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Broad spectrum artificial light at night increases the conspicuousness of camouflaged prey

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Table S1. Tukey HSD pairwise contrasts between colour morphs of the conspicuousness of Littorinid snail (*L. obtusata*/*L. fabalis*) to the Herring Gull (*Larus argentatus*) under different lighting technologies. Significant differences in conspicuousness at the 95% confidence level are underlined.

Lighting technology	Contrast	Estimate	SE	Z Ratio	<i>p</i>	Lower 95% Confidence Limit	Upper 95% Confidence Limit
HPS	<u>Brown - Olive</u>	1.13	0.25	4.44	<0.01	0.24	2.02
	<u>Brown - Yellow</u>	-3.98	0.68	-5.84	<0.001	-6.36	-1.60
	<u>Olive - Yellow</u>	-5.11	0.68	-7.54	<0.001	-7.48	-2.75
LED	Brown - Olive	0.81	0.26	3.12	0.146	-0.10	1.72
	<u>Brown - Yellow</u>	-4.58	0.72	-6.34	<0.001	-7.1	-2.06
	<u>Olive - Yellow</u>	-5.39	0.73	-7.44	<0.001	-7.92	-2.86
LPS ^a	Brown - Olive	-0.01	0.01	-0.8	1	-0.03	0.02
	<u>Brown - Yellow</u>	0.02	0.00	5.39	<0.001	0.01	0.04
	<u>Olive - Yellow</u>	0.03	0.01	4.51	<0.001	0.01	0.05
MH	Brown - Olive	0.87	0.28	3.08	0.162	-0.11	1.86
	<u>Brown - Yellow</u>	-3.9	0.68	-5.67	<0.001	-6.22	-1.48
	<u>Olive - Yellow</u>	-4.72	0.68	-6.92	<0.001	-7.10	-2.34
SUN	Brown - Olive	0.71	0.24	2.94	0.232	-0.13	1.56
	<u>Brown - Yellow</u>	-4.89	0.73	-6.71	<0.001	-7.44	-2.35
	<u>Olive - Yellow</u>	-5.61	0.73	-7.66	<0.001	-8.16	-3.05
MOON	Brown - Olive	0.72	0.24	3.03	0.186	-0.12	1.55
	<u>Brown - Yellow</u>	-4.89	0.72	-6.74	<0.001	-7.40	-2.35
	<u>Olive - Yellow</u>	-5.60	0.73	-7.70	<0.001	-8.13	-3.06

^aThresholds of detectability were not exceeded under LPS lighting in any case such that significant differences in conspicuousness are unlikely to be ecologically relevant.

Table S2: Tukey HSD pairwise contrasts between colour morphs of the conspicuousness of Littorinid snail (*L. obtusata/L. fabalis*) to the Common Blenny (*Lipophrys pholis*) under different lighting technologies. Significant differences in conspicuousness at the 95% confidence level are underlined.

Lighting technology	Contrast	Estimate	SE	Z Ratio	p	Lower 95% Confidence Limit	Upper 95% Confidence Limit
HPS	<u>Brown - Olive</u>	0.81	0.22	3.65	<0.05	0.04	1.59
	Brown - Yellow	0.43	0.24	1.77	0.951	-0.41	1.27
	Olive - Yellow	-0.38	0.24	-1.58	0.984	-1.23	0.46
LED	<u>Brown - Olive</u>	0.92	0.23	3.93	<0.05	0.10	1.73
	Brown - Yellow	-0.46	0.33	-1.39	0.99	-1.61	0.69
	<u>Olive - Yellow</u>	-1.38	0.33	-4.20	<0.01	-2.52	-0.23
LPS ^a	Brown - Olive	-0.01	0.01	-0.92	1	-0.03	0.02
	<u>Brown - Yellow</u>	0.03	0.00	6.16	<0.001	0.01	0.04
	<u>Olive - Yellow</u>	0.03	0.01	5.06	<0.001	0.01	0.05
MH	Brown - Olive	0.86	0.33	2.61	0.445	-0.29	2.02
	<u>Brown - Yellow</u>	1.14	0.30	3.77	<0.05	0.09	2.19
	Olive - Yellow	0.27	0.32	0.85	1	-0.85	1.40
SUN	<u>Brown - Olive</u>	0.96	0.21	4.46	<0.01	0.21	1.70
	<u>Brown - Yellow</u>	-1.47	0.40	-3.68	<0.05	-2.87	-0.07
	<u>Olive - Yellow</u>	-2.43	0.40	-6.15	<0.001	-3.81	-1.05
MOON	<u>Brown - Olive</u>	0.96	0.23	4.18	<0.05	0.16	1.76
	Brown - Yellow	-0.99	0.37	-2.65	0.416	-2.29	0.31
	<u>Olive - Yellow</u>	-1.94	0.37	-5.28	<0.001	-3.23	-0.66

