EAG responses of adult *Lobesia botrana* males and females collected from *Vitis vinifera* and *Daphne gnidium* to larval host-plant volatiles and sex pheromone

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Supplementary material

Table S1. Pairwise significance tests for the factors A) larval host-plant, B) odorant by sex, and C) sex by odorant in the ANOVA performed with the complete dataset (Table 3A, main text). Different letters in each section indicate significant differences among groups (Tukey´s test, $P < 0.05$)

A. Larval host-plant						
host	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
Vitis	0.400	0.0204	239	0.361	0.442	a
Daphne	0.302	0.0154	239	0.273	0.334	b
B. Odorant by sex						
sex = female						
odor	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
far	0.781	0.1447	239	0.5418	1.125	a
msl	0.571	0.1058	239	0.3961	0.822	ab
1ol	0.499	0.0926	239	0.3466	0.720	ab
lnl	0.426	0.0789	239	0.2953	0.613	ab
ben	0.380	0.0705	239	0.2637	0.548	ab
dmn	0.330	0.0611	239	0.2288	0.475	ab
2eh	0.301	0.0559	239	0.2092	0.434	bc
lox	0.273	0.0507	239	0.1898	0.394	bc
ebz	0.272	0.0505	239	0.1889	0.392	bc
major	0.138	0.0256	239	0.0957	0.199	cd
minac	0.110	0.0205	239	0.0766	0.159	d
minoh	0.107	0.0198	239	0.0740	0.154	d
sex = male						
odor	**emmean**	**SE**	**df**	**lower. CL**	**upper. CL**	**group**
major	3.629	0.6141	239	25.999	5.065	a
minac	0.832	0.1408	239	0.5960	1.161	b
far	0.807	0.1366	239	0.5784	1.127	bc
1ol	0.392	0.0664	239	0.2809	0.547	bcd
lnl	0.367	0.0621	239	0.2631	0.512	cd
ben	0.323	0.0547	239	0.2317	0.451	d
msl	0.289	0.0490	239	0.2074	0.404	d
lox	0.268	0.0454	239	0.1921	0.374	d
minoh	0.268	0.0453	239	0.1917	0.373	d
dmn	0.261	0.0441	239	0.1867	0.364	d
ebz	0.195	0.0330	239	0.1398	0.272	d
2eh	0.184	0.0311	239	0.1318	0.257	d
C. Sex by odorant						
odor = 1ol						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.499	0.0926	239	0.3466	0.720	a
m	0.392	0.0664	239	0.2809	0.547	a
odor = 2eh						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.301	0.0559	239	0.2092	0.434	a
m	0.184	0.0311	239	0.1318	0.257	a
odor = ben						

sex	response	SE	df	lower.CL	upper.CL	.group
f	0.380	0.0705	239	0.2637	0.548	a
m	0.323	0.0547	239	0.2317	0.451	a
odor = dmn						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.330	0.0611	239	0.2288	0.475	a
m	0.261	0.0441	239	0.1867	0.364	a
odor = ebz						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.272	0.0505	239	0.1889	0.392	a
m	0.195	0.0330	239	0.1398	0.272	a
odor = far						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.807	0.1366	239	0.5784	1.127	a
m	0.781	0.1447	239	0.5418	1.125	a
odor = lnl						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.426	0.0789	239	0.2953	0.613	a
m	0.367	0.0621	239	0.2631	0.512	a
odor = lox						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.273	0.0507	239	0.1898	0.394	a
m	0.268	0.0454	239	0.1921	0.374	a
odor = major						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	3.629	0.6141	239	25.999	5.065	a
m	0.138	0.0256	239	0.0957	0.199	b
odor = minac						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.832	0.1408	239	0.5960	1.161	a
m	0.110	0.0205	239	0.0766	0.159	b
odor = minoh						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.268	0.0453	239	0.1917	0.373	a
m	0.107	0.0198	239	0.0740	0.154	b
odor = msl						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.571	0.1058	239	0.3961	0.822	a
m	0.289	0.0490	239	0.2074	0.404	b

Table S2. Pairwise significance tests for the factors A) larval host-plant, B) plant odorant, and C) sex in the ANOVA performed with the *plant dataset* (Table 3B, main text). Different letters in each section indicate significant differences among groups (Tukey´s test, $P < 0.05$)

