Supplementary Material

Differential response of olive cultivars to leaf spot disease (*Fusicladium oleagineum*) under climate warming conditions in Morocco

Khaoula Habbadi, Ilyass Maafa, Abdellatif Benbouazza, Faiçal Aoujil, Hasnae Choukri, Salma El Iraqui El Houssaini, Ahmed El Bakkali

Table S1: List of cultivars used in the study, results of different parameters evaluated and their susceptibility to OLS disease

#	Cultivar	Origin	Incidence (%)					Severity (%)					AUDPC	Cultivar classification	Degree of susceptibility to OLS*	Total chlorophyll (µg/mg)	Total polyphenols (mg·GAE/g)	Flavonoid Content (mg·CE/g)
			March	April	May	June	July	March	April	May	June	July						
1	Amellau	France	10	8	8	5.5	2	7.5	2	2.5	2	0.75	1254,25	Moderatly resistant	100% High	0,40	1,4	1,01
2	Arbequine	Spain	10.7	9	10.5	9.5	5	6	5.8	5	4.5	4	1225,25	Moderatly Susceptible	50% High 5% Low 44% Medium	0,60	4,8	3,84
3	Ascolana tenera	Italy	3	0	0	0	0	1.5	0	0	0	0	391,5	Resistant	16% High 48% Low 34% Medium	0,82	7,91	4,22
4	Blanqueta	Spain	53	74	74.5	64.7	25	24.7	35.2	37	32.5	15	3045	Susceptible	66% High 33% Low	0,75	2,92	1,53
5	Bouchouk Soummam	Algeria	9	7	5.5	5	2.5	3	3.2	3	2.5	1.5	1065,75	Moderatly resistant		0,89	4,71	2,58
6	Carmelitana	Italy	3.5	1.5	2	2	1.5	2	0.3	0.75	0.75	0.5	1131	Moderatly resistant	100% Medium	0,58	11,19	7,91
7	Changlot Real	Spain	3	0	0	0	0	2.5	0	0	0	0	1080,25	Resistant	100% high	0,43	12,73	8,95
8	Chetoui	Tunisia	4	1	1	1	0	2.7	0.12	0	0	0	1239,75	Resistanct	100% high	0,50	5,8	3,75
9	Frantoio	Italy	2.75	0	0	0	0	1	0	0	0	0	848,25	Resistant	68% High 12% Low	0,50	10,02	7,88

														19% Medium			
10	Galega Vulgar	Portugal	3	1	3	2	2	1.5	0.44	0.5	0.5	0.15	848,25	Moderately resistant	100% Low	0,60	6,93	4,09
11	Grappolo	Italy	2	2	2	1.5	0	1	0.25	0.25	0	0.12	819,25	Moderately resistant	100% Low	0,99	15,03	10,1
12	Leucocarpa	Italy	3	0.5	1.5	0	0	1.75	0	0	0	0	652,5	Resistant	100% Low	0,70	9,14	4,26
13	Madonna Dell'Impruneta	Italy	2	2.5	2	2	2	0.5	0.39	0.5	0.5	0.15	942,5	Moderately resistant	90% Low 9% Medium	0,40	5,23	3,6
14	Maurino	Italy	3.75	3	3.5	2.5	2	1.5	2.1	1	1	0.5	1276	Moderately resistant	3% High 56% Low 40% Medium	0,46	9,51	6,46
15	Meslala	Morocco	7	7.5	4.5	4	2	4.75	5	3.75	3	0.5	841	Moderately resistant		0,82	9,11	4,24
16	Piangente	Italy	32.3	33.5	32	26	17	15.5	19.5	15	12.75	9.5	1421	Moderatly Susceptible	9% High 54% Low 36% Medium	0,44	9,74	7,65
17	Picholine marocaine	Morocco	50.5	52	48.75	45	20.5	13.75	15.79	14	12.7	8.5	2225,75	Moderatly Susceptible	91% High 8% Low	0,82	5,01	3,12
18	Sevillenca	Spain	3	0	3	4	3	1.5	0	1	1	1	913,5	Moderately resistant	75% High 25% Medium	0,41	13,13	8,73
19	Tabelout	Algeria	16.25	19	17.5	17	12.5	5.5	9.3	9	8.7	3.5	1399,25	Moderatly Susceptible		0,54	9,19	5,42
20	Verdial Tansmontana	Portugal	27.7	26	23.5	21	7.5	4	3.5	2	2.5	1.75	899	Moderatly Susceptible		0,43	5,84	3,85