^aThresholds of detectability were not exceeded under LPS lighting in any case such that significant differences in conspicuousness are unlikely to be ecologically relevant.

Table S3: Tukey HSD pairwise contrasts between colour morphs of the conspicuousness of Littorinid snail (*L. obtusata/L. fabalis*) to the Green Shore Crab (*Carcinus maenas*) under different lighting technologies. Significant differences in conspicuousness at the 95% confidence level are underlined.

Lighting technology	Contrast	Estimate	SE	Z Ratio	<i>p</i>	Lower 95% Confidence Limit	Upper 95% Confidence Limit
HPS	<u>Brown - Olive</u>	1.79	0.46	3.90	<0.05	0.19	3.40
	<u>Brown - Yellow</u>	-7.95	1.70	-4.67	<0.001	-13.90	-2.01
	<u>Olive - Yellow</u>	-9.74	1.69	-5.78	<0.001	-15.60	-3.86
LED	Brown - Olive	-0.20	0.25	-0.80	1	-1.07	0.67
	<u>Brown - Yellow</u>	-9.77	1.58	-6.17	<0.001	-15.30	-4.25
	<u>Olive - Yellow</u>	-9.57	1.59	-6.01	<0.001	-15.10	-4.01
LPS ^a	Brown - Olive	-0.01	0.02	-0.48	1	-0.08	0.06
	<u>Brown - Yellow</u>	0.06	0.01	4.37	<0.01	0.01	0.10
	Olive - Yellow	0.06	0.02	3.45	0.057	0.00	0.13
MH	Brown - Olive	0.11	0.25	0.45	1	-0.77	1.00
	<u>Brown - Yellow</u>	-10.14	1.67	-6.07	<0.001	-16.00	-4.31
	<u>Olive - Yellow</u>	-10.26	1.68	-6.11	<0.001	-16.10	-4.40
SUN	Brown - Olive	-0.39	0.21	-1.86	0.93	-1.12	0.34
	<u>Brown - Yellow</u>	-8.42	1.34	-6.31	<0.001	-13.10	-3.76
	<u>Olive - Yellow</u>	-8.03	1.35	-5.97	<0.001	-12.70	-3.34
MOON	Brown - Olive	-0.35	0.22	-1.58	0.98	-1.13	0.43
	<u>Brown - Yellow</u>	-8.88	1.42	-6.27	<0.001	-13.80	-3.94
	<u>Olive - Yellow</u>	-8.53	1.43	-5.98	<0.001	-13.50	-3.55

^aThresholds of detectability were not exceeded under LPS lighting in any case such that significant differences in conspicuousness are unlikely to be ecologically relevant.

