

# ECTOPARASITIC MITES (ACARI) ON ANDINO-PATAGONIAN NOCTUID MOTHS (LEPIDOPTERA: NOCTUIDAE)

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Treat (1975) reported over ninety species of mites (Arthropoda: Acari) found on more than 380 species of butterflies and moths. Most of these mites belong to the suborder Prostigmata, cohort Parasitengona, and superfamilies Trombidoidea and Erythraeoidea. The larval instar in these large cosmopolitan groups parasitize insects and arachnids, but the active postlarval instars prey on ground and aerial arthropods in many habitats (Krantz, 1978; Young and Welbourn, 1987).

Among the Trombidoidea, the family Trombidiidae has 573 described species in 81 genera worldwide. Larvae of some species parasitize few Lepidoptera families, like Pyralidae (Thompson and Simmonds, 1965), Noctuidae (Oudemans, 1912; Treat, 1975; Mishra and Malhotra, 1976; Welbourn, 1983), Nymphalidae (Treat, 1975), Satyridae (Treat, 1975; Welbourn, 1983), Lymantriidae (Treat, 1975; Thompson and Simmonds, 1965), Lycaenidae and Pieridae (Robaux, 1974), Zygaenidae (Robaux, 1974; Treat, 1975), Yponomeutidae (Thompson and Simmonds, 1965) and Hesperidae (Emmel and Nation, 1990).

Within the superfamily Erythraeoidea, the larvae of Erythraeidae are ectoparasitic on a wide variety of terrestrial arthropods, like insects, arachnids and collembolans (Oudemans, 1912;

Southcott, 1946, 1961; Greenslade and Southcott, 1980; Welbourn, 1983; Young and Welbourn, 1987; Welbourn and Jennings, 1991). Erythraeidae has about 250 named species; however there are many undescribed taxa worldwide (Welbourn, 1983).

Seven erythraeid genera have been reported worldwide from Lepidoptera. However, larvae of *Callidosoma* and *Leptus* appear to be the only important parasites of Lepidoptera, mainly Noctuidae (Welbourn, 1983). The host and prey list of Erythraeoidea given by Welbourn (op. cit.) suggests that the genus *Leptus* is a generalist.

Little information is available concerning the genus *Leptus* in Chile. There are currently two recognizable species of *Leptus* known only from their larval stage: *L. scheidunggi* (Oudemans, 1911) on Rhopalocera and *L. lomani* (Oudemans, 1912) on Opiliona. The present note is the first record of ectoparasitic larvae of the genus *Leptus* on andino-patagonian noctuid moths (Lepidoptera: Noctuidae).

Several larvae of *Leptus* sp.—probably a new species—were found associated with specimens of *Pseudoleucania onerosa* (Köhler) (Fig. 1), *Pseudoleucania ferruginescens* (Blanchard) (Noctuidae) (Fig. 2) (Noctuinae), and *Scriptania godoyi* Olivares, 1993 (Fig.

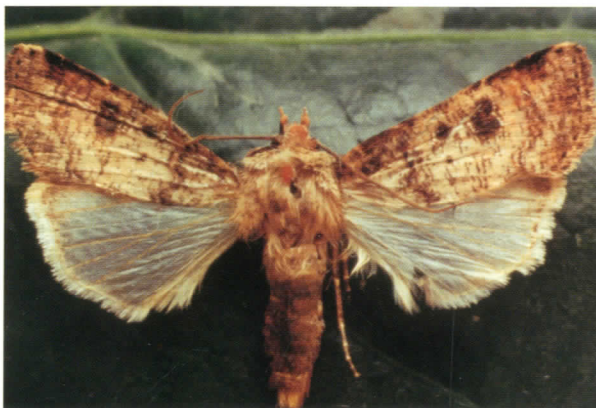


Fig. 1. *Pseudoleucania onerosa* (Köhler) (Noctuinae), left.

Fig. 2. *Pseudoleucania ferruginescens* (Blanchard) (Noctuinae).

Fig. 3. *Scriptania godoyi* Olivares (Hadeninae), right.

3) (Hadeninae), collected at the southern part of Chile (Puerto Montt-Aysen). As shown in the figures, the larvae were attached at different sites of the host, like dorsal body membranes, between head and thorax, thorax, wing veins and ventrally around the coxae area. Their apparently random selection of an attachment site on a host and their red or reddish color makes these erythraeid larvae the most obvious of all parasitengone parasites.

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