

## Supplemental Tables and Table Legends

**Supplemental Table S1:** Locations of study sites and timing of oviposition experiments

Sites	Latitude and Longitude Coordinates	Dates visited
Highgrove Walkway <sup>(1)</sup>	-45.918, 170.474	18/11/2021–01/04/2022
Long Beach <sup>(2)</sup>	-45.745, 170.641	21/12/2021–03/04/2022
The Pyramids <sup>(3)</sup>	-45.823, 170.720	07/01/2022–10/04/2022
Portobello Marine Studies Centre Walkway <sup>(4)</sup>	-45.826, 170.642	23/11/2021–10/04/2022
Sawyers Bay Eco Sanctuary <sup>(5)</sup>	-45.818, 170.606	23/02/2022–2/03/2022
Larnach Castle <sup>(6)</sup>	-45.861, 170.626	01/02/2022–21/02/2022
Botanic Gardens <sup>(7)</sup>	-45.857, 170.521	03/12/2021
Invermay Agricultural Centre <sup>(8)</sup>	-45.860, 170.382	07/02/2022–18/03/2022
Taieri Mouth Road <sup>(9)</sup>	-46.025, 170.229	08/04/2022

"Dates visited" indicates the first and last visits at that site. Latitude and longitude are shown with 3dp. Superscript numbers in brackets refers to site location shown in Fig 2.

**Supplemental Table S2:** *Number of larvae used from each ovipositing V. g. gonerilla*

Mother ID	Total eggs laid	Total larvae used
1	62	9
3	6	6
12	35	25
21	1	0
22	3	3
25	4	0
27	1	0
28	1	0
31	27	21
32	30	24

**Supplemental Table S3: Oviposition break down across sites**

Site:	Number of trips (successful trips)	Total caught (median/trip)	Total oviposited	Total eggs laid (median/trip)
High Grove	8 (2)	4 (0)	2	67 (34)
Long Beach	4 (0)	10 (2)	0	0 (0)
The Pyramids	11 (5)	24 (2)	8	102 (3.5)
Larnach Castle	4 (0)	2 (0)	0	0 (0)
Sawyers Bay	3 (0)	7 (3)	0	0 (0)
Portobello	2 (0)	0 (0)	0	0 (0)
Taieri Mouth	1 (0)	0 (0)	0	0 (0)
Botanic Gardens	1 (0)	0 (0)	0	0 (0)

Data gathered from 18 November 2021 to 10 March 2022. Values for total caught and total eggs laid are presented as total (median). Successful trips are the number of trips where oviposition occurred. The Invermay site is not included in this table because we never saw *V. gonerilla* adults at the site.

**Supplemental Table S4: Larval performance on different nettle food treatments**

	Number of larvae	Days to pupation		Days to adult		Percent survived
		Mean $\pm$ SE	Median (95% CI)	Mean $\pm$ SE	Median (95% CI)	
<i>U. ferox</i>	28	36 $\pm$ 1.949	35 (31–41)	51 $\pm$ 2.074	49 (47–56)	18%
<i>U. australis</i> hybrid	26	33 $\pm$ 1.173	31 (31–35)	47.92 $\pm$ 1.293	47 (45–51)	50%
<i>U. urens</i>	25	37 $\pm$ 2.097	36.5 (33–43)	54.75 $\pm$ 3.065	55 (47–62)	16%

The nettle food treatments are shown in the left column (*U. ferox*, *U. australis* hybrid, *U. urens*). The descriptive stats for days to pupation and days to adult only include those that survived to adulthood.