1,174

759

762 <sup>c</sup> Total number of hop yards: 402