



Fig 1. The feeding preference of fourth instar *T. luctuosa* is influenced by early instar food plant type. Grouped by history food. Numbers and the letter within the pie signify the new food type.

Table 2. Survival of *T. Luctuosa* larvae during development on four field bindweed biotypes and hedge bindweed.

Developmental stage	Plant type				
	Biotype 1	Biotype 2	Biotype 3	Biotype 4	Hedge
			% survival		
1 st - 4 th	86a	78a	73a	86a	83a
4 th - 5 th	100a	100a	100a	94a	98a
5 th (feeding)	98a	100a	98a	100a	100a
5 th (prepupa)	82a	62b	66ab	54b	56b

Means within a row followed different letters are significantly different at the $P=0.05$ level by the Pearson's X^2 test for independence (SAS 1992). Overall X^2 for prepupa: $F=10.76$; $df=4, 10$; $P=0.029$.

Table 1. Feeding and weight of *T. Luctuosa* on field bindweed biotypes and hedge bindweed during L₄ and L₅.

Experiment	Parameter	Plant type				
		Biotype 1	Biotype 2	Biotype 3	Biotype 4	Hedge
1	Total leaf area consumed, cm ²	44.4a	44.4a	51.2b	57.8c	90.1d
	Total dry matter consumed, mg	145.2a	170.0b	183.8b	214.4c	227.0c
	Maximum larval weight, mg	223.3a	233.1a	243.2a	261.7a	252.0a
2	Total leaf area consumed, cm ²	36.6ab	33.2a	41.2c	40.8bc	65.8 ^z
	Total dry matter consumed, mg	117.1a	128.4a	144.2b	156.0b	175.0 ^z
	Maximum larval weight, mg	232.7a	232.8a	235.2a	248.2a	203.0 ^z

Means within a row followed by different letters are significantly different at the $P = 0.05$ level by Fischer's LSD (SAS 1992). ^zHedge bindweed means from experiment 2 are shown for information only and are not included in the analysis of experiment 2 data.