

Table S1. Variance Inflation Factors (VIFs) for predictors in the models for abundance and family richness.

Variable	VIFs	
	Abundance	Family richness
HPSV vs HPMV	1.52	1.65
HM vs HPMV	1.47	1.75
LEDs vs HPMV	1.46	2.59
Abundance		2.40
Wind direction	1.36	1.40
Moon visibility	1.34	1.42
Temperature	1.09	1.10
Wind speed	1.77	2.16

Table S2. GLM Binomial Models predicting abundance of the most frequent insect families captured with light traps. * Microlepidoptera is a not monophyletic group of moth families.

Order COLEOPTERA

Scolytidae	Coefficient	ES	Z	p-value
(Intercept)	-2.99	1.05	-2.86	0.004
HPSV vs HPMV	2.30	0.66	3.50	<0.001
HM vs HPMV	0.98	0.66	1.49	0.138
LEDs vs HPMV	0.19	0.67	0.28	0.781
Wind direction	-0.72	0.50	-1.44	0.149
Moon visibility	-1.07	1.53	-0.70	0.483
Temperature	0.29	0.06	5.07	<0.001
Wind speed	-0.66	0.23	-2.85	0.004

Staphylinidae

(Intercept)	-4.86	1.25	-3.90	<0.001
HPSV vs HPMV	0.89	0.69	1.29	0.196
HM vs HPMV	-0.23	0.70	-0.33	0.742
LEDs vs HPMV	-1.68	0.73	-2.28	0.022
Wind direction	-1.14	0.56	-2.04	0.041
Moon visibility	-0.43	1.68	-0.26	0.799
Temperature	0.50	0.07	7.03	<0.001
Wind speed	-0.73	0.26	-2.78	0.005

Order DIPTERA**Asilidae**

(Intercept)	14.09	1.13	12.51	<0.001
HPSV vs HPMV	-2.56	0.77	-3.31	0.001
HM vs HPMV	-1.23	0.73	-1.67	0.094
LEDs vs HPMV	-2.75	0.76	-3.63	<0.001
Wind direction	0.22	0.64	0.34	0.731
Moon visibility	-4.00	2.00	-2.00	0.046
Temperature	-0.59	0.07	-8.40	<0.001
Wind speed	0.12	0.28	0.44	0.659

Culicidae

(Intercept)	7.57	1.01	7.47	<0.001
HPSV vs HPMV	-0.98	0.69	-1.43	0.154
HM vs HPMV	-0.18	0.64	-0.27	0.785
LEDs vs HPMV	-3.19	0.87	-3.65	0.000
Wind direction	-0.34	0.61	-0.56	0.575
Moon visibility	0.30	1.78	0.17	0.864

Temperature	-0.36	0.07	-5.47	<0.001
Wind speed	-0.11	0.26	-0.43	0.668

Muscidae

(Intercept)	0.71	0.75	0.94	0.347
HPSV vs HPMV	-0.98	0.48	-2.07	0.039
HM vs HPMV	0.04	0.45	0.08	0.933
LEDs vs HPMV	-3.09	0.57	-5.41	<0.001
Wind direction	0.18	0.40	0.45	0.653
Moon visibility	1.10	1.20	0.92	0.359
Temperature	0.12	0.04	2.76	0.006
Wind speed	0.01	0.17	0.03	0.974

Order HEMIPTERA

Cicadellidae

(Intercept)	-1.01	0.97	-1.04	0.297
HPSV vs HPMV	-0.04	0.63	-0.06	0.954
HM vs HPMV	-0.96	0.63	-1.54	0.125
LEDs vs HPMV	-1.91	0.65	-2.91	0.004
Wind direction	-0.13	0.50	-0.27	0.788
Moon visibility	-1.36	1.54	-0.88	0.378
Temperature	0.27	0.06	4.82	<0.001
Wind speed	-0.77	0.24	-3.20	0.001

Miridae

(Intercept)	-3.47	1.14	-3.03	0.002
HPSV vs HPMV	-0.38	0.68	-0.55	0.581
HM vs HPMV	-0.32	0.66	-0.48	0.628
LEDs vs HPMV	-1.87	0.69	-2.69	0.007

Wind direction	0.67	0.54	1.26	0.209
Moon visibility	0.48	1.66	0.29	0.771
Temperature	0.39	0.07	6.04	<0.001
Wind speed	-0.78	0.24	-3.21	0.001

Order HYMENOPTERA

Ichneumonidae

(Intercept)	-3.24	0.94	-3.45	0.001
HPSV vs HPMV	-0.05	0.53	-0.10	0.924
HM vs HPMV	0.00	0.51	-0.01	0.995
LEDs vs HPMV	-2.66	0.61	-4.40	<0.001
Wind direction	-0.49	0.42	-1.15	0.252
Moon visibility	-0.84	1.32	-0.64	0.522
Temperature	0.41	0.05	7.61	<0.001
Wind speed	-0.44	0.19	-2.34	0.019

Order LEPIDOPTERA

Geometridae

(Intercept)	1.66	0.71	2.33	0.020
HPSV vs HPMV	0.83	0.52	1.61	0.108
HM vs HPMV	0.34	0.51	0.67	0.502
LEDs vs HPMV	0.42	0.50	0.84	0.403
Wind direction	0.69	0.41	1.71	0.088
Moon visibility	0.61	1.26	0.49	0.626
Temperature	-0.03	0.04	-0.71	0.477
Wind speed	-1.03	0.22	-4.70	<0.001

Microlepidoptera *

(Intercept)	-0.72	0.55	-1.31	0.190
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HPSV vs HPMV	0.18	0.35	0.50	0.616
HM vs HPMV	-0.19	0.35	-0.56	0.579
LEDs vs HPMV	-1.87	0.36	-5.14	0.000
Wind direction	0.32	0.28	1.13	0.257
Moon visibility	0.89	0.87	1.03	0.304
Temperature	0.34	0.03	10.63	<0.001
Wind speed	-0.95	0.13	-7.44	<0.001

Noctuidae

(Intercept)	2.58	0.55	4.71	<0.001
HPSV vs HPMV	0.08	0.38	0.22	0.826
HM vs HPMV	-0.12	0.37	-0.33	0.745
LEDs vs HPMV	-0.71	0.38	-1.85	0.064
Wind direction	0.23	0.30	0.76	0.446
Moon visibility	-0.01	0.94	-0.01	0.992
Temperature	0.02	0.03	0.56	0.578
Wind speed	-0.68	0.14	-4.75	<0.001

Pyralidae

(Intercept)	1.56	0.54	2.88	0.004
HPSV vs HPMV	-0.12	0.38	-0.30	0.764
HM vs HPMV	0.49	0.35	1.40	0.163
LEDs vs HPMV	-1.21	0.39	-3.08	0.002
Wind direction	-0.12	0.29	-0.40	0.687
Moon visibility	0.91	0.92	0.98	0.325
Temperature	0.09	0.03	2.69	0.007
Wind speed	-1.16	0.17	-6.83	<0.001

Order NEUROPTERA

Chrysopidae

(Intercept)	-3.25	1.13	-2.87	0.004
HPSV vs HPMV	-0.31	0.63	-0.50	0.617
HM vs HPMV	-1.56	0.67	-2.33	0.020
LEDs vs HPMV	-1.16	0.61	-1.90	0.057
Wind direction	0.20	0.49	0.40	0.689
Moon visibility	0.17	1.50	0.11	0.911
Temperature	0.36	0.07	5.33	<0.001
Wind speed	-1.02	0.26	-3.91	<0.001