* Classification based on the web-based edition OLEA database (http://www.oleadb.it/)

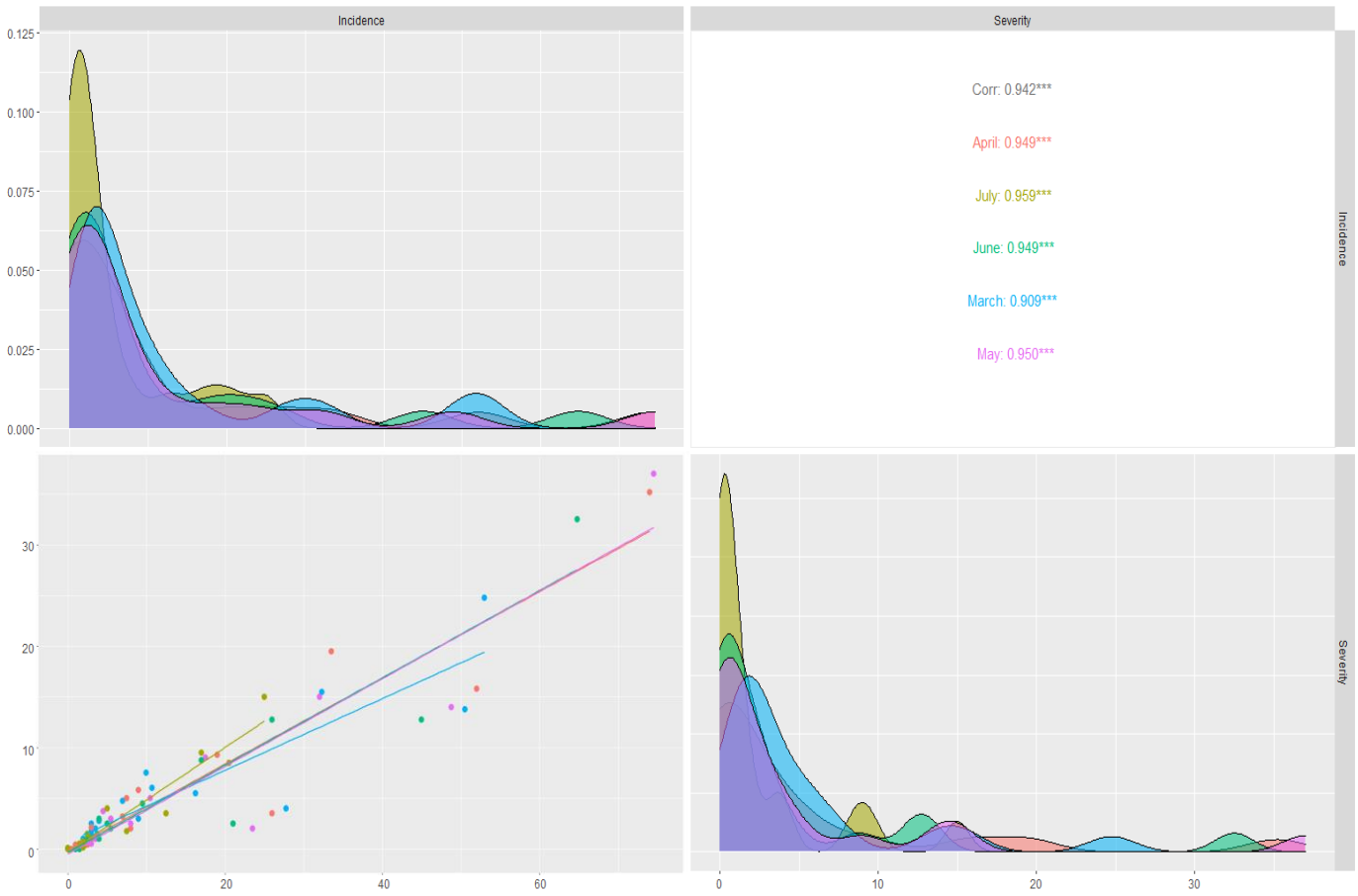

Figure S1. Pearson correlation between the incidence and severity disease indices in each sampling month.

