

Table S1. Chemical composition at 30 dpi in *Piper divaricatum* leaves inoculated with AMFs and concentrations of P (mean \pm standard deviation).

Compound	RI ^a	RI ^b	Control	AMF	P20	P200	P20 + AMF	P200 + AMF
(E)-2-Hexenal	839	846	0.16 \pm 0.28	0.63 \pm 0.16	0.11 \pm 0.12		0.32 \pm 0.24	0.07 \pm 0.05
α -Pinene	932	932	2.40 \pm 2.09	0.02 \pm 0.04				
Sabinene	971	969	1.20 \pm 2.07					
β -Pinene	981	974	1.59 \pm 2.51	0.01 \pm 0.02				
Myrcene	982	988	0.12 \pm 0.16	0.07 \pm 0.04	0.03 \pm 0.02	0.02 \pm 0.03	0.06 \pm 0.01	0.04 \pm 0.04
β -Phellandrene	1023	1025	0.06 \pm 0.08	0.05 \pm 0.09	0.02 \pm 0.02	0.01 \pm 0.02	0.02 \pm 0.04	0.02 \pm 0.03
Limonene	1023	1024	0.59 \pm 0.51					
Silvestrene	1030	1025	0.04 \pm 0.03					
Z- β -Ocimene	1030	1032	0.03 \pm 0.05	0.08 \pm 0.07	0.04 \pm 0.04		0.06 \pm 0.04	0.03 \pm 0.06
E-β-Ocimene	1042	1044	1.72 \pm 0.88	3.92 \pm 1.22	2.79 \pm 0.51	2.59 \pm 0.47	3.44 \pm 0.61	3.11 \pm 0.77
<i>Allo</i> -Ocimene	1129	1128	0.01 \pm 0.02	0.05 \pm 0.01	0.01 \pm 0.01	0.01 \pm 0.02	0.02 \pm 0.02	0.02 \pm 0.03
δ -Elemene	1340	1335	0.06 \pm 0.04	0.03 \pm 0.01	0.01 \pm 0.01		0.01 \pm 0.01	0.02 \pm 0.03
Eugenol	1360	1356	1.18 \pm 2.05	0.23 \pm 0.35	0.96 \pm 1.91		1.25 \pm 2.51	1.67 \pm 2.19
α -Copaene	1379	1374	0.02 \pm 0.03	0.12 \pm 0.11				
β-Elemene	1396	1389	6.27 \pm 1.12	5.49 \pm 0.45	5.62 \pm 0.93	6.36 \pm 0.22	6.05 \pm 1.76	5.64 \pm 0.65
Methyl eugenol	1410	1403	76.07 \pm 2.57	85.09 \pm 3.62	87.51 \pm 2.95**	87.00 \pm 0.58*	84.86 \pm 4.20*	84.32 \pm 4.83*
E-Caryophyllene	1426	1417	1.98 \pm 0.69	1.26 \pm 0.16	1.53 \pm 0.40	1.89 \pm 0.16	1.54 \pm 0.47	1.73 \pm 0.23

Table S1. Continuation

β -Copaene	1436	1430	0.07 \pm 0.04	0.07 \pm 0.01	0.04 \pm 0.04	0.08 \pm 0.01	0.06 \pm 0.08	1.42 \pm 0.14
γ -Elemene	1439	1434	0.01 \pm 0.01					
α -Humulene	1460	1452	0.13 \pm 0.04	0.10 \pm 0.02	0.06 \pm 0.07			
Germacrene D	1486	1484	1.04 \pm 0.29	1.01 \pm 0.15	0.99 \pm 0.41	1.07 \pm 0.08	1.19 \pm 0.58	1.22 \pm 1.54
β -Selinene	1493	1489	0.02 \pm 0.03					
(E)-Methyl-isoeugenol	1499	1491	0.08 \pm 0.08					
Bicyclogermacrene	1502	1500	0.05 \pm 0.09					
Eugenol acetate	1531	1521	0.77 \pm 1.23	1.46 \pm 2.45	0.01 \pm 0.01		0.45 \pm 0.91	
Elemicin	1559	1555	0.13 \pm 0.16	0.19 \pm 0.11	0.18 \pm 0.10	0.21 \pm 0.06	0.23 \pm 0.04	0.24 \pm 0.11
(E)-Nerolidol	1567	1561	0.03 \pm 0.05					
Caryophyllene oxide	1590	1582	0.01 \pm 0.01					
Selin-11-en-4-alpha-ol	1660	1658	0.03 \pm 0.05					
Monoterpene hydrocarbons			7.72 \pm 8.38	4.20 \pm 1.48	2.87 \pm 0.60	2.63 \pm 0.53	3.59 \pm 0.73	3.22 \pm 0.93
Sesquiterpene hydrocarbons			9.70 \pm 2.49	8.07 \pm 0.89	8.24 \pm 1.86	9.39 \pm 0.48	8.84 \pm 2.90	8.81 \pm 1.05
Phenylpropanoids			78.23 \pm 6.10	86.97 \pm 6.53	88.65 \pm 4.97*	87.21 \pm 0.64*	86.80 \pm 7.65*	87.45 \pm 8.66*
Others			0.16 \pm 0.28	0.63 \pm 0.16	0.10 \pm 0.12	0.00 \pm 0.00	0.32 \pm 0.24	0.07 \pm 0.05
Total			95.82 \pm 17.27	99.88 \pm 9.06	99.87 \pm 7.56	99.23 \pm 1.65	99.55 \pm 11.52	99.55 \pm 10.69

RI^a: Retention index calculated; **RI^b**: Retention Index of Library. **Control**: (control *P. divaricatum*); **AMF**: (*P. divaricatum* inoculated with AMF); **P20**: (*P. divaricatum* with 20 mg of P.dm⁻³ of soil); **P200**: (*P. divaricatum* with 200 mg of P.dm⁻³ of soil); **P20 + AMF**: (*P. divaricatum* inoculated with AMF and 20 mg of P.dm⁻³ of soil); **P200 + AMF**: (*P. divaricatum* inoculated with AMF and 200 mg of P.dm⁻³ of soil). * Statistical difference according to Bonferroni-test ($p < 0.05$). Significance level: ** significant, * little significant.