

**Plant glucosinolate content and host-plant preference and suitability in the small  
white butterfly (Lepidoptera: Pieridae) and comparison with another specialist  
lepidopteran**

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**Table S1.** Pairwise comparisons in OPI between plant species after conducting Kruskal-Wallis test. The test statistic (TS) and *p*-values of the Kruskal-Wallis tests were TS=35.63 and *p*=0.002 and TS=35.44 and *p*=0.002 for *P. rapae* and *P. xylostella*, respectively. The pairwise comparisons among plant species is shown below for *P. rapae* (A) and *P. xylostella* (B). Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is 0.050.

A

**Pairwise comparisons of plant species for *P. rapae* OPI**

<i>Sample 1-Sample 2</i>	Test Statistic	Std. Error	Std. Test Statistic	Sig.
<i>M. oleifera-A. argenteum</i>	4.167	10.867	.383	.701
<i>L. douglasii-R. odorata</i>	-29.500	10.867	-2.715	.007
<i>M. oleifera-B. vulgaris</i>	29.833	10.867	2.745	.006
<i>L. douglasii-C. bursa-pastoris</i>	5.167	10.867	.475	.634
<i>L. douglasii-B. orientalis</i>	34.500	10.867	3.175	.001
<i>M. oleifera-C. papaya</i>	5.500	10.867	.506	.613
<i>M. oleifera-B. orientalis</i>	34.500	10.867	3.175	.001
<i>T. majus-C. papaya</i>	5.500	10.867	.506	.613
<i>L. douglasii-A. argenteum</i>	4.167	10.867	.383	.701
<i>L. douglasii-C. pratensis</i>	25.500	10.867	2.347	.019
<i>T. majus-B. orientalis</i>	34.500	10.867	3.175	.001
<i>M. oleifera-C. pratensis</i>	25.500	10.867	2.347	.019
<i>T. majus-A. argenteum</i>	4.167	10.867	.383	.701
<i>T. majus-iberis</i>	-12.833	10.867	-1.181	.238
<i>T. majus-C. pratensis</i>	25.500	10.867	2.347	.019
<i>L. douglasii-C. spinosa</i>	16.000	10.867	1.472	.141
<i>M. oleifera-C. spinosa</i>	16.000	10.867	1.472	.141
<i>T. majus-C. spinosa</i>	16.000	10.867	1.472	.141
<i>L. douglasii-I. amara</i>	10.667	10.867	.982	.326
<i>M. oleifera-I. amara</i>	10.667	10.867	.982	.326
<i>T. majus-I. amara</i>	10.667	10.867	.982	.326
<i>L. douglasii-M. oleifera</i>	.000	10.867	.000	1.000
<i>T. majus-B. vulgaris</i>	29.833	10.867	2.745	.006

<i>L. douglasii-A. caucasica</i>	6.667	10.867	.613	.540
<i>M. oleifera-A. caucasica</i>	6.667	10.867	.613	.540
<i>L. douglasii-T. majus</i>	.000	10.867	.000	1.000
<i>L. douglasii-P. sativum</i>	-4.500	10.867	-.414	.679
<i>T. majus-A. caucasica</i>	6.667	10.867	.613	.540
<i>L. douglasii-C. papaya</i>	5.500	10.867	.506	.613
<i>L. douglasii-iberis</i>	-12.833	10.867	-1.181	.238
<i>L. douglasii-B. vulgaris</i>	29.833	10.867	2.745	.006
<i>M. oleifera-T. majus</i>	.000	10.867	.000	1.000
<i>M. oleifera-P. sativum</i>	-4.500	10.867	-.414	.679
<i>M. oleifera-C. bursa-pastoris</i>	5.167	10.867	.475	.634
<i>M. oleifera-R. odorata</i>	-29.500	10.867	-2.715	.007
<i>T. majus-C. bursa-pastoris</i>	5.167	10.867	.475	.634
<i>L. douglasii-B. oleracea</i>	23.167	10.867	2.132	.033
<i>M. oleifera-iberis</i>	-12.833	10.867	-1.181	.238
<i>M. oleifera-B. oleracea</i>	23.167	10.867	2.132	.033
<i>T. majus-P. sativum</i>	4.500	10.867	.414	.679
<i>T. majus-B. oleracea</i>	23.167	10.867	2.132	.033
<i>T. majus-R. odorata</i>	29.500	10.867	2.715	.007
<i>A. argenteum-P. sativum</i>	-.333	10.867	-.031	.976
<i>A. argenteum-C. bursa-pastoris</i>	-1.000	10.867	-.092	.927
<i>A. argenteum-C. papaya</i>	-1.333	10.867	-.123	.902
<i>A. argenteum-A. caucasica</i>	-2.500	10.867	-.230	.818
<i>A. argenteum-I. amara</i>	-6.500	10.867	-.598	.550
<i>A. argenteum-iberis</i>	-8.667	10.867	-.798	.425
<i>A. argenteum-C. spinosa</i>	-11.833	10.867	-1.089	.276
<i>A. argenteum-B. oleracea</i>	-19.000	10.867	-1.748	.080
<i>A. argenteum-C. pratensis</i>	-21.333	10.867	-1.963	.050
<i>A. argenteum-R. odorata</i>	-25.333	10.867	-2.331	.020
<i>A. argenteum-B. vulgaris</i>	-25.667	10.867	-2.362	.018
<i>A. argenteum-B. orientalis</i>	-30.333	10.867	-2.791	.005
<i>P. sativum-C. bursa-pastoris</i>	.667	10.867	.061	.951
<i>P. sativum-C. papaya</i>	1.000	10.867	.092	.927
<i>P. sativum-A. caucasica</i>	2.167	10.867	.199	.842
<i>P. sativum-I. amara</i>	6.167	10.867	.567	.570
<i>P. sativum-iberis</i>	-8.333	10.867	-.767	.443
<i>P. sativum-C. spinosa</i>	11.500	10.867	1.058	.290
<i>P. sativum-B. oleracea</i>	18.667	10.867	1.718	.086

<i>P. sativum-C. pratensis</i>	21.000	10.867	1.932	.053
<i>P. sativum-R. odorata</i>	-25.000	10.867	-2.301	.021
<i>P. sativum-B. vulgaris</i>	25.333	10.867	2.331	.020
<i>P. sativum-B. orientalis</i>	30.000	10.867	2.761	.006
<i>C. bursa-pastoris-C. papaya</i>	-.333	10.867	-.031	.976
<i>C. bursa-pastoris-A. caucasica</i>	1.500	10.867	.138	.890
<i>C. bursa-pastoris-I. amara</i>	-5.500	10.867	-.506	.613
<i>C. bursa-pastoris-iberis</i>	-7.667	10.867	-.705	.481
<i>C. bursa-pastoris-C. spinosa</i>	-10.833	10.867	-.997	.319
<i>C. bursa-pastoris-B. oleracea</i>	18.000	10.867	1.656	.098
<i>C. bursa-pastoris-C. pratensis</i>	-20.333	10.867	-1.871	.061
<i>C. bursa-pastoris-R. odorata</i>	-24.333	10.867	-2.239	.025
<i>C. bursa-pastoris-B. vulgaris</i>	24.667	10.867	2.270	.023
<i>C. bursa-pastoris-B. orientalis</i>	29.333	10.867	2.699	.007
<i>C. papaya-A. caucasica</i>	1.167	10.867	.107	.915
<i>C. papaya-I. amara</i>	-5.167	10.867	-.475	.634
<i>C. papaya-iberis</i>	-7.333	10.867	-.675	.500
<i>C. papaya-C. spinosa</i>	-10.500	10.867	-.966	.334
<i>C. papaya-B. oleracea</i>	17.667	10.867	1.626	.104
<i>C. papaya-C. pratensis</i>	-20.000	10.867	-1.840	.066
<i>C. papaya-R. odorata</i>	-24.000	10.867	-2.209	.027
<i>C. papaya-B. vulgaris</i>	24.333	10.867	2.239	.025
<i>C. papaya-B. orientalis</i>	29.000	10.867	2.669	.008
<i>A. caucasica-I. amara</i>	-4.000	10.867	-.368	.713
<i>A. caucasica-iberis</i>	-6.167	10.867	-.567	.570
<i>A. caucasica-C. spinosa</i>	-9.333	10.867	-.859	.390
<i>A. caucasica-B. oleracea</i>	-16.500	10.867	-1.518	.129
<i>A. caucasica-C. pratensis</i>	-18.833	10.867	-1.733	.083
<i>A. caucasica-R. odorata</i>	-22.833	10.867	-2.101	.036
<i>A. caucasica-B. vulgaris</i>	-23.167	10.867	-2.132	.033
<i>A. caucasica-B. orientalis</i>	-27.833	10.867	-2.561	.010
<i>I. amara-iberis</i>	-2.167	10.867	-.199	.842
<i>I. amara-C. spinosa</i>	5.333	10.867	.491	.624
<i>I. amara-B. oleracea</i>	12.500	10.867	1.150	.250
<i>I. amara-C. pratensis</i>	14.833	10.867	1.365	.172
<i>I. amara-R. odorata</i>	-18.833	10.867	-1.733	.083
<i>I. amara-B. vulgaris</i>	19.167	10.867	1.764	.078
<i>I. amara-B. orientalis</i>	23.833	10.867	2.193	.028

<i>iberis-C. spinosa</i>	3.167	10.867	.291	.771
<i>iberis-B. oleracea</i>	10.333	10.867	.951	.342
<i>iberis-C. pratensis</i>	12.667	10.867	1.166	.244
<i>iberis-R. odorata</i>	16.667	10.867	1.534	.125
<i>iberis-B. vulgaris</i>	17.000	10.867	1.564	.118
<i>iberis-B. orientalis</i>	21.667	10.867	1.994	.046
<i>C. spinosa-B. oleracea</i>	7.167	10.867	.659	.510
<i>C. spinosa-C. pratensis</i>	9.500	10.867	.874	.382
<i>C. spinosa-R. odorata</i>	-13.500	10.867	-1.242	.214
<i>C. spinosa-B. vulgaris</i>	13.833	10.867	1.273	.203
<i>C. spinosa-B. orientalis</i>	18.500	10.867	1.702	.089
<i>B. oleracea-C. pratensis</i>	-2.333	10.867	-.215	.830
<i>B. oleracea-R. odorata</i>	-6.333	10.867	-.583	.560
<i>B. oleracea-B. vulgaris</i>	-6.667	10.867	-.613	.540
<i>B. oleracea-B. orientalis</i>	-11.333	10.867	-1.043	.297
<i>C. pratensis-R. odorata</i>	-4.000	10.867	-.368	.713
<i>C. pratensis-B. vulgaris</i>	4.333	10.867	.399	.690
<i>C. pratensis-B. orientalis</i>	9.000	10.867	.828	.408
<i>R. odorata-B. vulgaris</i>	.333	10.867	.031	.976
<i>R. odorata-B. orientalis</i>	5.000	10.867	.460	.645
<i>B. vulgaris-B. orientalis</i>	4.667	10.867	.429	.668

