

## RECORDS OF INTRODUCED COLEOPTERA AND NOTES ON THE 1953-54 COLLECTING SEASON

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In January, 1950, a foreign lucanid found in a house at Hexton was sent by F. Jackson, Instructor in agriculture at Gisborne to the Cawthron Institute for identification, when the writer placed it as **Rhyssonotus nebulosus**. A second specimen, obtained from H. R. Littleworth, Gisborne was forwarded by the Dept. of Agriculture in February 1951, with comment that it was either boring into or living in dead wood of dying ringbarked bluegum trees, for several beetles were found inside tunnels. These remarks would indicate that the species could be established in this country at Gisborne and confirmation of this was given when a third, living specimen was received in December 1953 from E. R. Smythe, Livestock Instructor, Gisborne, where it had been found in a car. The correct identity of this insect is **Rhyssonotus foveolatus** Thunb., with **nebulosus** a synonym. From the information available, it appears possible that the introduction occurred as a result of importation of Australian eucalypt timber; fortunately lucanids attack dead rather than living trees, so **R. foveolatus** is unlikely to become a species of economic importance.

A colourful Australian Cerambycid, *Aridaeus thoracicus* Don., was found running rapidly over flowers in New Plymouth in January, 1954, by Mrs. G. Julian; only one specimen was obtained. Two exotic beetles, though not obtained in the present season are worth recording. They are *Mycetaea hirta* (Marsh.) and *Cryptophagus pilosus* (Gyll.) both of which were taken in Nelson in September, 1942, breeding in a case of old apples which had remained forgotten for two seasons, so that they had become nearly dried out and mummified. Only a small number of adults of each species was taken, before the apples were destroyed. A survey of the foliage feeding habits of adults of Fuller's rose weevil *Pantomorus godmani* Croch which has been established in Nelson for 16 years was taken in April and includes as host plants roses, periwinkles, scotch thistle, wild broom, *Clematis vitalba* Linn., *Solanum nigrum* Linn., *Actinidia chinensis* Planch. and *Talauma candollei* Blume\*. Two native trees, whau and karaka were heavily attacked close to ground level and decreasingly up to nine feet.

During November, 1953, a visit was made to Lake Sylvester and adjacent upland areas, lying west of the Cobb Valley in the Nelson province where observations on some insects were made. On a small snowfield just below a ridge and lying to the north above the lake representatives of five insect orders were found immobilised on the surface, some still alive and others appearing to have been dead for some time, though still perfectly preserved. Due to a heavy storm approaching, with no shelter present for three miles, only half an hour was spent on the snowfield in which time the following specimens were secured: Perlaria—two *Nesoperla trivacuata* Till., one *Protonemoura latipennis* Till., three unidentified perlids in one species; Plectoptera—one *Coloburiscus humeralis* Walk., one *Atalophlebia dentata* Eat.; Hymenoptera—three small ichneumons in one species, one large species of *Apanteles*; Hemiptera—a number of alates of *Rhopalosiphum padi* (Linn.), a few alates of *Cavariella aegopodii* (Scop.); Diptera—three *Dicranomyia cubitalis* Edw; six *Dicranomyia* in one species, three specimens in two species of anthomyiids, one tachinid of the genus *Heteria*; Coleoptera—1 *Alloprocas muticus* Broun, 1 small staphylinid. It is noteworthy that no vigorous types of insects were trapped on the snowfield, although a number of grasshoppers and strong flying Diptera was in the vicinity. The greatest proportion of all types found was in the aphids, for large numbers were present; they may have been deposited by air currents from the Cobb Valley 2000' lower, or could have come from the inflorescence of *Aciphylla munroi* Hook. which grows sparsely in the Lake Sylvester region.