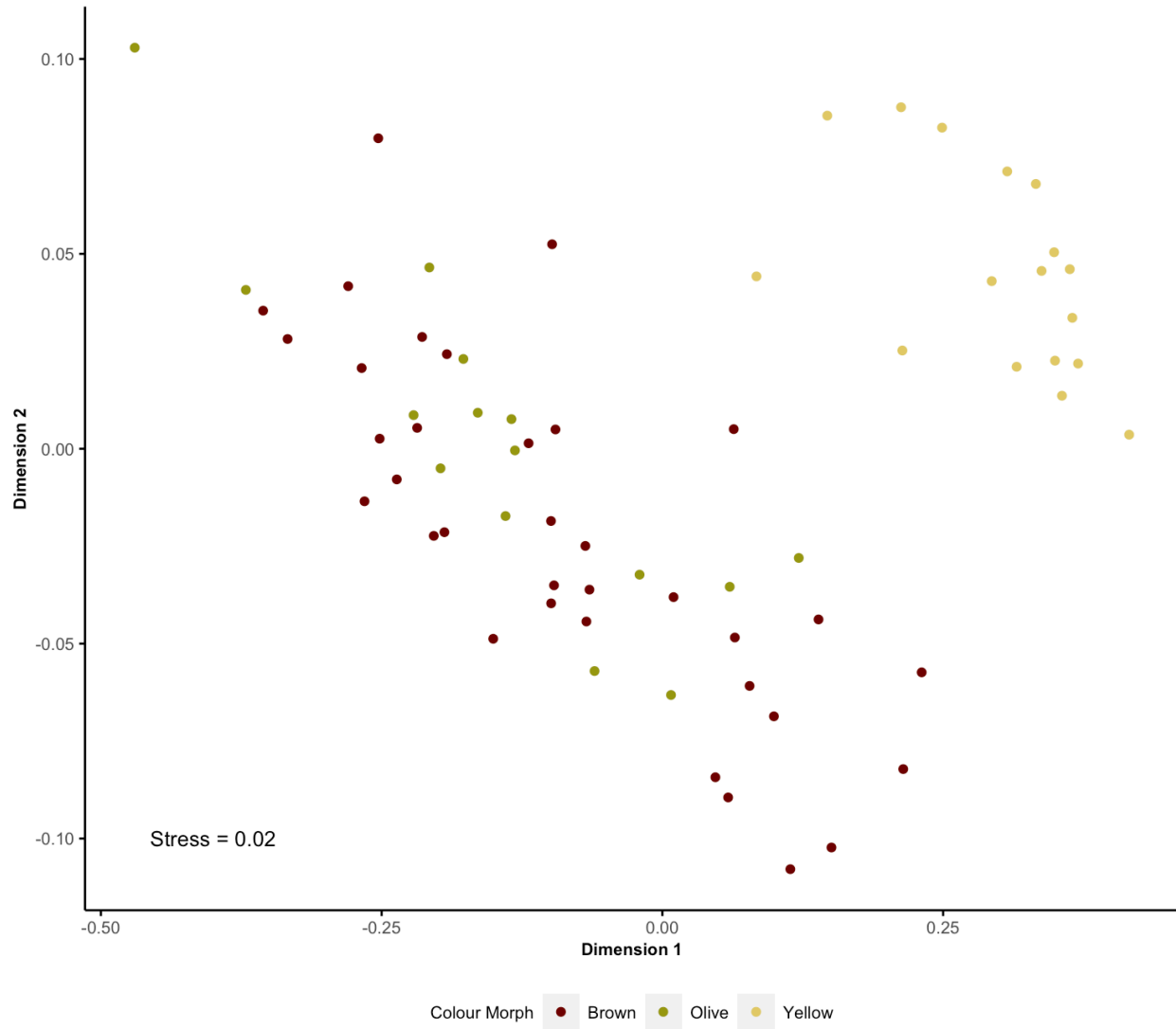


Figure S1: Multidimensional scaling (MDS) plot displaying dissimilarities in colour morph grouping. Plot is based on a Bray-Curtis Dissimilarity Index derived from raw spectral reflectance data collected in sunlight from Littorinid snails (*L. obtusata* / *L. fabalis*).