## B

### Pairwise comparisons of plant species for *P. xylostella* OPI

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.
<i>P. sativum-T. majus</i>	-5.500	11.289	-.487	.626
<i>P. sativum-A. argenteum</i>	11.833	11.289	1.048	.295
<i>P. sativum-R. odorata</i>	-17.000	11.289	-1.506	.132
<i>M. oleifera-T. majus</i>	-5.500	11.289	-.487	.626
<i>M. oleifera-R. odorata</i>	-17.000	11.289	-1.506	.132
<i>P. sativum-C. bursa-pastoris</i>	7.000	11.289	.620	.535
<i>M. oleifera-P. sativum</i>	.000	11.289	.000	1.000
<i>M. oleifera-B. orientalis</i>	17.500	11.289	1.550	.121
<i>P. sativum-L. douglasii</i>	38.833	11.289	3.440	<.001
<i>M. oleifera-L. douglasii</i>	38.833	11.289	3.440	<.001

<i>P. sativum-C. papaya</i>	6.500	11.289	.576	.565
<i>M. oleifera-C. papaya</i>	6.500	11.289	.576	.565
<i>M. oleifera-C. bursa-pastoris</i>	7.000	11.289	.620	.535
<i>M. oleifera-A. argenteum</i>	11.833	11.289	1.048	.295
<i>M. oleifera-B. oleracea</i>	22.167	11.289	1.964	.050
<i>M. oleifera-I. amara</i>	26.500	11.289	2.347	.019
<i>M. oleifera-B. vulgaris</i>	36.833	11.289	3.263	.001
<i>P. sativum-E. cheiri</i>	14.333	11.289	1.270	.204
<i>M. oleifera-E. cheiri</i>	14.333	11.289	1.270	.204
<i>P. sativum-C. spinosa</i>	10.667	11.289	.945	.345
<i>P. sativum-B. orientalis</i>	17.500	11.289	1.550	.121
<i>P. sativum-B. oleracea</i>	22.167	11.289	1.964	.050
<i>M. oleifera-C. spinosa</i>	10.667	11.289	.945	.345
<i>P. sativum-I. amara</i>	26.500	11.289	2.347	.019
<i>M. oleifera-A. caucasica</i>	27.167	11.289	2.406	.016
<i>P. sativum-A. caucasica</i>	27.167	11.289	2.406	.016
<i>P. sativum-C. pratensis</i>	30.167	11.289	2.672	.008
<i>P. sativum-B. vulgaris</i>	36.833	11.289	3.263	.001
<i>M. oleifera-C. pratensis</i>	30.167	11.289	2.672	.008
<i>T. majus-C. papaya</i>	1.000	11.289	.089	.929
<i>T. majus-C. bursa-pastoris</i>	1.500	11.289	.133	.894
<i>T. majus-C. spinosa</i>	5.167	11.289	.458	.647
<i>T. majus-A. argenteum</i>	6.333	11.289	.561	.575
<i>T. majus-E. cheiri</i>	8.833	11.289	.782	.434
<i>T. majus-R. odorata</i>	11.500	11.289	1.019	.308
<i>T. majus-B. orientalis</i>	12.000	11.289	1.063	.288
<i>T. majus-B. oleracea</i>	16.667	11.289	1.476	.140
<i>T. majus-I. amara</i>	21.000	11.289	1.860	.063
<i>T. majus-A. caucasica</i>	21.667	11.289	1.919	.055
<i>T. majus-C. pratensis</i>	24.667	11.289	2.185	.029
<i>T. majus-B. vulgaris</i>	31.333	11.289	2.776	.006
<i>T. majus-L. douglasii</i>	33.333	11.289	2.953	.003
<i>C. papaya-C. bursa-pastoris</i>	.500	11.289	.044	.965
<i>C. papaya-C. spinosa</i>	-4.167	11.289	-.369	.712
<i>C. papaya-A. argenteum</i>	5.333	11.289	.472	.637
<i>C. papaya-E. cheiri</i>	-7.833	11.289	-.694	.488
<i>C. papaya-R. odorata</i>	-10.500	11.289	-.930	.352
<i>C. papaya-B. orientalis</i>	11.000	11.289	.974	.330

<i>C. papaya-B. oleracea</i>	15.667	11.289	1.388	.165
<i>C. papaya-I. amara</i>	-20.000	11.289	-1.772	.076
<i>C. papaya-A. caucasica</i>	20.667	11.289	1.831	.067
<i>C. papaya-C. pratensis</i>	-23.667	11.289	-2.096	.036
<i>C. papaya-B. vulgaris</i>	30.333	11.289	2.687	.007
<i>C. papaya-L. douglasii</i>	-32.333	11.289	-2.864	.004
<i>C. bursa-pastoris-C. spinosa</i>	-3.667	11.289	-.325	.745
<i>C. bursa-pastoris-A. argenteum</i>	4.833	11.289	.428	.669
<i>C. bursa-pastoris-E. cheiri</i>	-7.333	11.289	-.650	.516
<i>C. bursa-pastoris-R. odorata</i>	-10.000	11.289	-.886	.376
<i>C. bursa-pastoris-B. orientalis</i>	10.500	11.289	.930	.352
<i>C. bursa-pastoris-B. oleracea</i>	15.167	11.289	1.344	.179
<i>C. bursa-pastoris-I. amara</i>	-19.500	11.289	-1.727	.084
<i>C. bursa-pastoris-A. caucasica</i>	20.167	11.289	1.786	.074
<i>C. bursa-pastoris-C. pratensis</i>	-23.167	11.289	-2.052	.040
<i>C. bursa-pastoris-B. vulgaris</i>	29.833	11.289	2.643	.008
<i>C. bursa-pastoris-L. douglasii</i>	-31.833	11.289	-2.820	.005
<i>C. spinosa-A. argenteum</i>	1.167	11.289	.103	.918
<i>C. spinosa-E. cheiri</i>	-3.667	11.289	-.325	.745
<i>C. spinosa-R. odorata</i>	-6.333	11.289	-.561	.575
<i>C. spinosa-B. orientalis</i>	6.833	11.289	.605	.545
<i>C. spinosa-B. oleracea</i>	11.500	11.289	1.019	.308
<i>C. spinosa-I. amara</i>	-15.833	11.289	-1.403	.161
<i>C. spinosa-A. caucasica</i>	16.500	11.289	1.462	.144
<i>C. spinosa-C. pratensis</i>	19.500	11.289	1.727	.084
<i>C. spinosa-B. vulgaris</i>	26.167	11.289	2.318	.020
<i>C. spinosa-L. douglasii</i>	-28.167	11.289	-2.495	.013
<i>A. argenteum-E. cheiri</i>	-2.500	11.289	-.221	.825
<i>A. argenteum-R. odorata</i>	-5.167	11.289	-.458	.647
<i>A. argenteum-B. orientalis</i>	-5.667	11.289	-.502	.616
<i>A. argenteum-B. oleracea</i>	-10.333	11.289	-.915	.360
<i>A. argenteum-I. amara</i>	-14.667	11.289	-1.299	.194
<i>A. argenteum-A. caucasica</i>	-15.333	11.289	-1.358	.174
<i>A. argenteum-C. pratensis</i>	-18.333	11.289	-1.624	.104
<i>A. argenteum-B. vulgaris</i>	-25.000	11.289	-2.215	.027
<i>A. argenteum-L. douglasii</i>	-27.000	11.289	-2.392	.017
<i>E. cheiri-R. odorata</i>	-2.667	11.289	-.236	.813
<i>E. cheiri-B. orientalis</i>	3.167	11.289	.281	.779

<i>E. cheiri-B. oleracea</i>	7.833	11.289	.694	.488
<i>E. cheiri-I. amara</i>	-12.167	11.289	-1.078	.281
<i>E. cheiri-A. caucasica</i>	12.833	11.289	1.137	.256
<i>E. cheiri-C. pratensis</i>	15.833	11.289	1.403	.161
<i>E. cheiri-B. vulgaris</i>	22.500	11.289	1.993	.046
<i>E. cheiri-L. douglasii</i>	-24.500	11.289	-2.170	.030
<i>R. odorata-B. orientalis</i>	.500	11.289	.044	.965
<i>R. odorata-B. oleracea</i>	5.167	11.289	.458	.647
<i>R. odorata-I. amara</i>	9.500	11.289	.842	.400
<i>R. odorata-A. caucasica</i>	10.167	11.289	.901	.368
<i>R. odorata-C. pratensis</i>	13.167	11.289	1.166	.243
<i>R. odorata-B. vulgaris</i>	19.833	11.289	1.757	.079
<i>R. odorata-L. douglasii</i>	21.833	11.289	1.934	.053
<i>B. orientalis-B. oleracea</i>	4.667	11.289	.413	.679
<i>B. orientalis-I. amara</i>	-9.000	11.289	-.797	.425
<i>B. orientalis-A. caucasica</i>	9.667	11.289	.856	.392
<i>B. orientalis-C. pratensis</i>	-12.667	11.289	-1.122	.262
<i>B. orientalis-B. vulgaris</i>	-19.333	11.289	-1.713	.087
<i>B. orientalis-L. douglasii</i>	-21.333	11.289	-1.890	.059
<i>B. oleracea-I. amara</i>	-4.333	11.289	-.384	.701
<i>B. oleracea-A. caucasica</i>	5.000	11.289	.443	.658
<i>B. oleracea-C. pratensis</i>	-8.000	11.289	-.709	.479
<i>B. oleracea-B. vulgaris</i>	-14.667	11.289	-1.299	.194
<i>B. oleracea-L. douglasii</i>	-16.667	11.289	-1.476	.140
<i>I. amara-A. caucasica</i>	.667	11.289	.059	.953
<i>I. amara-C. pratensis</i>	3.667	11.289	.325	.745
<i>I. amara-B. vulgaris</i>	10.333	11.289	.915	.360
<i>I. amara-L. douglasii</i>	-12.333	11.289	-1.093	.275
<i>A. caucasica-C. pratensis</i>	-3.000	11.289	-.266	.790
<i>A. caucasica-B. vulgaris</i>	-9.667	11.289	-.856	.392
<i>A. caucasica-L. douglasii</i>	-11.667	11.289	-1.033	.301
<i>C. pratensis-B. vulgaris</i>	6.667	11.289	.591	.555
<i>C. pratensis-L. douglasii</i>	-8.667	11.289	-.768	.443
<i>B. vulgaris-L. douglasii</i>	-2.000	11.289	-.177	.859



**Table S2.** Comparison between *P. rapae* and *P. xylostella* for the percentage of eggs laid on plant species tested compared to *A. thaliana* (n=3). Significant differences are shown in bold type.

