

Appendix V

Early stages of *Euchrysops dolorosa* (Trimen)

(a) Egg

Laid singly among the buds of the foodplant. The eggs are 0.6mm in diameter by 0.4mm high. It is pale green with white vertical and horizontal ribbing. The eggs take 4-6 days to hatch.

(b) Larvae

The first instar larvae are plain green but after the first moult they develop diagonal green stripes and a pink to purple dorsal line. The larvae feed on the buds and flowers of the foodplant.

1st instar. On emergence it is 1.25mm in length, growing to 7.5mm in 4 days.

2nd instar. It grows to 5mm in 4 days.

3rd instar. It grows to 7.5mm in 4 days.

4th instar. It grows to 12mm in 7 days.

(c) Pupae

The pupae are 10mm in length and are light green with yellowish on the abdomen. They are secured to the foodplant by the cremastral hooks and a silken girdle. The pupal stage lasts about 16 days.

Appendix VI

RETENTION TIMES AND AREAS UNDER PEAKS AS GIVEN BY THE AUTOLAB MINIGRATOR
WITH RELATIVE RETENTION TIMES AND PERCENTAGES OF EACH CHEMICAL

1. Camponotus maculatus (Fabricius)

Brood extract

Retention Time	Relative Retention Time	Area	%
973	0.585	29108	1.0
1103	0.664	11688	0.4
1171	0.704	58232	2.0
1247	0.750	18310	0.7
1345	0.810	79862	2.8
1425	0.857	54629	1.9
1455	0.876	49569	1.8
1537	0.924	285429	10.0
1595	0.960	133563	4.7
1663	1.000	199721	7.0
1761	1.060	476820	15.7
1811	1.090	305897	10.7
1895	1.139	483516	16.9
1931	1.161	243397	8.5
1983	1.193	428424	14.9
		2858165	100.0

2. *Euchrysops dolorosa* (Trimen)

Retention Time	Relative Retention Time	Area	%
1171	0.704	27188	1.1
1351	0.812	52285	2.0
1429	0.857	41168	1.6
1511	0.908	169097	6.6
1601	0.963	264437	10.2
1667	1.000	211076	8.2
1703	1.025	116988	4.5
1763	1.058	441348	17.1
1815	1.089	248371	9.6
1851	1.111	257437	10.0
1903	1.140	344446	13.3
1989	1.190	409643	15.8
		2583484	100.0

Appendix VII

CALCULATION OF THE PERCENTAGE OF PEAKS ON THE CHROMATOGRAMS OF THE LYCAENID LARVAE CORRESPONDING TO THOSE ON THE CHROMATOGRAMS OF THE THREE ANT SPECIES INVESTIGATED

Lycaenid species	Ant Species		
	<i>A. capensis</i>	<i>C. niveosetosus</i>	<i>C. maculatus</i>
<i>A. dentatis</i>	$\frac{100}{1} \times \frac{12}{13} = 92$	$\frac{100}{1} \times \frac{5}{13} = 38$	$\frac{100}{1} \times \frac{9}{13} = 69$
<i>L. ignota</i>	$\frac{100}{1} \times \frac{4}{8} = 50$	$\frac{100}{1} \times \frac{5}{8} = 63$	$\frac{100}{1} \times \frac{3}{8} = 38$
<i>E. dolorosa</i>	$\frac{100}{1} \times \frac{7}{12} = 53$	$\frac{100}{1} \times \frac{5}{12} = 42$	$\frac{100}{1} \times \frac{9}{12} = 75$

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