On a long ridge running east from Iron Hill, which is west of Lake Sylvester, a number of "vegetable sheep", *Raoulia eximia* Hook., occur on rocky elevations. On these plants the Townsend fly,



*Trypanea centralis* Mall. was ovipositing in the sun. Males were difficult to catch for they flew off at the least disturbance, but females, occupied with oviposition, would allow a pill box to be placed over them. Although the flower buds of *R. eximia* were not showing among the tightly packed tops of the plants, flowering occurs in January and February and as some New Zealand trypetids belonging to this group oviposit in composite seed heads, *R. eximia* is probably the host plant of *T. centralis*. A similar relationship exists with *Trypanea longipennis* Mall., which has been reared from seed heads of *Celmisia spectabilis* Hook. the "flannel plant", from river flats of the upper Wilberforce river in Canterbury, Mt. Arthur tableland, Lake Sylvester and Beeby's Knob. The most recent record is that of R. D. Dick, who reared it from the same host at 3000' on Mt. Torlesse range near Springfield, Canterbury, in February of this year. Infested flower heads containing large sized larvae, exhibit a characteristic tufted appearance, when the larvae, having consumed the seeds, move about to provide room for pupation. The writer has known *Tephritis cassiniae* Mall. to behave similarly in the flower heads of its host plant, *Cassinia leptophylla* R. Br., at Tahunanui, Nelson, since 1923. The minute biting midge, *Acanthoconops myersi* Tonn., has again been reported as occurring in large numbers at the eastern end of Rabbit Island, Nelson, where it has been known to me to occur, since 1925, through irregular visits since that date. Both R. J. Tillyard and A. L. Dumbleton obtained directions for finding them and the latter reported their presence in 1953.

On a ridge to the north of Lake Sylvester, in an area where the predominant vegetation consisted of *Carpha alpina* R. Br., larval workings of the melolonthid, *Chlorochiton discoidea* (Broun) Giv. were discovered, giving the appearance of surface pig rooting. In an aggregate infestation all the roots of this plant had been eaten, allowing dead plant tufts to rise above the surrounding level where they lay loosely on the surface (fig 1). When several larvae are working together the effect is to form a continuous tunnel, as much as three feet in length (fig 2), with divergence on both sides to a restricted degree by individual larvae, all of which remain otherwise isolated from one another; this tunnel is roughly the same depth as that from foliage level to ground level, 4-5 inches, and in it are found many adult elytra as well as the larval population. Infestations are sparse throughout the area examined. Adult flights occur in early January on the Mt. Peel ridge, across the Cobb Valley. Four thousand to four thousand five hundred feet appears to be the common altitudinal range of *C. discoidea*.

Another interesting discovery in this region at 4500 feet is one living specimen of the previously unknown male of the weta *Deinacrida tibiospina* Salm., described from a single female, taken by

G. V. Hudson at Mt. Arthur some years ago. When living, the male measured 32 mm. in length, which reduced to 30 mm. after stuffing and drying.

Thanks are due to Dr. W. Cottier for identifying two aphids and to MI' J. Johns, of the Forestry Dept. Wellington for the host habitat photographs of **Chlorochiton discoidea**.

\*=**Magnolia odoratissima** Reinw.