	Test Statistic, <i>p</i> -value
<i>A. argenteum</i>	$z=0.42, p=0.336$
<i>A. caucasica</i>	$z=0.86, p=0.196$
<i>B. vulgaris</i>	$z=0.82, p=0.206$
<i>B. oleracea</i>	$z=0.09, p=0.463$
<i>B. orientalis</i>	$z=0.97, p=0.167$
<i>C. bursa-pastoris</i>	$z=0.14, p=0.445$
<i>C. pratensis</i>	$z=0.53, p=0.297$
<i>C. papaya</i>	$z=0.16, p=0.436$
<i>C. spinosa</i>	$z=0.39, p=0.350$
<i>E. cheiri</i>	$z=0.50, p=0.310$
<i>I. amara</i>	$z=0.84, p=0.201$
<i>L. douglasii</i>	<b><math>z=1.95, p=0.026^*</math></b>
<i>M. oleifera</i>	$z=0.00, p=0.050$
<i>P. sativum</i>	$z=0.18, p=0.430$
<i>R. odorata</i>	$z=0.31, p=0.379$
<i>T. majus</i>	$z=0.43, p=0.333$

**Table S3.** Significance of correlations between oviposition preference index in two-choice tests (OPI), total oviposition in no-choice tests (TO), and larval survival (LS) for *P. rapae* and *P. xylostella* in the plants tested. Two-tailed Spearman's rho correlations were performed. Replication was n = 17 for the correlations between LS in *P. rapae* and LS in *P. xylostella* and n=16 for the correlations involving OPI and TO (*A. thaliana* was not included in the OPI and TO tests). Significant *p*-values ( $p \leq 0.05$ ) are shown in bold type.

**A**

P-value and correlation coefficient of Spearman's rho correlation					
	TO <i>P. xylostella</i>	TO <i>P. rapae</i>	LS <i>P. xylostella</i>	LS <i>P. rapae</i>	OPI <i>P. xylostella</i>
OPI <i>P. rapae</i>	-	<b><math>P \leq 0.001</math>; 0.765</b>	-	$P=0.059$ ; 0.482	$P=0.126$ ; 0.398
OPI <i>P. xylostella</i>	<b><math>P=0.027</math>; 0.550</b>	-	<b><math>P=0.035</math>; 0.529</b>	-	-

**B**

P-value and correlation coefficient of Spearman's rho correlation			
	LS <i>P. xylostella</i>	TO <i>P. xylostella</i>	TO <i>P. rapae</i>
LS <i>P. rapae</i>	$P=0.170$ ; 0.348	-	<b><math>P=0.018</math>; 0.581</b>
LS <i>P. xylostella</i>	-	<b><math>P=0.049</math>; 0.500</b>	-

**Table S4.** Mean  $\pm$  SE glucosinolate content ( $\mu\text{mol g}^{-1}$  plant dry weight) in the plants tested. From the total glucosinolate content the percentage of individual glucosinolates and the percentage of glucosinolates according to chemical class is shown. Four glucosinolate classes were considered: aliphatic with sulfur-containing side chains (AS), other aliphatic (AO), benzenic (BEN), and indolic (IN). Values based on means across replicates (n=3-26) taken from Badenes-Pérez et al. [37].

Plant species	Total glucosinolates (% AO, BEN, IN, and AS)	Identity of glucosinolates identified (% of total glucosinolates)
<i>A. argenteum</i>	1.4 $\pm$ 0.3 (0%, 0%, 75.32%, 24.68%)	5MSOP (75.32%), I3M (18.94%), 4OHI3M (4.33%), 4MOI3M (1.41%)
<i>A. thaliana</i>	17.6 $\pm$ 0.4 (0%, 0%, 14.81%, 85.19%)	4MSOB (65.00%), I3M (11.10%), 3MSOP (9.56%), 8MSOO (5.15%), 4MTB (4.50%), 4MOI3M (2.22%), 1MOI3M (1.23%), 7MSOH (0.97%), 4OHI3M (0.26%)
<i>A. caucasica</i>	20.8 $\pm$ 18.2 (60.03%, 0%, 0.78%, 39.19%)	1ME (53.43%), 9MSON (32.70%), 1MP (4.48%), 10MSOD (3.19%), 2MP (2.12%), 8MSOO (1.77%), 4MTB (1.53%), 4MOI3M (0.52%), 4OHI3M (0.26%)
<i>B. vulgaris</i>	35.6 $\pm$ 4.2 (0%, 81.60%, 18.40%, 0%)	S2OH2PE (80.88%), I3M (17.26%), 4MOI3M (0.80%), R2OH2PE (0.72%), 4OHI3M (0.34%)
<i>B. oleracea capitata</i>	8.0 $\pm$ 1.5 (25.13%, 0%, 59.04%, 15.83%)	I3M (52.66%), A (24.13%), 3MSOP (15.06%), 4MOI3M (3.88%), 1MOI3M (1.72%), R2OH3B (1.00%), 4OHI3M (0.78%), 4MSOB (0.77%)
<i>B. orientalis</i>	33.3 $\pm$ 2.9 (0%, 99.66%, 0.34%, 0%)	4OHB (96.47%), 4MOHB (3.19%), 4MOI3M (0.23%), 4OHI3M (0.06%), I3M (0.05%)
<i>C. bursa-pastoris</i>	0 $\pm$ 0 (0%, 0%, 0%, 0%)	-
<i>C. pratensis</i>	27.1 $\pm$ 7.6 (95.10%, 0%, 4.90%, 0%)	3OHMP (93.92%), I3M (4.51%), 3MP (1.18%), 4OHI3M (0.39%)
<i>C. papaya</i>	4.1 $\pm$ 1.3 (0%, 99.72%, 0.28%, 0%)	B (99.72%), I3M (0.28%)
<i>C. spinosa</i>	39.9 $\pm$ 6.1 (97.44%, 0%, 2.56%, 0%)	M (97.44%), I3M (1.64%), 4OHI3M (0.84%), 4MOI3M (0.08%)
<i>E. cheiri</i>	16.3 $\pm$ 6.5 (0%, 0%, 0%, 100.00%)	3MSOOP (59.35%), 3MTP (25.10%), 3MSOP (14.98%), 4MSOB (0.57%)
<i>I. amara</i>	53.8 $\pm$ 9.8 (0%, 0%, 0.06%, 99.94%)	3MSOP (85.71%), 3MTP (13.85%), 4MSOB (0.37%), 4MOI3M (0.06%)
<i>L. douglasii</i>	49.4 $\pm$ 10.2 (0%, 99.97%, 0.03%, 0%)	3MOHB (93.61%), 3OHB (6.36%), 4OHI3M (0.02%), 1MOI3M (0.01%)
<i>M. oleifera</i>	28.0 $\pm$ 2.5 (0%, 100.00%, 0%, 0%)	4RB (87.94%), 4OHB (10.52%), B (1.54%)
<i>P. sativum</i>	0 $\pm$ 0 (0%, 0%, 0%, 0%)	-
<i>R. odorata</i>	89.8 $\pm$ 18.0 (0%, 93.88%, 6.12%, 0%)	2RB (92.96%), I3M (6.12%), 2AB (0.91%)
<i>T. majus</i>	28.0 $\pm$ 12.4 (0%, 100.00%, 0%, 0%)	B (99.66%), 4MOHB (0.34%)

Glucosinolate abbreviations were: Allyl (A), 2-Arabinobenzyl (2AB), Benzyl (B), 3-Hydroxybenzyl (3OHB), 4-Hydroxybenzyl (4OHB), 2(R)-Hydroxy-3-butenyl (R2OH3B), 3-(Hydroxymethyl)pentyl (3OHMP), 4-Hydroxyindol-3-ylmethyl (4OHI3M), 2(R)-Hydroxy-2-phenylethyl (R2OH2PE), 2(S)-Hydroxy-2-phenylethyl (S2OH2PE), Indol-3-ylmethyl (I3M), 3-Methoxybenzyl (3MOHB), 4-Methoxybenzyl (4MOHB), 1-Methoxyindol-3-ylmethyl (1MOI3M), 4-Methoxyindol-3-ylmethyl (4MOI3M), Methyl (M), 1-Methylethyl (1ME), 3-Methylpentyl (3MP), 1-Methylpropyl (1MP), 2-Methylpropyl (2MP), 4-(Methylsulfinyl)butyl (4MSOB), 10-(Methylsulfinyl)decyl (10MSOD), 7-(Methylsulfinyl)heptyl (7MSOH), 9-(Methylsulfinyl)nonyl (9MSON), 8-(Methylsulfinyl)octyl (8MSOO), 5-(Methylsulfinyl)pentyl (5MSOP), 3-(Methylsulfinyl)propyl (3MSOP), 3-(Methylsulfonyl)propyl (3MSOOP), 4-(Methylthio)butyl (4MTB), 3-(Methylthio)propyl (3MTP), 2-( $\alpha$ -L-Rhamnopyranosyloxy)benzyl (2RB), 4-( $\alpha$ -L-Rhamnopyranosyloxy)benzyl (4RB).

**Table S5.** Total glucosinolate content (TOT) and content of aliphatic glucosinolates with sulfur-containing side chains (AS), other aliphatic glucosinolates (AO), benzenic glucosinolates (BEN), and indolic glucosinolates (IN) for each of the plant types tested (A). Glucosinolate richness ( $S$ ), Shannon's diversity index for the four glucosinolate classes ( $H_A$ ), Shannon's diversity index for the relative concentrations of all individual glucosinolates ( $H_B$ ), and chemical complexity index for glucosinolates (CCI) for each of the plant types tested (B). Values based on means across replicates taken from Badenes-Pérez et al. [37].

