

Concerning the foregoing insects the following notes will be of interest :—

*Byturus unicolor* Say.—This is a small Dermentid beetle which feeds as a rule on the young leaves and buds of raspberry and blackberry. The larvæ feed on the mature fruit and sometimes cause a considerable amount of damage.

*Oberea bimaculata* Oliv.—The raspberry-cane borer, a slender, black Cerambycid beetle. The larval stage is spent burrowing in the raspberry-canes. It also has a fondness for roses to a limited extent, and each year is recorded as being very much in evidence.

*Phorbia rubivora* Coq.—The raspberry-cane maggot, a small greyish-black fly the larvæ of which tunnel in the raspberry-canes.

*Synchlora aerata* Fab.—The raspberry spanworm. The larvæ of this sometimes injure the fruit of raspberry and blackberry, but not to any great extent or to the extent of rendering the seed sterile.

*Monophadnus rubi* Harris.—The raspberry sawfly, whose larvæ work havoc on the foliage of raspberries and blackberries.

*Pamphilius fletcheri* Macq.—The raspberry web-worm, an insect which causes considerable destruction by webbing the terminal leaves together.

*Prionus laticollis* Drury.—The giant root-borer, one of the large long-horned beetles the larvæ of which bore into the roots of blackberry, grape, apple, and cherry. It may cause a considerable amount of damage, but favours too many hosts of economic importance to warrant a trial in this country.

*Bembecia marginata* Harris.—The blackberry-crown borer. The larvæ of this moth attack blackberries, timpleberries, and loganberries by boring into the roots and girdling them. In some places it becomes a very serious pest, and there seems every likelihood of it turning out a very useful parasite. Regarding this insect Dr. Tillyard says, "It can be controlled in raspberry by carefully cutting out the infested canes. Does not attack roses or any other plants. A vigorous insect of great potential value."

*Ecanthus niveus* DeG.—The snowy tree-cricket. Damage by this insect is done through the egg-punctures, but it is not of any great importance.

*Agrilus ruficollis* Fabr.—The red-necked agrilus. The larvæ of this attack blackberry, raspberry, and dewberry canes, causing gall-like swellings and at times doing a considerable amount of damage by killing the stems.

Concerning the insects listed from America attacking blackberry and raspberry, a very large range of orders is represented—*e.g.*, Coleoptera (beetles), Hymenoptera (ants and bees), Lepidoptera (butterflies and moths), Diptera (flies, mosquitoes, &c.), Hemiptera (cicada, aphids, lice), and Orthoptera (dragonflies, mayflies, earwigs). The most likely to do damage are *Agrilus ruficollis* and *Bembecia marginata* (both mentioned elsewhere). In the United States damage by these is not so very extensive on account of the vigorous control exercised against them, so it is impossible to say what damage they might cause if introduced into New Zealand where these control measures are absent. It is more than likely, however, that they would find blackberry a very palatable host.