yellowish buff patch above and caudad of spiracle on first abdominal segment; spiracles yellowish buff outlined in black; venter, pale buff marked with dark brown, venter of fourth abdominal segment broadly banded with dark brown.

**Hypagyrtis piniata** Pack.—*P. menziesii, T. heterophylla, L. occidentalis, P. contorta, P. engelmanni, T. plicata, A. lasiocarpa* (3 records), *P. ponderosa* (3). Central to southern Interior; common. LARVA: 1⅛ inches; head, bright reddish-brown with transverse dark brown bands; body light reddish-brown, pale yellow or buff, diamond pattern on dorsum except on first thoracic and ninth abdominal segments; dark brown "V" markings on dorsum extending diagonally to the venter; spiracles, pale reddish-brown outlined with black, located centrally in the dark brown diagonal band; venter marked by irregular bands of dark brown.

**Eufidonia notataria** Wlk. — *P. contorta, A. lasiocarpa* (1 record), *Larix laricina* (Du Roi) K. Koch (1). Central Interior; rare. LARVA: 1 inch; head, green with grey dots forming a herringbone pattern on vertex and sides; body, yellowish-green, fine grey green dorsal, addorsal and subdorsal lines; white spiracular stripe; thin red subspiracular line; spiracles pale yellow outlined with red; venter pale green with yellowish-green mid ventral line.

**Eufidonia discospilata** Wlk. — *Salix* spp.; *Alnus* sp. (1 record). Central Interior and central coastal regions; rare. LARVA: similar to *E. notataria*.

## OCCURRENCE OF THE SMALL BLACK ROOT WEEVIL, *Trachyphloeus bifoveolatus* (BECK) (COLEOPTERA: CURCULIONIDAE), ON STRAWBERRY IN BRITISH COLUMBIA[1]

W. T. CRAM

In mid-June 1964, a large adult population of a European root weevil, *Trachyphloeus bifoveolatus* (Beck)[2], was discovered[3] near Abbotsford in the Fraser Valley, feeding voraciously on the foliage of a newly set, 24-acre planting of strawberry (var. Northwest). This soil received a preplanting treatment with insecticide at the recommended rate for the control of Brachyrhinus root weevils (Cram, 1962). The adults of *T. bifoveolatus* were found in groups of up to 50 on the surface of the dry, light soil, usually beneath leaves but sometimes fully exposed to the sun and drying wind. Some adults were feeding on the leaflets during the daytime which indicates that they can tolerate desiccating conditions. The foliage was so damaged that often only the mid-ribs of trifoliate leaves remained. Feeding notches were also noted in leaves of clovers, narrow leaf plantain and sheep sorrel or sour grass. Many adults were taken beneath these other plants. The evidence suggests that this introduced weevil has become established in old pastures and attacks strawberry when the pastures are broken up and planted. The field in question had been in oats for the two previous years and in pasture for many years before that. This occurrence is the first record of the species as a pest of strawberry in British Columbia.

Rosenstiel (1963) reported that in recent years this weevil, which he

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2 Determined by W. J. Brown, Entomology Research Institute, Ottawa.

3 Thanks to the vigilance of I. C. Carne, Horticulturist, British Columbia Department of Agriculture, Abbotsford, B.C.

calls the small black or grass weevil, has become increasingly abundant as a pest of strawberry and some nursery crops in the Willamette Valley and coastal counties of Oregon. In Canada, the species has been observed as numerous but not a pest in Nova Scotia, New Brunswick, Prince Edward Island and Ontario; a single specimen was taken in Fernie, British Columbia (Brown, 1940, 1950).

In the Fraser Valley, adults have been taken in abundance in recent years at windows in homes during the fall and spring. Their occurrence here is fortuitous, for like other root weevil adults they have the annoying habit of entering homes in late summer and fall.

The extent of damage to roots by the larvae is not known, but Rosenstiel (1963) considers that control is necessary and recommends a spray of Guthion in July. At Abbotsford, a satisfactory kill of adults was obtained using malathion with DDT applied in mid-June at field rates. In preliminary laboratory tests adults were readily killed with field rates of Guthion and malathion but not with diazinon or DDT.

The adults are not easy to find. They are only 3 mm long and usually are so coated with soil as to be virtually indistinguishable from small soil particles.

### References

Brown, W. J. 1940. Notes on the American distribution of some species of Coleoptera common to the European and North American continents. Canad. Ent. 72:65-78.

Brown, W. J. 1950. The extralimital distribution of some species of Coleoptera. Canad. Ent. 82:197-205.

Cram, W. T. 1962. Control of root weevils in strawberries. Can. Dept. Agric. Pub. 1110.

Rosenstiel, R. G. 1963. Root weevils and their control in strawberry fields. Oregon State Univ. Ext. Cir. 717.

## THE CIGARETTE BEETLE IN VANCOUVER (Coleoptera: Anobiidae)

G. J. SPENCER[1]

In 1961, the dried, partly cleaned skeleton of a small monkey was sent from Malaya in a heavy plastic bag, to the university department of Zoology. More than six months later small beetles emerged from the hard, dried flesh on the bones. From the carcass I obtained a good series of *Lasioderma serricorne* (Fabr.) (Anobiidae) the cigarette beetle. This was the first time I had recorded the insect in the province.

In October, 1962 I received an enquiry and soon after some specimens of cigarette beetles from a medical doctor in New Westminster who reported "insects in numbers all over the house." The breeding place was in a 2 lb. bag of bran from which the infestation had spread to a contiguous bag of corn meal. Both materials had come from the food section of a large department store to whose manager I reported the seriousness of the situation; the man was furious, taking it to be a slight upon his department. I reported it to the owner of the store who appreciated the matter and apparently took steps to remedy it because there have been no further complaints.

The beetles are slightly larger and about one-and-a-half times as broad as the drug store beetle with the same cowl-shaped prothorax which nearly conceals the hypognathous head. The elytra are smooth and not grooved lengthwise as are those of the drug store beetle. When disturb-

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