**A**

	TOT	AS	AO	BEN	IN
<i>A. argenteum</i>	20.81	8.16	12.49	0.00	0.16
<i>A. thaliana</i>	97.95	0.12	93.74	0.00	4.09
<i>A. caucasica</i>	6.11	0.00	1.73	0.00	4.38
<i>B. vulgaris</i>	0.00	0.00	0.00	0.00	0.00
<i>B. oleracea</i>	30.72	27.54	1.31	0.00	0.18
<i>B. orientalis</i>	53.79	53.76	0.00	0.00	0.03
<i>C. bursa-pastoris</i>	120.51	0.06	0.00	120.44	0.00
<i>C. pratensis</i>	27.96	0.00	0.00	27.96	0.00
<i>C. papaya</i>	0.00	0.00	0.00	0.00	0.00
<i>C. spinosa</i>	89.83	0.00	0.00	84.33	5.50
<i>E. cheiri</i>	20.81	8.16	12.49	0.00	0.16
<i>I. amara</i>	97.95	0.12	93.74	0.00	4.09
<i>L. douglasii</i>	0.00	0.00	0.00	0.00	0.00
<i>M. oleifera</i>	4.12	0.00	0.00	4.11	0.01
<i>P. sativum</i>	37.41	33.78	1.56	0.00	0.17
<i>R. odorata</i>	16.34	16.34	0.00	0.00	0.00
<i>T. majus</i>	120.51	0.06	0.00	120.44	0.00

**B**

	$S$	$H_A$	$H_B$	$CCI=H_A+H_B$
<i>A. argenteum</i>	4	0.693	0.724	1.417
<i>A. thaliana</i>	9	0.693	1.240	1.933
<i>A. caucasica</i>	9	1.099	1.209	2.308
<i>B. vulgaris</i>	5	0.693	0.568	1.261
<i>B. oleracea</i>	8	1.099	1.283	2.382
<i>B. orientalis</i>	5	0.693	0.167	0.860
<i>C. bursa-pastoris</i>	0	n/a	n/a	0
<i>C. pratensis</i>	4	0.693	0.273	0.966
<i>C. papaya</i>	2	0.693	0.019	0.712
<i>C. spinosa</i>	4	0.693	0.139	0.832
<i>E. cheiri</i>	4	0.000	0.970	0.970
<i>I. amara</i>	4	0.693	0.431	1.124
<i>L. douglasii</i>	5	0.693	0.240	0.933
<i>M. oleifera</i>	3	0.000	0.414	0.414
<i>P. sativum</i>	0	n/a	n/a	0
<i>R. odorata</i>	3	0.693	0.282	0.975
<i>T. majus</i>	2	0.000	0.023	0.023

**Table S6.** Correlations between oviposition preference index (OPI), total oviposition (TO), and larval survival (LS) and glucosinolate richness (*S*), Shannon’s diversity index for the four glucosinolate classes (*H<sub>A</sub>*), Shannon’s diversity index for the relative concentrations of all individual glucosinolates (*H<sub>B</sub>*), glucosinolate complexity index (GCI), total glucosinolate content (TOT), aliphatic glucosinolates with sulfur-containing side chains (AS), other aliphatic glucosinolates (AO), benzenic (BEN), and indolic glucosinolates (IN) as shown by CATPCA analysis. Only values above 0.35 were considered for subsequent generalized linear model analysis.

	OPI	TO	LS
<i>S</i>	.199	.352	.289
<i>H<sub>A</sub></i>	.293	.454	.291
<i>H<sub>B</sub></i>	.128	.366	.318
GCI	.278	.493	.357
TOT	.455	.183	.143
AO	.194	.566	.141
BEN	.242	-.208	.021
IN	.409	.240	.415
AS	-.057	.162	.203
Insect <sup>b</sup>	.162	.378	.086

<sup>b</sup>Supplementary variable.

**Table S7.** Pairwise comparisons in total oviposition in no-choice tests (TO) between plant species after conducting Kruskal-Wallis test. The test statistic (TS) and  $p$ -values of the Kruskal-Wallis tests were TS=39.75 and  $p \leq 0.001$  and TS=38.99 and  $p \leq 0.001$  for *P. rapae* and *P. xylostella*, respectively. The pairwise comparisons among plant species is shown below for *P. rapae* (A) and *P. xylostella* (B). Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is 0.050.

**A**

**Pairwise comparisons of plant species for *P. rapae* TO**

<i>Sample 1-Sample 2</i>	Test Statistic	Std. Error	Std. Test Statistic	Sig.
<i>C. papaya-E. cheiri</i>	-4.167	11.195	-.372	.710
<i>C. papaya-C. bursa-pastoris</i>	4.167	11.195	.372	.710
<i>C. papaya-I. amara</i>	-10.833	11.195	-.968	.333
<i>C. papaya-B. orientalis</i>	23.667	11.195	2.114	.035
<i>L. douglasii-B. vulgaris</i>	27.500	11.195	2.456	.014
<i>C. papaya-A. argenteum</i>	4.167	11.195	.372	.710
<i>C. papaya-C. spinosa</i>	-35.167	11.195	-3.141	.002
<i>P. sativum-C. bursa-pastoris</i>	4.167	11.195	.372	.710
<i>P. sativum-B. vulgaris</i>	27.500	11.195	2.456	.014
<i>L. douglasii-A. argenteum</i>	4.167	11.195	.372	.710
<i>L. douglasii-B. orientalis</i>	23.667	11.195	2.114	.035
<i>M. oleifera-A. argenteum</i>	4.167	11.195	.372	.710
<i>P. sativum-A. argenteum</i>	4.167	11.195	.372	.710
<i>M. oleifera-B. orientalis</i>	23.667	11.195	2.114	.035
<i>P. sativum-B. orientalis</i>	23.667	11.195	2.114	.035
<i>C. papaya-C. pratensis</i>	-28.000	11.195	-2.501	.012
<i>M. oleifera-E. cheiri</i>	4.167	11.195	.372	.710
<i>L. douglasii-E. cheiri</i>	4.167	11.195	.372	.710
<i>M. oleifera-C. bursa-pastoris</i>	4.167	11.195	.372	.710
<i>C. papaya-A. caucasica</i>	18.167	11.195	1.623	.105
<i>P. sativum-C. spinosa</i>	35.167	11.195	3.141	.002
<i>M. oleifera-C. spinosa</i>	35.167	11.195	3.141	.002
<i>L. douglasii-C. bursa-pastoris</i>	4.167	11.195	.372	.710
<i>L. douglasii-A. caucasica</i>	18.167	11.195	1.623	.105
<i>L. douglasii-C. spinosa</i>	35.167	11.195	3.141	.002

<i>M. oleifera-A. caucasica</i>	18.167	11.195	1.623	.105
<i>P. sativum-A. caucasica</i>	18.167	11.195	1.623	.105
<i>P. sativum-C. pratensis</i>	28.000	11.195	2.501	.012
<i>M. oleifera-C. pratensis</i>	28.000	11.195	2.501	.012
<i>L. douglasii-C. pratensis</i>	28.000	11.195	2.501	.012
<i>C. papaya-T. majus</i>	-12.000	10.472	-1.146	.252
<i>M. oleifera-B. vulgaris</i>	27.500	11.195	2.456	.014
<i>C. papaya-P. sativum</i>	.000	11.195	.000	1.000
<i>C. papaya-M. oleifera</i>	.000	11.195	.000	1.000
<i>C. papaya-R. odorata</i>	-23.500	11.195	-2.099	.036
<i>C. papaya-B. vulgaris</i>	27.500	11.195	2.456	.014
<i>C. papaya-B. oleracea</i>	33.333	11.195	2.978	.003
<i>L. douglasii-B. oleracea</i>	33.333	11.195	2.978	.003
<i>M. oleifera-B. oleracea</i>	33.333	11.195	2.978	.003
<i>P. sativum-B. oleracea</i>	33.333	11.195	2.978	.003
<i>C. papaya-L. douglasii</i>	.000	11.195	.000	1.000
<i>P. sativum-E. cheiri</i>	4.167	11.195	.372	.710
<i>L. douglasii-I. amara</i>	10.833	11.195	.968	.333
<i>M. oleifera-I. amara</i>	10.833	11.195	.968	.333
<i>P. sativum-I. amara</i>	10.833	11.195	.968	.333
<i>L. douglasii-M. oleifera</i>	.000	11.195	.000	1.000
<i>L. douglasii-P. sativum</i>	.000	11.195	.000	1.000
<i>L. douglasii-T. majus</i>	-12.000	10.472	-1.146	.252
<i>L. douglasii-R. odorata</i>	-23.500	11.195	-2.099	.036
<i>M. oleifera-P. sativum</i>	.000	11.195	.000	1.000
<i>M. oleifera-T. majus</i>	-12.000	10.472	-1.146	.252
<i>M. oleifera-R. odorata</i>	-23.500	11.195	-2.099	.036
<i>P. sativum-T. majus</i>	-12.000	10.472	-1.146	.252
<i>P. sativum-R. odorata</i>	-23.500	11.195	-2.099	.036
<i>C. bursa-pastoris-B. oleracea</i>	29.167	11.195	2.605	.009
<i>E. cheiri-B. oleracea</i>	29.167	11.195	2.605	.009
<i>C. bursa-pastoris-B. orientalis</i>	19.500	11.195	1.742	.082
<i>E. cheiri-B. orientalis</i>	19.500	11.195	1.742	.082
<i>C. bursa-pastoris-B. vulgaris</i>	23.333	11.195	2.084	.037
<i>E. cheiri-T. majus</i>	-7.833	10.472	-.748	.454
<i>E. cheiri-B. vulgaris</i>	23.333	11.195	2.084	.037
<i>C. bursa-pastoris-E. cheiri</i>	.000	11.195	.000	1.000
<i>C. bursa-pastoris-I. amara</i>	-6.667	11.195	-.596	.552

<i>C. bursa-pastoris-T. majus</i>	-7.833	10.472	-.748	.454
<i>C. bursa-pastoris-R. odorata</i>	-19.333	11.195	-1.727	.084
<i>C. bursa-pastoris-C. pratensis</i>	-23.833	11.195	-2.129	.033
<i>C. bursa-pastoris-C. spinosa</i>	-31.000	11.195	-2.769	.006
<i>E. cheiri-I. amara</i>	-6.667	11.195	-.596	.552
<i>E. cheiri-C. pratensis</i>	23.833	11.195	2.129	.033
<i>E. cheiri-C. spinosa</i>	31.000	11.195	2.769	.006
<i>A. argenteum-A. caucasica</i>	-14.000	11.195	-1.251	.211
<i>E. cheiri-R. odorata</i>	-19.333	11.195	-1.727	.084
<i>A. argenteum-C. bursa-pastoris</i>	.000	11.195	.000	1.000
<i>A. argenteum-E. cheiri</i>	.000	11.195	.000	1.000
<i>A. argenteum-I. amara</i>	-6.667	11.195	-.596	.552
<i>A. argenteum-T. majus</i>	-7.833	10.472	-.748	.454
<i>A. argenteum-R. odorata</i>	-19.333	11.195	-1.727	.084
<i>A. argenteum-B. orientalis</i>	-19.500	11.195	-1.742	.082
<i>A. argenteum-B. vulgaris</i>	-23.333	11.195	-2.084	.037
<i>A. argenteum-C. pratensis</i>	-23.833	11.195	-2.129	.033
<i>A. argenteum-B. oleracea</i>	-29.167	11.195	-2.605	.009
<i>A. argenteum-C. spinosa</i>	-31.000	11.195	-2.769	.006
<i>C. bursa-pastoris-A. caucasica</i>	14.000	11.195	1.251	.211
<i>E. cheiri-A. caucasica</i>	14.000	11.195	1.251	.211
<i>I. amara-T. majus</i>	-1.167	10.472	-.111	.911
<i>I. amara-A. caucasica</i>	7.333	11.195	.655	.512
<i>I. amara-R. odorata</i>	-12.667	11.195	-1.131	.258
<i>I. amara-B. orientalis</i>	12.833	11.195	1.146	.252
<i>I. amara-B. vulgaris</i>	16.667	11.195	1.489	.137
<i>I. amara-C. pratensis</i>	17.167	11.195	1.533	.125
<i>I. amara-B. oleracea</i>	22.500	11.195	2.010	.044
<i>I. amara-C. spinosa</i>	24.333	11.195	2.174	.030
<i>T. majus-A. caucasica</i>	6.167	10.472	.589	.556
<i>T. majus-R. odorata</i>	11.500	10.472	1.098	.272
<i>T. majus-B. orientalis</i>	11.667	10.472	1.114	.265
<i>T. majus-B. vulgaris</i>	15.500	10.472	1.480	.139
<i>T. majus-C. pratensis</i>	16.000	10.472	1.528	.127
<i>T. majus-B. oleracea</i>	21.333	10.472	2.037	.042
<i>T. majus-C. spinosa</i>	23.167	10.472	2.212	.027
<i>A. caucasica-R. odorata</i>	-5.333	11.195	-.476	.634
<i>A. caucasica-B. orientalis</i>	-5.500	11.195	-.491	.623



