

a disruptive colour pattern and/or by the presence of laterally placed long white setae (*S. suavis*) or foliose papillae. In nearly all species the tubercles on the body are variable; particularly this is so in species with appressed larvae. Hudson's figure (1928) of *Selidosema leucelaea* portrays a larva type which has been rarely found in the four years that the Forest Biology Survey has collected this species from indigenous and exotic hosts.

Larvae of *Declana atronivea*, *D. egregia*, *D. leptomera*, *D. junctilinea* and *D. feredayi* have a lateral papilla anterior to the A₆ spiracle; in *D. feredayi* this appears to butt on to a scobinated mound on the posterior margin of A₅. The papilla is not evident in *D. griseata* (instars 3-5) or in any instars of *D. floccosa*, *D. hermione*, *D. niveata* or *D. glacialis*.

KEY TO SUBFAMILIES OF NEW ZEALAND GEOMETRIDAE

Larvae of the Geometrid subfamilies can be distinguished by the following key, which is a combination and interpretation of keys by McGuffin (1958b) and Singh (1953); subfamilies not occurring in New Zealand are in parentheses. Second to ultimate instars only are considered.

- 1. SV₃ present on A₁₋₅ (if absent, then hypoproct long, acute) 2
 SV₃ absent on A₁, often absent on A₁₋₅; hypoproct short, blunt or anal plate setae D₁, SD₁, in a transverse row (see couplet 5) 3
- 2. Hypoproct short; SV₂ present on A₁ N.Z. *Oenochromatinae*
 Hypoproct long; SV₂ absent on A₁ *Ennominae*
- 3. Abdominal prolegs on A₃₋₆; SV₂ present on A₁ (*Brephinae*)
 Abdominal prolegs on A₆ and A₁₀ only 4
- 4. SV₃ present on A₃₋₅, often on A₂₋₅ 5
 SV₃ absent on A₁₋₅ *Larentiinae*
 (a) SV₂ absent on A₁ *Asthenini*
 (b) SV₂ present on A₁ Other Larentiine groups
- 5. Anal plate with setae D₁, SD₁ approximately in a transverse row *Sterrhinae*
 (a) SV₂, SV₃ absent on A₁, SV₃ absent on A₂ Group A (Singh)
 (b) Only SV₂ absent on A₁, SV₁, SV₂, SV₃ present on A₂₋₅ Group B (Singh)
 Anal plate with seta D₁ on a line distinctly posterior to SD₁; SV₂ absent on A₁, present on A₂₋₅ (*Geometrinae*)

The subfamilies Oenochromatinae, Ennominae and Larentiinae are well represented in the New Zealand fauna. The Sterrhinae is represented by a single immigrant, *Leptomera rubraria* Dbldy., present also in Australia.

The larvae of the New Zealand Ennomines may be identified to their genera by the following key, which is a summary of the Sections I-VI above.

KEY TO THE NEW ZEALAND GENERA OF ENNOMINE LARVAE

- 1. First instar larvae with the proleg crotchets in an incompletely broken meseries; each meson of the body with a single broad dark subdorsal band. Second to ultimate instar larvae with setae V₁, SV₁ and L₃ in vertical alignment on A₃₋₅; A₆ proleg with two subprimary setae, no secondary setae 2
 First instar larvae with the proleg crotchets in a com-equal meseries; each meson of the body, or at least the prothorax, with two to four bands (dorsal, subdorsal, lateral, subventral). Second to ultimate instar larvae with setae V₁, SV₁ and L₃ not in vertical alignment on A₃₋₅; A₆ proleg with three subprimary setae and often several secondary setae 3