A. Larval host-plant						
host	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
vitis	0.416	0.0261	187	0.368	0.471	a
daphne	0.300	0.0188	187	0.265	0.339	b
B. Plant odorant						
odor	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
far	0.804	0.1067	187	0.619	1.045	a
1ol	0.443	0.0587	187	0.341	0.575	b
msl	0.399	0.0529	187	0.307	0.518	bc
lnl	0.397	0.0527	187	0.306	0.516	bc
ben	0.352	0.0467	187	0.271	0.457	bc
dmn	0.293	0.0389	187	0.226	0.381	bc
lox	0.274	0.0363	187	0.211	0.355	bc
2eh	0.233	0.0309	187	0.179	0.303	c
ebz	0.230	0.0305	187	0.177	0.298	c
C. Sex						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
f	0.401	0.0263	187	0.352	0.456	a
m	0.311	0.0186	187	0.276	0.350	b

Table S3. Pairwise significance tests for the pheromone compound*sex interaction [A) Pheromone compound by sex, B) sex compound by pheromone] in the ANOVA performed with the *pheromone dataset* (Table 3C, main text). Different letters in each section indicate significant differences among groups (Tukey´s test, $P < 0.05$)

A. Pheromone compound by sex						
sex = female						
odor	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
major	0.138	0.0194	60	0.1040	0.183	a
minac	0.110	0.0155	60	0.0833	0.146	a
minoh	0.107	0.0150	60	0.0805	0.141	a
sex = male						
odor	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
major	3.629	0.4665	60	28.059	4.693	a
minac	0.832	0.1069	60	0.6432	1.076	b
minoh	0.268	0.0344	60	0.2069	0.346	c
B. Sex compound by pheromone						
Major pheromone compound (*E*7, *Z*9-12:Ac)						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
m	3.629	0.4665	60	28.059	4.693	a
f	0.138	0.0194	60	0.1040	0.183	b
Minor pheromone compound *Z*9-12:Ac						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
m	0.832	0.1069	60	0.6432	1.076	a
f	0.110	0.0155	60	0.0833	0.146	b
Minor pheromone compound (*E*7, *Z*9-12:OH)						
sex	**response**	**SE**	**df**	**lower.CL**	**upper.CL**	**.group**
m	0.268	0.0344	60	0.2069	0.346	a
f	0.107	0.0150	60	0.0805	0.141	b

Figure S1. EAG trace of a *Lobesia botrana* male collected from *Vitis vinifera* (VG2 population, EAG file **130601407**). Stimuli: a) (*E*)-β-farnesene, b) major sex pheromone compound (*E*7,*Z*9-12:Ac), c) 1-octen-3-ol, d) puff and solvent control (*n*-hexane), e) methyl salicylate, f) linalool, g) minor pheromone compound (*E*7,*Z*9-12:OH), h) benzothiazole, i) 2-ethylhexan-1-ol, j) (*E*)-4,8-dimethyl-1,3,7-nonatriene. Top trace, EAG; bottom trace, puffs (0.5 s duration).

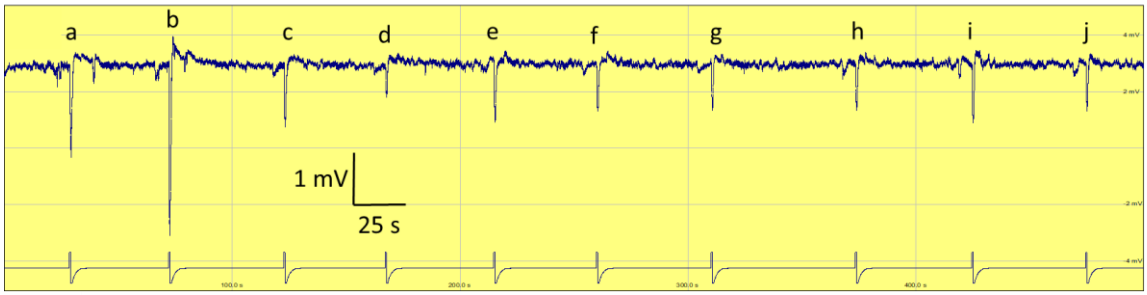

Figure S2. Electroantennogram responses of *L. botrana* males and females collected in *Vitis vinifera* or *Daphne gnidium* to host-plant odorants and individual sex pheromone compounds. Plant compounds were *V. vinifera* specific [1-octen-3-ol, (*E*)-β-farnesene, (*E*)-4,8-dimethyl-1,3,7-nonatriene], *D. gnidium*-specific (2-ethyl-hexan-1-ol, benzothiazole, linalool-oxide, ethyl benzanoate) or common to both (linalool and methyl salicylate).