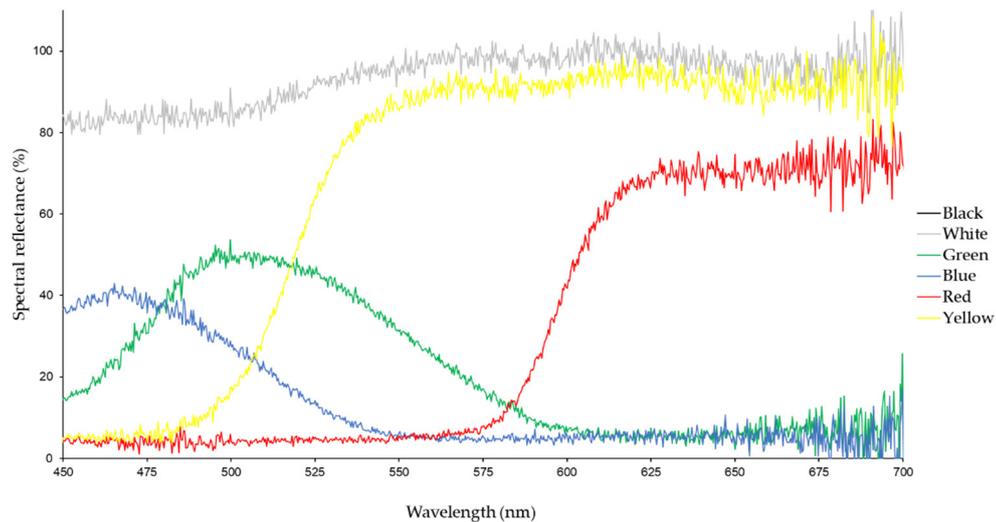


## Supplementary Materials

### *Refuge colour measurements*

The painted paper cups used as refuges in this study had differences in reflectance along the visible spectrum (450–700 nm) (Supplementary figure 1). White refuges had high reflectance (90 %) at wavelengths above ~ 550 nm. In contrast, black refuges had zero or close to zero reflectance at the wavelengths measured. Yellow refuges also had high reflectance (80 %) above ~ 560 nm. The reflectance of blue refuges was 40 % between ~ 455 and 475 nm, while green refuges had a maximum spectral reflectance (50 %) between ~ 495 and 510 nm. Red refuges had high reflectance (70 %) at wavelengths above ~ 625 nm.



**Supplementary Figure S1.** Reflectance values from spectral analysis of coloured paper cups used in trapping experiments.

**Supplementary Table S1.** Tukey contrast comparison between coloured refuges when vine weevil adults were released individually

<b>Comparison</b>	<b>Odds ratio</b>	<b>SE</b>	<b>p. value</b>
White / Yellow	3.13	3.67	0.93
Green / Yellow	7.98	8.69	0.398
Green / White	2.55	1.84	0.79
Black / Yellow	13.82	14.74	0.13
Black / White	4.42	3.03	0.25
Black / Green	1.73	0.92	0.91
Red / Yellow	13.82	14.74	0.13
Red / White	4.42	3.03	0.25
Red / Green	1.73	0.92	0.91
Red / Black	1.00	0.48	1.00
Blue / Yellow	23.06	24.31	0.03
Blue / White	7.37	4.93	0.03
Blue / Green	2.89	1.47	0.29
Blue / Black	1.67	0.76	0.87
Blue / Red	1.67	0.76	0.87

**Supplementary Table S2.** Tukey contrast comparison between coloured refuges when vine weevil adults were released in groups of 10

<b>Comparison</b>	<b>Odds ratio</b>	<b>SE</b>	<b>p. value</b>
Blue / Black	0.51	0.12	0.05
Green / Black	0.44	0.11	0.01
Green / Blue	0.86	0.24	0.99
Red / Black	0.39	0.1	0.004
Red / Blue	0.77	0.22	0.95
Red / Green	0.9	0.27	0.99
White / Black	0.12	0.049	<.0001
White / Blue	0.23	0.1	0.01
White / Green	0.27	0.12	0.05
White / Red	0.29	0.13	0.08
Yellow / Black	0.28	0.08	0.0002
Yellow / Blue	0.54	0.17	0.4

Yellow / Green	0.63	0.21	0.74
Yellow / Red	0.7	0.24	0.9
Yellow / White	2.37	1.13	0.46

**Supplementary Table S3.** Tukey contrast comparison between refuges with different heights

Comparison	Odds ratio	SE	p. value
3 cm / 11.30 cm	0.46	0.08	<.0001
6 cm / 11.30 cm	0.66	0.1	0.02
6 cm / 3 cm	1.45	0.28	0.12

**Supplementary Table S4.** Tukey contrast comparison between refuge with different entrance configurations

Comparison	Odds ratio	SE	p. value
continuous opening (base)/ four openings (base)	0.94	0.14	0.98
four openings (side)/ four openings (base)	0.04	0.02	<.0001
four openings (side)/continuous opening (base)	0.05	0.02	<.0001
four openings (top)/ four openings (base)	0.1	0.03	<.0001
four openings (top)/continuous opening (base)	0.11	0.04	<.0001
four openings (top)/ four openings (side)	2.25	1.35	0.53