<i>A. caucasica</i> - <i>B. vulgaris</i>	-9.333	11.195	-.834	.404
<i>A. caucasica</i> - <i>C. pratensis</i>	-9.833	11.195	-.878	.380
<i>A. caucasica</i> - <i>B. oleracea</i>	-15.167	11.195	-1.355	.175
<i>A. caucasica</i> - <i>C. spinosa</i>	-17.000	11.195	-1.519	.129
<i>R. odorata</i> - <i>B. orientalis</i>	.167	11.195	.015	.988
<i>R. odorata</i> - <i>B. vulgaris</i>	4.000	11.195	.357	.721
<i>R. odorata</i> - <i>C. pratensis</i>	4.500	11.195	.402	.688
<i>R. odorata</i> - <i>B. oleracea</i>	9.833	11.195	.878	.380
<i>R. odorata</i> - <i>C. spinosa</i>	11.667	11.195	1.042	.297
<i>B. orientalis</i> - <i>B. vulgaris</i>	-3.833	11.195	-.342	.732
<i>B. orientalis</i> - <i>C. pratensis</i>	-4.333	11.195	-.387	.699
<i>B. orientalis</i> - <i>B. oleracea</i>	9.667	11.195	.863	.388
<i>B. orientalis</i> - <i>C. spinosa</i>	-11.500	11.195	-1.027	.304
<i>B. vulgaris</i> - <i>C. pratensis</i>	-.500	11.195	-.045	.964
<i>B. vulgaris</i> - <i>B. oleracea</i>	5.833	11.195	.521	.602
<i>B. vulgaris</i> - <i>C. spinosa</i>	-7.667	11.195	-.685	.493
<i>C. pratensis</i> - <i>B. oleracea</i>	5.333	11.195	.476	.634
<i>C. pratensis</i> - <i>C. spinosa</i>	-7.167	11.195	-.640	.522
<i>B. oleracea</i> - <i>C. spinosa</i>	-1.833	11.195	-.164	.870

## B

### Pairwise comparisons of plant species for *P. xylostella* TO

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.
<i>P. sativum</i> - <i>R. odorata</i>	-1.333	11.402	-.117	.907
<i>P. sativum</i> - <i>C. papaya</i>	3.000	11.402	.263	.792
<i>P. sativum</i> - <i>M. oleifera</i>	3.167	11.402	.278	.781
<i>P. sativum</i> - <i>T. majus</i>	-8.667	11.402	-.760	.447
<i>P. sativum</i> - <i>C. bursa-pastoris</i>	10.500	11.402	.921	.357
<i>P. sativum</i> - <i>B. orientalis</i>	12.500	11.402	1.096	.273
<i>P. sativum</i> - <i>B. oleracea</i>	19.000	11.402	1.666	.096
<i>P. sativum</i> - <i>I. amara</i>	20.833	11.402	1.827	.068
<i>P. sativum</i> - <i>B. vulgaris</i>	25.000	11.402	2.193	.028
<i>P. sativum</i> - <i>C. pratensis</i>	25.333	11.402	2.222	.026
<i>P. sativum</i> - <i>C. spinosa</i>	30.167	11.402	2.646	.008
<i>P. sativum</i> - <i>A. caucasica</i>	31.833	11.402	2.792	.005
<i>P. sativum</i> - <i>E. cheiri</i>	32.833	11.402	2.880	.004
<i>P. sativum</i> - <i>L. douglasii</i>	34.333	11.402	3.011	.003

<i>P. sativum-A. argenteum</i>	37.500	11.402	3.289	.001
<i>R. odorata-C. papaya</i>	1.667	11.402	.146	.884
<i>R. odorata-M. oleifera</i>	1.833	11.402	.161	.872
<i>R. odorata-T. majus</i>	-7.333	11.402	-.643	.520
<i>R. odorata-C. bursa-pastoris</i>	9.167	11.402	.804	.421
<i>R. odorata-B. orientalis</i>	11.167	11.402	.979	.327
<i>R. odorata-B. oleracea</i>	17.667	11.402	1.549	.121
<i>R. odorata-I. amara</i>	19.500	11.402	1.710	.087
<i>R. odorata-B. vulgaris</i>	23.667	11.402	2.076	.038
<i>R. odorata-C. pratensis</i>	24.000	11.402	2.105	.035
<i>R. odorata-C. spinosa</i>	28.833	11.402	2.529	.011
<i>R. odorata-A. caucasica</i>	30.500	11.402	2.675	.007
<i>R. odorata-E. cheiri</i>	31.500	11.402	2.763	.006
<i>R. odorata-L. douglasii</i>	33.000	11.402	2.894	.004
<i>R. odorata-A. argenteum</i>	36.167	11.402	3.172	.002
<i>C. papaya-M. oleifera</i>	-.167	11.402	-.015	.988
<i>C. papaya-T. majus</i>	-5.667	11.402	-.497	.619
<i>C. papaya-C. bursa-pastoris</i>	7.500	11.402	.658	.511
<i>C. papaya-B. orientalis</i>	9.500	11.402	.833	.405
<i>C. papaya-B. oleracea</i>	16.000	11.402	1.403	.161
<i>C. papaya-I. amara</i>	-17.833	11.402	-1.564	.118
<i>C. papaya-B. vulgaris</i>	22.000	11.402	1.930	.054
<i>C. papaya-C. pratensis</i>	-22.333	11.402	-1.959	.050
<i>C. papaya-C. spinosa</i>	-27.167	11.402	-2.383	.017
<i>C. papaya-A. caucasica</i>	28.833	11.402	2.529	.011
<i>C. papaya-E. cheiri</i>	-29.833	11.402	-2.617	.009
<i>C. papaya-L. douglasii</i>	-31.333	11.402	-2.748	.006
<i>C. papaya-A. argenteum</i>	34.500	11.402	3.026	.002
<i>M. oleifera-T. majus</i>	-5.500	11.402	-.482	.630
<i>M. oleifera-C. bursa-pastoris</i>	7.333	11.402	.643	.520
<i>M. oleifera-B. orientalis</i>	9.333	11.402	.819	.413
<i>M. oleifera-B. oleracea</i>	15.833	11.402	1.389	.165
<i>M. oleifera-I. amara</i>	17.667	11.402	1.549	.121
<i>M. oleifera-B. vulgaris</i>	21.833	11.402	1.915	.056
<i>M. oleifera-C. pratensis</i>	22.167	11.402	1.944	.052
<i>M. oleifera-C. spinosa</i>	27.000	11.402	2.368	.018
<i>M. oleifera-A. caucasica</i>	28.667	11.402	2.514	.012
<i>M. oleifera-E. cheiri</i>	29.667	11.402	2.602	.009

<i>M. oleifera-L. douglasii</i>	31.167	11.402	2.733	.006
<i>M. oleifera-A. argenteum</i>	34.333	11.402	3.011	.003
<i>T. majus-C. bursa-pastoris</i>	1.833	11.402	.161	.872
<i>T. majus-B. orientalis</i>	3.833	11.402	.336	.737
<i>T. majus-B. oleracea</i>	10.333	11.402	.906	.365
<i>T. majus-I. amara</i>	12.167	11.402	1.067	.286
<i>T. majus-B. vulgaris</i>	16.333	11.402	1.433	.152
<i>T. majus-C. pratensis</i>	16.667	11.402	1.462	.144
<i>T. majus-C. spinosa</i>	21.500	11.402	1.886	.059
<i>T. majus-A. caucasica</i>	23.167	11.402	2.032	.042
<i>T. majus-E. cheiri</i>	24.167	11.402	2.120	.034
<i>T. majus-L. douglasii</i>	25.667	11.402	2.251	.024
<i>T. majus-A. argenteum</i>	28.833	11.402	2.529	.011
<i>C. bursa-pastoris-B. orientalis</i>	2.000	11.402	.175	.861
<i>C. bursa-pastoris-B. oleracea</i>	8.500	11.402	.745	.456
<i>C. bursa-pastoris-I. amara</i>	-10.333	11.402	-.906	.365
<i>C. bursa-pastoris-B. vulgaris</i>	14.500	11.402	1.272	.203
<i>C. bursa-pastoris-C. pratensis</i>	-14.833	11.402	-1.301	.193
<i>C. bursa-pastoris-C. spinosa</i>	-19.667	11.402	-1.725	.085
<i>C. bursa-pastoris-A. caucasica</i>	21.333	11.402	1.871	.061
<i>C. bursa-pastoris-E. cheiri</i>	-22.333	11.402	-1.959	.050
<i>C. bursa-pastoris-L. douglasii</i>	-23.833	11.402	-2.090	.037
<i>C. bursa-pastoris-A. argenteum</i>	27.000	11.402	2.368	.018
<i>B. orientalis-B. oleracea</i>	6.500	11.402	.570	.569
<i>B. orientalis-I. amara</i>	-8.333	11.402	-.731	.465
<i>B. orientalis-B. vulgaris</i>	-12.500	11.402	-1.096	.273
<i>B. orientalis-C. pratensis</i>	-12.833	11.402	-1.126	.260
<i>B. orientalis-C. spinosa</i>	-17.667	11.402	-1.549	.121
<i>B. orientalis-A. caucasica</i>	19.333	11.402	1.696	.090
<i>B. orientalis-E. cheiri</i>	-20.333	11.402	-1.783	.075
<i>B. orientalis-L. douglasii</i>	-21.833	11.402	-1.915	.056
<i>B. orientalis-A. argenteum</i>	25.000	11.402	2.193	.028
<i>B. oleracea-I. amara</i>	-1.833	11.402	-.161	.872
<i>B. oleracea-B. vulgaris</i>	-6.000	11.402	-.526	.599
<i>B. oleracea-C. pratensis</i>	-6.333	11.402	-.555	.579
<i>B. oleracea-C. spinosa</i>	-11.167	11.402	-.979	.327
<i>B. oleracea-A. caucasica</i>	12.833	11.402	1.126	.260
<i>B. oleracea-E. cheiri</i>	-13.833	11.402	-1.213	.225