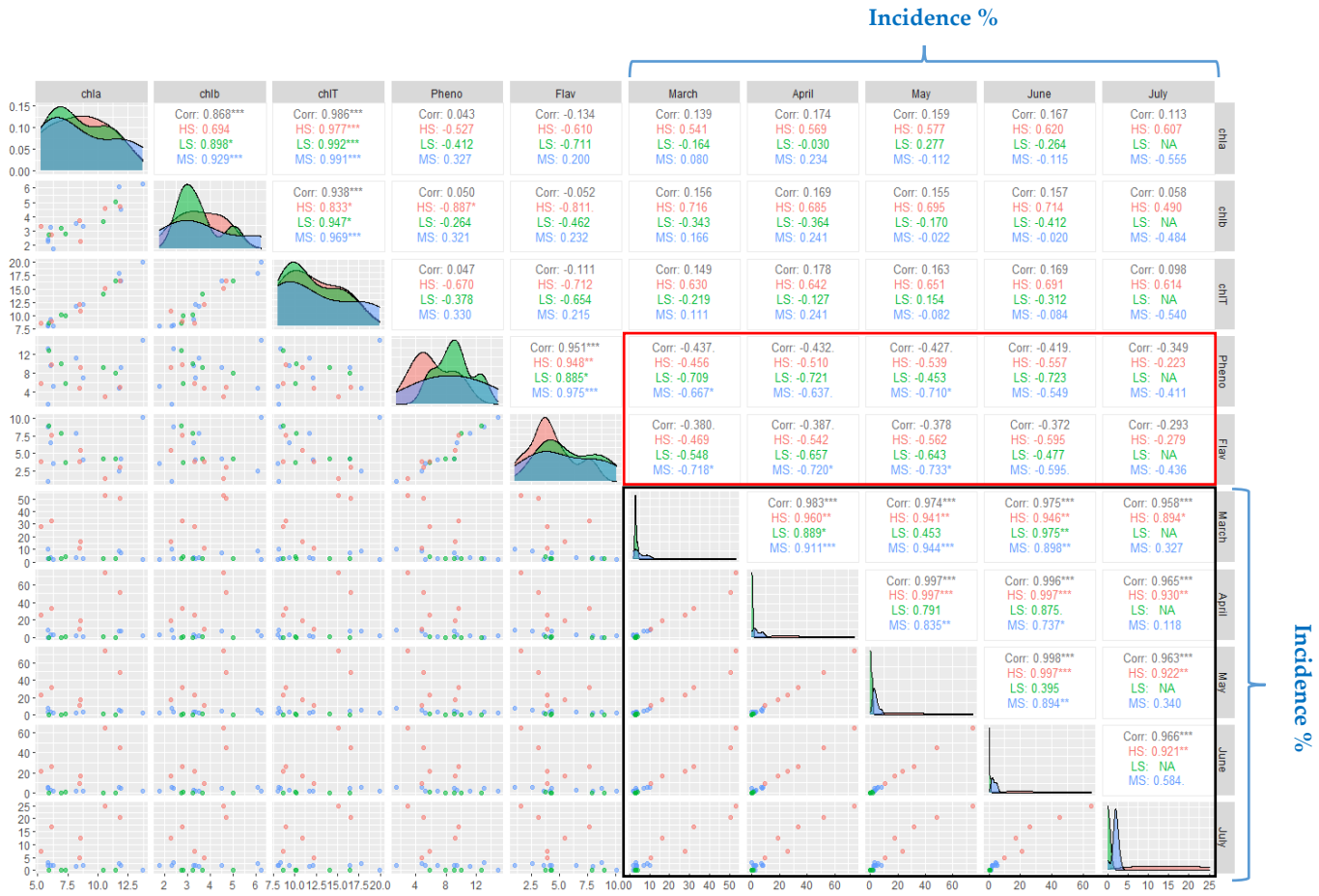

Figure S2. Pearson correlation between the OLS disease incidence and biochemical contents in each sampling month of the study.

HS: Highly susceptible; LS: least susceptible; MS: Moderatly susceptible; ChT: chlorophyll total; Chla: chlorophyll a; chlb: chlorophyll b; Pheno: polyphenols; Flav: flavonoids.

- In these results, a positive linear relationships was observed between the incidence in each month of the sudy (the black frame).
- A negative linear relationship exists between the incidence and chlorophyll, polyphenols and flavonoids contents. The Incidence over months of the OLS disease was negatively correlated with polyphenols and flavonoids contents (Red Frame)