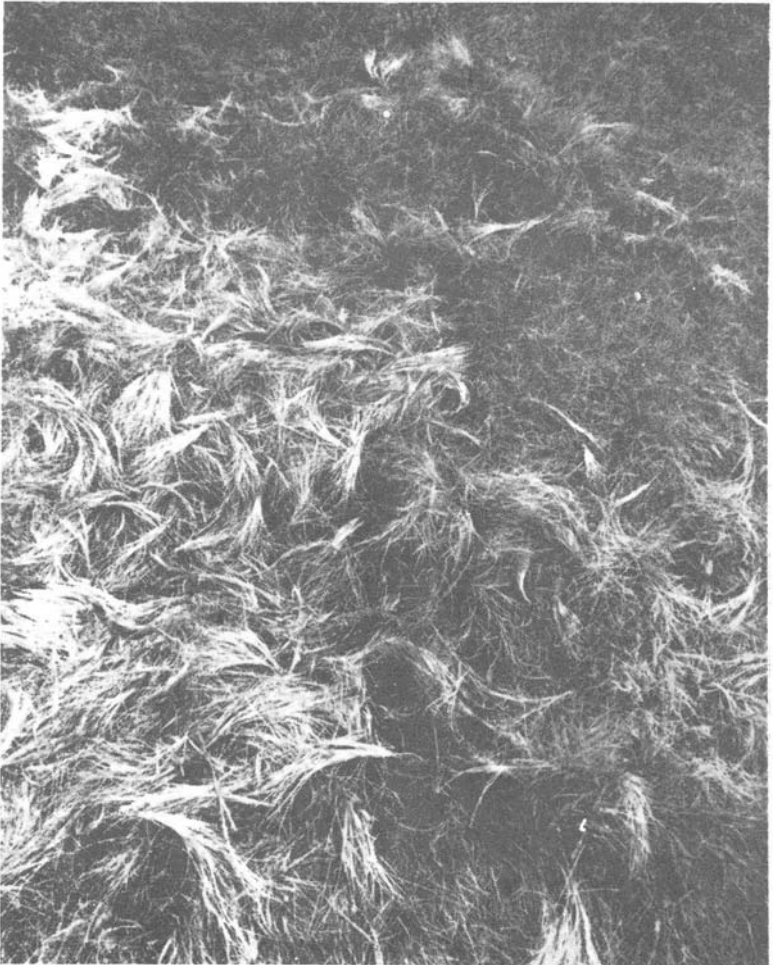
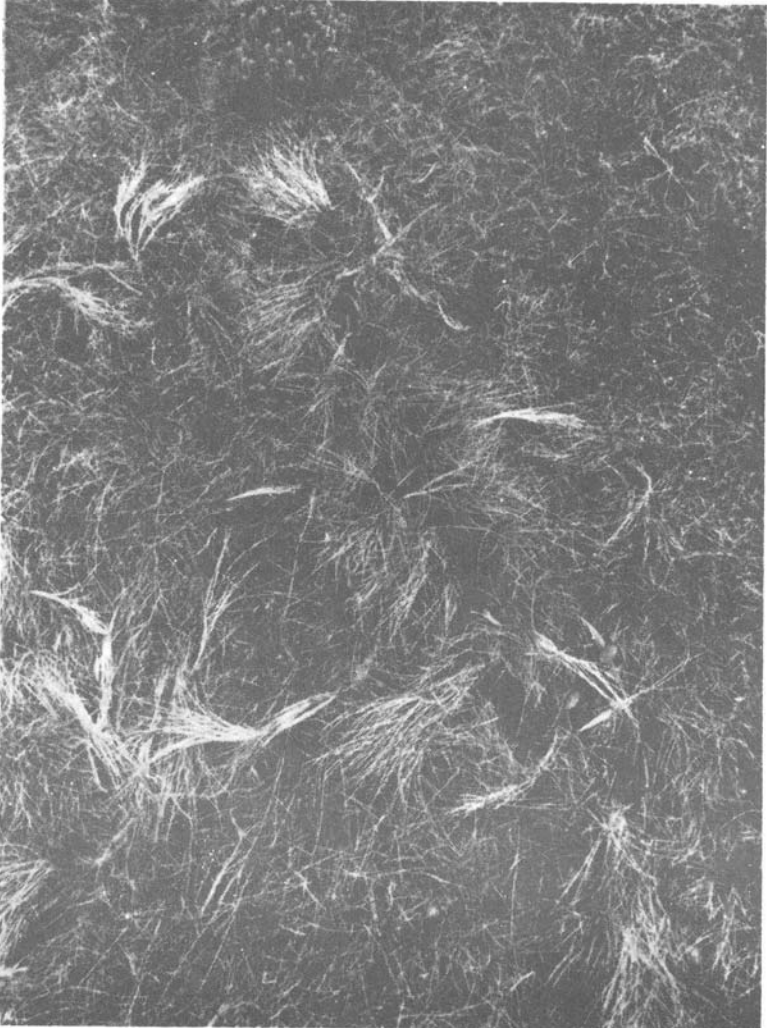


Photo by J. Johns

**Fig' 1: Aggregate infestation. PI-nt covering, almost exclusively Cornha alpha R.Ur.**



2: Tunnel feeding area, about 3 ft. long. Slope of 15-20°

Photo by J. Johns Fig