

TWO BRACONID PARASITES OF CLOTHES MOTHS.

In the course of a survey of the species of clothes moths occurring in New Zealand, two species of larval parasites were found. They were **Chremylus rubiginosus** (Nees.) and **Apanteles carpatus** Say. (Hymenoptera: Braconidae).

C. rubiginosus was bred in August, 1948, from larvae of the case-bearing clothes moth (**Tinaca pellionella** (L.)) collected from carpets in Auckland. The female parasites were 2 mm. long and the males were somewhat smaller. This parasite has been recorded from a variety of insect hosts (including **T. pellionella**) in Europe and U.S.A.

Apanteles carpatus was bred in November, 1948, from *Tinaea pellionella* larvae. Further specimens were obtained between November, 1948, and June, 1949, from an old coat from Te Awamutu which was heavily infested with the tapestry moth (*Trichophaga tapetzella* (L.)) together with a few brown house moths (*Hofmannophila pseudopretella* (Stainton)). As far as could be ascertained the parasites were associated only with *T. tapetzella* larvae. In the laboratory **A. carpatus** adults were observed to attack and oviposit in larvae of *T. tapetzella* but not eggs or pupae. Larvae of *T. pellionella* and the webbing clothes moth (*Tineola bisselliella* (Hum.)) were also attacked, though no **A. carpatus** were bred from field-collected larvae of the latter species. **Apanteles** adults were observed to oviposit through the larval cases of *T. pellionella* but in general they appeared to prefer to wait until the larvae emerged from their cases and then lay directly into their bodies. Adults of **A. carpatus** are considerably larger (female length 4 mm.) than those of **C. rubiginosus**.

A. carpatus has been recorded as a parasite of *Tinaea pellionella* in U.S.A. and Japan; as a parasite of *Tineola bisselliella* in Canada and Switzerland; and as a parasite of *Trichophaga tapetzella* in U.S.A.

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