<i>B. oleracea-L. douglasii</i>	-15.333	11.402	-1.345	.179
<i>B. oleracea-A. argenteum</i>	18.500	11.402	1.623	.105
<i>I. amara-B. vulgaris</i>	4.167	11.402	.365	.715
<i>I. amara-C. pratensis</i>	4.500	11.402	.395	.693
<i>I. amara-C. spinosa</i>	9.333	11.402	.819	.413
<i>I. amara-A. caucasica</i>	11.000	11.402	.965	.335
<i>I. amara-E. cheiri</i>	12.000	11.402	1.052	.293
<i>I. amara-L. douglasii</i>	-13.500	11.402	-1.184	.236
<i>I. amara-A. argenteum</i>	16.667	11.402	1.462	.144
<i>B. vulgaris-C. pratensis</i>	-.333	11.402	-.029	.977
<i>B. vulgaris-C. spinosa</i>	-5.167	11.402	-.453	.650
<i>B. vulgaris-A. caucasica</i>	6.833	11.402	.599	.549
<i>B. vulgaris-E. cheiri</i>	-7.833	11.402	-.687	.492
<i>B. vulgaris-L. douglasii</i>	-9.333	11.402	-.819	.413
<i>B. vulgaris-A. argenteum</i>	12.500	11.402	1.096	.273
<i>C. pratensis-C. spinosa</i>	-4.833	11.402	-.424	.672
<i>C. pratensis-A. caucasica</i>	6.500	11.402	.570	.569
<i>C. pratensis-E. cheiri</i>	-7.500	11.402	-.658	.511
<i>C. pratensis-L. douglasii</i>	-9.000	11.402	-.789	.430
<i>C. pratensis-A. argenteum</i>	12.167	11.402	1.067	.286
<i>C. spinosa-A. caucasica</i>	1.667	11.402	.146	.884
<i>C. spinosa-E. cheiri</i>	-2.667	11.402	-.234	.815
<i>C. spinosa-L. douglasii</i>	-4.167	11.402	-.365	.715
<i>C. spinosa-A. argenteum</i>	7.333	11.402	.643	.520
<i>A. caucasica-E. cheiri</i>	-1.000	11.402	-.088	.930
<i>A. caucasica-L. douglasii</i>	-2.500	11.402	-.219	.826
<i>A. caucasica-A. argenteum</i>	5.667	11.402	.497	.619
<i>E. cheiri-L. douglasii</i>	-1.500	11.402	-.132	.895
<i>E. cheiri-A. argenteum</i>	4.667	11.402	.409	.682
<i>L. douglasii-A. argenteum</i>	3.167	11.402	.278	.781

**Table S8.** Comparison between *P. rapae* and *P. xylostella* for the percentage of eggs laid on the abaxial side of the leaves in the plant species tested (n = 3-96). Data were analyzed using a one-tailed, two-sample test of proportions ( $p \leq 0.05$ ). Significant differences are shown in bold type; n/a: not available, not possible to calculate because oviposition occurred in less than two replicates in at least one of the species.

	Test Statistic, $p$ -value
<i>A. argenteum</i>	n/a
<i>A. thaliana</i>	<b><math>z=4.61, p \leq 0.001</math></b>
<i>A. caucasica</i>	$z=0.06, p=0.476$
<i>B. vulgaris</i>	$z=0.68, p=0.249$
<i>B. oleracea</i>	$z=1.26, p=0.103$
<i>B. orientalis</i>	$z=0.28, p=0.388$
<i>C. bursa-pastoris</i>	n/a
<i>C. pratensis</i>	$z=0.25, p=0.399$
<i>C. papaya</i>	n/a
<i>C. spinosa</i>	$z=0.25, p=0.400$
<i>E. cheiri</i>	$z=0.08, p=0.469$
<i>I. amara</i>	$z=0.26, p=0.397$
<i>L. douglasii</i>	n/a
<i>M. oleifera</i>	n/a
<i>P. sativum</i>	n/a
<i>R. odorata</i>	$z=0.60, p=0.274$
<i>T. majus</i>	$z=1.01, p=0.156$

**Table S9.** Pairwise comparisons in larval survival (LS) between plant species after conducting Kruskal-Wallis test. The test statistic (TS) and *p*-values of the Kruskal-Wallis tests were TS=49.45 and  $p \leq 0.001$  and TS=31.64 and  $p=0.011$  for *P. rapae* and *P. xylostella*, respectively. The pairwise comparisons among plant species is shown below for *P. rapae* (A) and *P. xylostella* (B). Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is 0.050.

**A**

**Pairwise comparisons of plant species for *P. rapae* LS**

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.
<i>A. argenteum</i> - <i>A. caucasica</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>B. orientalis</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>C. bursa-pastoris</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>C. papaya</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>C. spinosa</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>E. cheiri</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>I. amara</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>L. douglasii</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>M. oleifera</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>P. sativum</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>A. argenteum</i> - <i>B. vulgaris</i>	-19.833	9.760	-2.032	.042
<i>A. argenteum</i> - <i>A. thaliana</i>	-23.167	9.760	-2.374	.018
<i>A. argenteum</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>A. argenteum</i> - <i>B. oleracea</i>	-28.667	9.760	-2.937	.003
<i>A. argenteum</i> - <i>C. pratensis</i>	-28.667	9.760	-2.937	.003
<i>A. caucasica</i> - <i>B. orientalis</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>C. bursa-pastoris</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>C. papaya</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>C. spinosa</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>E. cheiri</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>I. amara</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>L. douglasii</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>M. oleifera</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>P. sativum</i>	.000	9.760	.000	1.000

<i>A. caucasica</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>A. caucasica</i> - <i>B. vulgaris</i>	-19.833	9.760	-2.032	.042
<i>A. caucasica</i> - <i>A. thaliana</i>	-23.167	9.760	-2.374	.018
<i>A. caucasica</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>A. caucasica</i> - <i>B. oleracea</i>	-28.667	9.760	-2.937	.003
<i>A. caucasica</i> - <i>C. pratensis</i>	-28.667	9.760	-2.937	.003
<i>L. douglasii</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>B. orientalis</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>M. oleifera</i> - <i>P. sativum</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>C. papaya</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>M. oleifera</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>C. spinosa</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>E. cheiri</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>I. amara</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>L. douglasii</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>M. oleifera</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>P. sativum</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>M. oleifera</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>T. majus</i> - <i>A. thaliana</i>	23.167	9.760	2.374	.018
<i>B. orientalis</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>P. sativum</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>C. bursa-pastoris</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>C. papaya</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>P. sativum</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>C. spinosa</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>E. cheiri</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>I. amara</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>L. douglasii</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>M. oleifera</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>P. sativum</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>T. majus</i> - <i>R. odorata</i>	27.167	9.760	2.784	.005
<i>T. majus</i> - <i>B. oleracea</i>	28.667	9.760	2.937	.003
<i>B. orientalis</i> - <i>C. bursa-pastoris</i>	.000	9.760	.000	1.000
<i>B. orientalis</i> - <i>C. papaya</i>	.000	9.760	.000	1.000
<i>B. orientalis</i> - <i>C. spinosa</i>	.000	9.760	.000	1.000
<i>B. orientalis</i> - <i>E. cheiri</i>	.000	9.760	.000	1.000
<i>B. orientalis</i> - <i>I. amara</i>	.000	9.760	.000	1.000

<i>B. orientalis-L. douglasii</i>	.000	9.760	.000	1.000
<i>B. orientalis-M. oleifera</i>	.000	9.760	.000	1.000
<i>B. orientalis-P. sativum</i>	.000	9.760	.000	1.000
<i>B. orientalis-T. majus</i>	.000	9.760	.000	1.000
<i>B. orientalis-B. vulgaris</i>	-19.833	9.760	-2.032	.042
<i>B. orientalis-R. odorata</i>	-27.167	9.760	-2.784	.005
<i>B. orientalis-C. pratensis</i>	-28.667	9.760	-2.937	.003
<i>C. bursa-pastoris-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>C. papaya-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>C. spinosa-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>E. cheiri-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>I. amara-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>L. douglasii-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>M. oleifera-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>P. sativum-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>T. majus-B. vulgaris</i>	19.833	9.760	2.032	.042
<i>C. bursa-pastoris-C. papaya</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-C. spinosa</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-E. cheiri</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-I. amara</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-L. douglasii</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-M. oleifera</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-P. sativum</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-T. majus</i>	.000	9.760	.000	1.000
<i>C. bursa-pastoris-R. odorata</i>	-27.167	9.760	-2.784	.005
<i>C. bursa-pastoris-C. pratensis</i>	-28.667	9.760	-2.937	.003
<i>C. papaya-C. spinosa</i>	.000	9.760	.000	1.000
<i>C. papaya-E. cheiri</i>	.000	9.760	.000	1.000
<i>C. papaya-I. amara</i>	.000	9.760	.000	1.000
<i>C. papaya-L. douglasii</i>	.000	9.760	.000	1.000
<i>C. papaya-M. oleifera</i>	.000	9.760	.000	1.000
<i>C. papaya-P. sativum</i>	.000	9.760	.000	1.000
<i>C. papaya-T. majus</i>	.000	9.760	.000	1.000
<i>C. papaya-R. odorata</i>	-27.167	9.760	-2.784	.005
<i>C. papaya-C. pratensis</i>	-28.667	9.760	-2.937	.003
<i>C. spinosa-C. pratensis</i>	28.667	9.760	2.937	.003
<i>E. cheiri-C. pratensis</i>	28.667	9.760	2.937	.003
<i>I. amara-C. pratensis</i>	28.667	9.760	2.937	.003



<i>L. douglasii</i> - <i>C. pratensis</i>	28.667	9.760	2.937	.003
<i>M. oleifera</i> - <i>C. pratensis</i>	28.667	9.760	2.937	.003
<i>P. sativum</i> - <i>C. pratensis</i>	28.667	9.760	2.937	.003
<i>T. majus</i> - <i>C. pratensis</i>	28.667	9.760	2.937	.003
<i>C. spinosa</i> - <i>E. cheiri</i>	.000	9.760	.000	1.000
<i>C. spinosa</i> - <i>I. amara</i>	.000	9.760	.000	1.000
<i>C. spinosa</i> - <i>L. douglasii</i>	.000	9.760	.000	1.000
<i>C. spinosa</i> - <i>M. oleifera</i>	.000	9.760	.000	1.000
<i>C. spinosa</i> - <i>P. sativum</i>	.000	9.760	.000	1.000
<i>C. spinosa</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>C. spinosa</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>E. cheiri</i> - <i>I. amara</i>	.000	9.760	.000	1.000
<i>E. cheiri</i> - <i>L. douglasii</i>	.000	9.760	.000	1.000
<i>E. cheiri</i> - <i>M. oleifera</i>	.000	9.760	.000	1.000
<i>E. cheiri</i> - <i>P. sativum</i>	.000	9.760	.000	1.000
<i>E. cheiri</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>E. cheiri</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>I. amara</i> - <i>L. douglasii</i>	.000	9.760	.000	1.000
<i>I. amara</i> - <i>M. oleifera</i>	.000	9.760	.000	1.000
<i>I. amara</i> - <i>P. sativum</i>	.000	9.760	.000	1.000
<i>I. amara</i> - <i>T. majus</i>	.000	9.760	.000	1.000
<i>I. amara</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>L. douglasii</i> - <i>M. oleifera</i>	.000	9.760	.000	1.000
<i>L. douglasii</i> - <i>P. sativum</i>	.000	9.760	.000	1.000
<i>L. douglasii</i> - <i>R. odorata</i>	-27.167	9.760	-2.784	.005
<i>B. vulgaris</i> - <i>A. thaliana</i>	3.333	9.760	.342	.733
<i>B. vulgaris</i> - <i>R. odorata</i>	-7.333	9.760	-.751	.452
<i>B. vulgaris</i> - <i>B. oleracea</i>	8.833	9.760	.905	.365
<i>B. vulgaris</i> - <i>C. pratensis</i>	-8.833	9.760	-.905	.365
<i>A. thaliana</i> - <i>R. odorata</i>	-4.000	9.760	-.410	.682
<i>A. thaliana</i> - <i>B. oleracea</i>	-5.500	9.760	-.564	.573
<i>A. thaliana</i> - <i>C. pratensis</i>	-5.500	9.760	-.564	.573
<i>R. odorata</i> - <i>B. oleracea</i>	1.500	9.760	.154	.878
<i>R. odorata</i> - <i>C. pratensis</i>	1.500	9.760	.154	.878
<i>B. oleracea</i> - <i>C. pratensis</i>	.000	9.760	.000	1.000

# B

## Pairwise comparisons of plant species for *P. xylostella* LS

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.
<i>C. papaya</i> - <i>C. spinosa</i>	-6.333	13.407	-.472	.637
<i>C. papaya</i> - <i>M. oleifera</i>	-7.500	12.541	-.598	.550
<i>C. papaya</i> - <i>B. orientalis</i>	12.667	13.407	.945	.345
<i>C. papaya</i> - <i>E. cheiri</i>	-32.125	12.541	-2.562	.010
<i>B. vulgaris</i> - <i>A. argenteum</i>	17.000	12.541	1.356	.175
<i>C. papaya</i> - <i>A. argenteum</i>	17.000	12.541	1.356	.175
<i>C. papaya</i> - <i>C. pratensis</i>	-38.667	13.407	-2.884	.004
<i>C. papaya</i> - <i>L. douglasii</i>	-38.667	13.407	-2.884	.004
<i>P. sativum</i> - <i>C. bursa-pastoris</i>	16.333	13.407	1.218	.223
<i>P. sativum</i> - <i>C. pratensis</i>	38.667	13.407	2.884	.004
<i>B. vulgaris</i> - <i>I. amara</i>	-27.750	12.541	-2.213	.027
<i>P. sativum</i> - <i>C. spinosa</i>	6.333	13.407	.472	.637
<i>B. vulgaris</i> - <i>E. cheiri</i>	-32.125	12.541	-2.562	.010
<i>P. sativum</i> - <i>A. argenteum</i>	17.000	12.541	1.356	.175
<i>C. papaya</i> - <i>C. bursa-pastoris</i>	16.333	13.407	1.218	.223
<i>C. papaya</i> - <i>I. amara</i>	-27.750	12.541	-2.213	.027
<i>B. vulgaris</i> - <i>B. orientalis</i>	12.667	13.407	.945	.345
<i>P. sativum</i> - <i>B. oleracea</i>	26.333	13.407	1.964	.050
<i>B. vulgaris</i> - <i>A. caucasica</i>	15.500	12.541	1.236	.216
<i>B. vulgaris</i> - <i>C. bursa-pastoris</i>	-16.333	13.407	-1.218	.223
<i>P. sativum</i> - <i>I. amara</i>	27.750	12.541	2.213	.027
<i>C. papaya</i> - <i>A. caucasica</i>	15.500	12.541	1.236	.216
<i>B. vulgaris</i> - <i>C. papaya</i>	.000	13.407	.000	1.000
<i>P. sativum</i> - <i>M. oleifera</i>	7.500	12.541	.598	.550
<i>P. sativum</i> - <i>L. douglasii</i>	38.667	13.407	2.884	.004
<i>B. vulgaris</i> - <i>C. pratensis</i>	-38.667	13.407	-2.884	.004
<i>P. sativum</i> - <i>A. thaliana</i>	30.667	13.407	2.287	.022
<i>B. vulgaris</i> - <i>B. oleracea</i>	26.333	13.407	1.964	.050
<i>P. sativum</i> - <i>A. caucasica</i>	15.500	12.541	1.236	.216
<i>C. papaya</i> - <i>B. oleracea</i>	26.333	13.407	1.964	.050
<i>P. sativum</i> - <i>B. orientalis</i>	12.667	13.407	.945	.345
<i>B. vulgaris</i> - <i>C. spinosa</i>	-6.333	13.407	-.472	.637

<i>B. vulgaris-R. odorata</i>	-10.750	12.541	-.857	.391
<i>B. vulgaris-T. majus</i>	-16.200	11.992	-1.351	.177
<i>B. vulgaris-A. thaliana</i>	30.667	13.407	2.287	.022
<i>C. papaya-A. thaliana</i>	30.667	13.407	2.287	.022
<i>B. vulgaris-P. sativum</i>	.000	13.407	.000	1.000
<i>B. vulgaris-M. oleifera</i>	-7.500	12.541	-.598	.550
<i>B. vulgaris-L. douglasii</i>	-38.667	13.407	-2.884	.004
<i>C. papaya-P. sativum</i>	.000	13.407	.000	1.000
<i>C. papaya-R. odorata</i>	-10.750	12.541	-.857	.391
<i>C. papaya-T. majus</i>	-16.200	11.992	-1.351	.177
<i>P. sativum-R. odorata</i>	-10.750	12.541	-.857	.391
<i>P. sativum-T. majus</i>	-16.200	11.992	-1.351	.177
<i>P. sativum-E. cheiri</i>	32.125	12.541	2.562	.010
<i>C. spinosa-M. oleifera</i>	-1.167	12.541	-.093	.926
<i>C. spinosa-R. odorata</i>	-4.417	12.541	-.352	.725
<i>C. spinosa-B. orientalis</i>	6.333	13.407	.472	.637
<i>C. spinosa-A. caucasica</i>	9.167	12.541	.731	.465
<i>C. spinosa-T. majus</i>	-9.867	11.992	-.823	.411
<i>C. spinosa-C. bursa-pastoris</i>	10.000	13.407	.746	.456
<i>C. spinosa-A. argenteum</i>	10.667	12.541	.851	.395
<i>C. spinosa-B. oleracea</i>	20.000	13.407	1.492	.136
<i>C. spinosa-I. amara</i>	-21.417	12.541	-1.708	.088
<i>C. spinosa-A. thaliana</i>	24.333	13.407	1.815	.070
<i>C. spinosa-E. cheiri</i>	-25.792	12.541	-2.057	.040
<i>C. spinosa-C. pratensis</i>	32.333	13.407	2.412	.016
<i>C. spinosa-L. douglasii</i>	-32.333	13.407	-2.412	.016
<i>M. oleifera-R. odorata</i>	-3.250	11.611	-.280	.780
<i>M. oleifera-B. orientalis</i>	5.167	12.541	.412	.680
<i>M. oleifera-A. caucasica</i>	8.000	11.611	.689	.491
<i>M. oleifera-T. majus</i>	-8.700	11.015	-.790	.430
<i>M. oleifera-C. bursa-pastoris</i>	8.833	12.541	.704	.481
<i>M. oleifera-A. argenteum</i>	9.500	11.611	.818	.413
<i>M. oleifera-B. oleracea</i>	18.833	12.541	1.502	.133
<i>M. oleifera-I. amara</i>	20.250	11.611	1.744	.081
<i>M. oleifera-A. thaliana</i>	23.167	12.541	1.847	.065
<i>M. oleifera-E. cheiri</i>	24.625	11.611	2.121	.034
<i>M. oleifera-C. pratensis</i>	31.167	12.541	2.485	.013
<i>M. oleifera-L. douglasii</i>	31.167	12.541	2.485	.013

<i>R. odorata-B. orientalis</i>	1.917	12.541	.153	.879
<i>R. odorata-A. caucasica</i>	4.750	11.611	.409	.682
<i>R. odorata-T. majus</i>	-5.450	11.015	-.495	.621
<i>R. odorata-C. bursa-pastoris</i>	5.583	12.541	.445	.656
<i>R. odorata-A. argenteum</i>	6.250	11.611	.538	.590
<i>R. odorata-B. oleracea</i>	15.583	12.541	1.243	.214
<i>R. odorata-I. amara</i>	17.000	11.611	1.464	.143
<i>R. odorata-A. thaliana</i>	19.917	12.541	1.588	.112
<i>R. odorata-E. cheiri</i>	21.375	11.611	1.841	.066
<i>R. odorata-C. pratensis</i>	27.917	12.541	2.226	.026
<i>R. odorata-L. douglasii</i>	27.917	12.541	2.226	.026
<i>B. orientalis-A. caucasica</i>	2.833	12.541	.226	.821
<i>B. orientalis-T. majus</i>	-3.533	11.992	-.295	.768
<i>B. orientalis-C. bursa-pastoris</i>	-3.667	13.407	-.273	.784
<i>B. orientalis-A. argenteum</i>	4.333	12.541	.346	.730
<i>B. orientalis-B. oleracea</i>	13.667	13.407	1.019	.308
<i>B. orientalis-I. amara</i>	-15.083	12.541	-1.203	.229
<i>B. orientalis-A. thaliana</i>	18.000	13.407	1.343	.179
<i>B. orientalis-E. cheiri</i>	-19.458	12.541	-1.552	.121
<i>B. orientalis-C. pratensis</i>	-26.000	13.407	-1.939	.052
<i>B. orientalis-L. douglasii</i>	-26.000	13.407	-1.939	.052
<i>A. caucasica-T. majus</i>	-.700	11.015	-.064	.949
<i>A. caucasica-C. bursa-pastoris</i>	-.833	12.541	-.066	.947
<i>A. caucasica-A. argenteum</i>	1.500	11.611	.129	.897
<i>A. caucasica-B. oleracea</i>	-10.833	12.541	-.864	.388
<i>A. caucasica-I. amara</i>	-12.250	11.611	-1.055	.291
<i>A. caucasica-A. thaliana</i>	-15.167	12.541	-1.209	.227
<i>A. caucasica-E. cheiri</i>	-16.625	11.611	-1.432	.152
<i>A. caucasica-L. douglasii</i>	-23.167	12.541	-1.847	.065
<i>A. caucasica-C. pratensis</i>	-23.167	12.541	-1.847	.065
<i>T. majus-C. bursa-pastoris</i>	.133	11.992	.011	.991
<i>T. majus-A. argenteum</i>	.800	11.015	.073	.942
<i>T. majus-B. oleracea</i>	10.133	11.992	.845	.398
<i>T. majus-I. amara</i>	11.550	11.015	1.049	.294
<i>T. majus-A. thaliana</i>	14.467	11.992	1.206	.228
<i>T. majus-E. cheiri</i>	15.925	11.015	1.446	.148
<i>T. majus-C. pratensis</i>	22.467	11.992	1.874	.061
<i>T. majus-L. douglasii</i>	22.467	11.992	1.874	.061

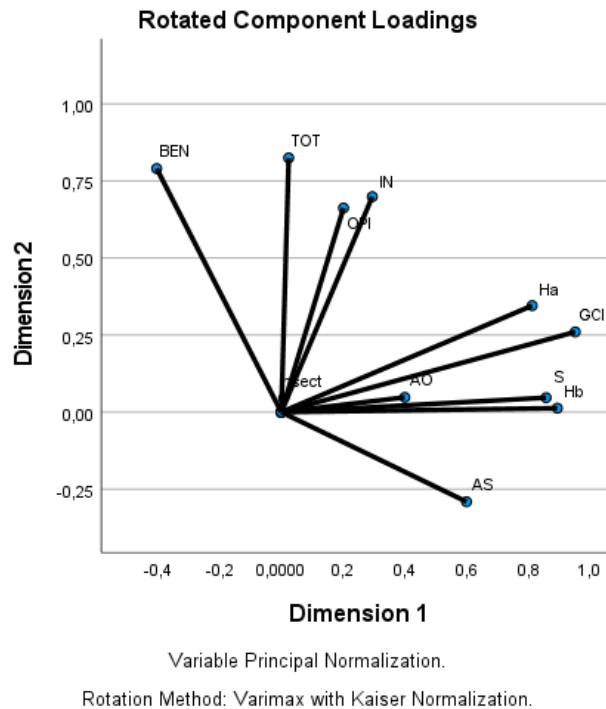
<i>C. bursa-pastoris</i> - <i>A. argenteum</i>	.667	12.541	.053	.958
<i>C. bursa-pastoris</i> - <i>B. oleracea</i>	10.000	13.407	.746	.456
<i>C. bursa-pastoris</i> - <i>I. amara</i>	-11.417	12.541	-.910	.363
<i>C. bursa-pastoris</i> - <i>A. thaliana</i>	14.333	13.407	1.069	.285
<i>C. bursa-pastoris</i> - <i>E. cheiri</i>	-15.792	12.541	-1.259	.208
<i>C. bursa-pastoris</i> - <i>C. pratensis</i>	-22.333	13.407	-1.666	.096
<i>C. bursa-pastoris</i> - <i>L. douglasii</i>	-22.333	13.407	-1.666	.096
<i>A. argenteum</i> - <i>B. oleracea</i>	-9.333	12.541	-.744	.457
<i>A. argenteum</i> - <i>I. amara</i>	-10.750	11.611	-.926	.355
<i>A. argenteum</i> - <i>A. thaliana</i>	-13.667	12.541	-1.090	.276
<i>A. argenteum</i> - <i>E. cheiri</i>	-15.125	11.611	-1.303	.193
<i>A. argenteum</i> - <i>L. douglasii</i>	-21.667	12.541	-1.728	.084
<i>A. argenteum</i> - <i>C. pratensis</i>	-21.667	12.541	-1.728	.084
<i>B. oleracea</i> - <i>I. amara</i>	-1.417	12.541	-.113	.910
<i>B. oleracea</i> - <i>A. thaliana</i>	4.333	13.407	.323	.747
<i>B. oleracea</i> - <i>E. cheiri</i>	-5.792	12.541	-.462	.644
<i>B. oleracea</i> - <i>L. douglasii</i>	-12.333	13.407	-.920	.358
<i>B. oleracea</i> - <i>C. pratensis</i>	-12.333	13.407	-.920	.358
<i>I. amara</i> - <i>A. thaliana</i>	2.917	12.541	.233	.816
<i>I. amara</i> - <i>E. cheiri</i>	4.375	11.611	.377	.706
<i>I. amara</i> - <i>C. pratensis</i>	10.917	12.541	.870	.384
<i>I. amara</i> - <i>L. douglasii</i>	-10.917	12.541	-.870	.384
<i>A. thaliana</i> - <i>E. cheiri</i>	-1.458	12.541	-.116	.907
<i>A. thaliana</i> - <i>L. douglasii</i>	-8.000	13.407	-.597	.551
<i>A. thaliana</i> - <i>C. pratensis</i>	-8.000	13.407	-.597	.551
<i>E. cheiri</i> - <i>L. douglasii</i>	-6.542	12.541	-.522	.602
<i>E. cheiri</i> - <i>C. pratensis</i>	6.542	12.541	.522	.602
<i>C. pratensis</i> - <i>L. douglasii</i>	.000	13.407	.000	1.000

**Table S10.** Origin of the seeds of the plant species tested.

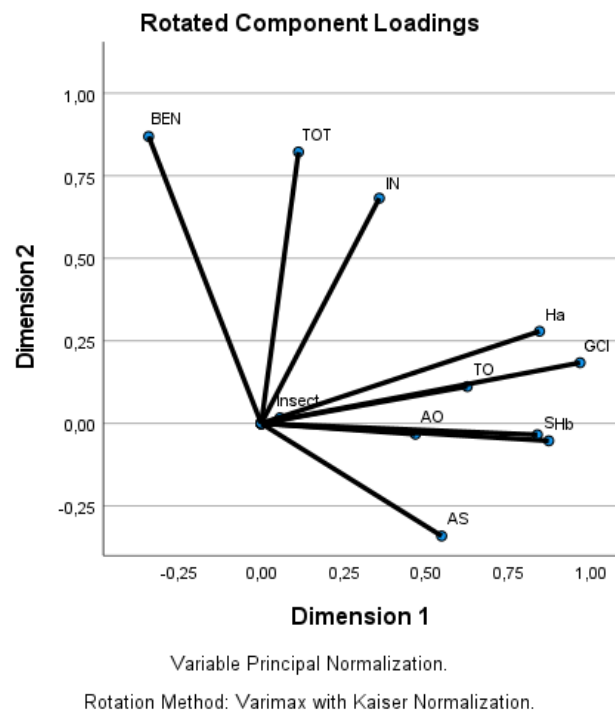
Species	Provider of seeds, city, country
<i>Alyssum argenteum</i> All.	Jelitto, Schwarmstedt, Germany
<i>Arabis caucasica</i> Willd.	B & T World Seeds, Aigues-Vives, France
<i>Arabidopsis thaliana</i> (L.) Heynh.	European Arabidopsis Stock Center, Nottingham University, Loughborough, UK
<i>Barbarea vulgaris</i> R.Br.	Dr. Niels Agerbirk, University of Copenhagen, Copenhagen, Denmark
<i>Brassica oleracea</i> var. <i>capitata</i> L.	B & T World Seeds, Aigues-Vives, France
<i>Bunias orientalis</i> L.	B & T World Seeds, Aigues-Vives, France
<i>Capsella bursa-pastoris</i> (L.) Medik.	B & T World Seeds, Aigues-Vives, France
<i>Cardamine pratensis</i> L.	Rühlemann's, Horstedt, Germany
<i>Carica papaya</i> L.	B & T World Seeds, Aigues-Vives, France
<i>Cleome spinosa</i> L.	B & T World Seeds, Aigues-Vives, France
<i>Erysimum cheiri</i> (L.) Crantz	B & T World Seeds, Aigues-Vives, France
<i>Iberis amara</i> L.	B & T World Seeds, Aigues-Vives, France
<i>Limnanthes douglasii</i> R. Br.	B & T World Seeds, Aigues-Vives, France
<i>Moringa oleifera</i> Lam.	B & T World Seeds, Aigues-Vives, France
<i>Pisum sativum</i> L.	B & T World Seeds, Aigues-Vives, France
<i>Reseda odorata</i> L.	B & T World Seeds, Aigues-Vives, France
<i>Tropaeolum majus</i> L.	B & T World Seeds, Aigues-Vives, France

**Figure S1.** CATPCA plots showing the relationship between oviposition preference index (OPI) (A), total oviposition (TO) (B), and larval survival (LS) (C) and total glucosinolate content (TOT), content of aliphatic glucosinolates with sulfur-containing side chains (AS), other aliphatic glucosinolates (AO), benzenic glucosinolates (BEN), and indolic glucosinolates (IN) in the plant species tested. The relationship of OPI, TO, and LS with glucosinolate richness ( $S$ ), Shannon's diversity index for the four glucosinolate classes ( $H_A$ ), Shannon's diversity index for the relative concentrations of all individual glucosinolates ( $H_B$ ), and chemical complexity index for glucosinolates (GCI) is also shown.

**A**

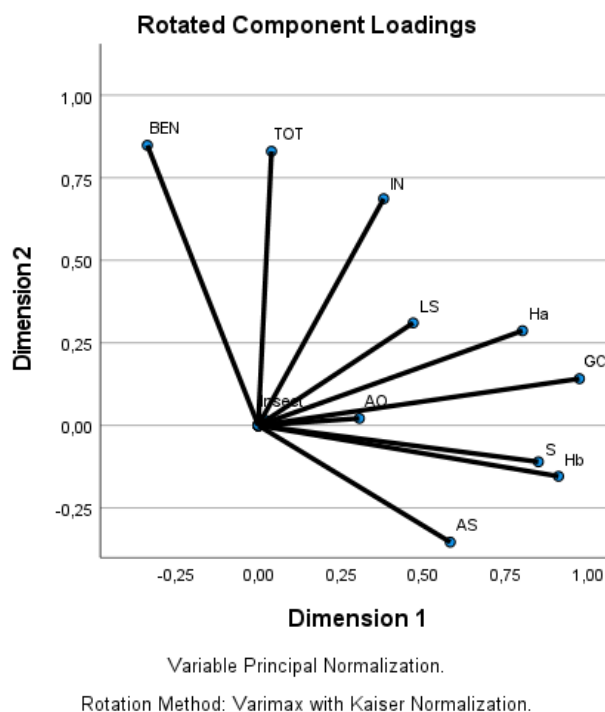


**B**





C



### Reference Cited

37. Badenes-Pérez. F.R.; Gershenson. J.; Heckel. D.G. Plant glucosinolate content increases susceptibility to diamondback moth (Lepidoptera: Plutellidae) regardless of its diet. *Journal of Pest Science* **2020**. 93. 491–506.