

gave trouble all through the summer, although vigorously assailed by a small Lady-bird beetle, *Scymnus punctatus*, Melsh.

The young shoots were attacked by the larvæ of an Anthomyian fly. The eggs of which were evidently laid in the axil of a leaf, and when hatched the maggot ate its way down inside the stem, leaving a thin discoloured track for six or eight inches. When mature it turned into a brown puparium and passed the winter inside the stem (this was in the breeding jars). The mature insect which is a small black and extremely active fly about half as big as a house-fly has not yet been identified. The presence of this enemy is first shown by the tip of the young shoot fading and hanging over, much in the same way as when attacked by the Raspberry-cane borer (*Oberea bimaculata*, Oliv.) except that when stems are injured by this latter, the two rings made by the female, and between which she deposits her egg, are plainly visible. The only practicable remedy for both of these is at once to cut off the stem below the seat of injury.

The Pale Brown Byturnus (*Byturus unicolor*, Say.)

*Attack.*—An active greyish brown beetle about one-sixth of an inch in length, which eats into the buds and destroys the flowers.

Early this spring these little beetles appeared in numbers and assailed the Raspberry bushes, doing a great deal of harm.

*Remedy.*—The only remedy tried was hand-picking. It is nocturnal in its habits, and in the morning each flower seemed to have its occupant. In my garden at Ottawa, all the first flowers were destroyed. The beetle seemed to be particularly attracted to a seedling bush of the White-flowered Scented-raspberry, *Rubus Nutkanus*, Mocino, flowering for the first time last year. Not a single flower of the first blossoms was perfect. As this bush was separated some distance from the rest, Pryethrum was dusted over the buds in the evening, and by this means perfect flowers were obtained. No fruit, however, was formed on this bush, but whether this was due to the insect powder keeping away bees and other insects, I am unable to say.

Red Raspberries at Ottawa were in some spots severely attacked by an aphid, by which all the young flowering shoots were thickly covered. Observing that many of the aphides showed signs of being parasitised I collected some shoots and had the pleasure of breeding many specimens of the minute Proctotrupid *Lygocerus stigmatus*, Say, and two examples of a tiny midge, *Diplosis aphidimyza*.

These parasites were kindly identified for me by Mr. W. H. Ashmead. He says: "The *Diplosis* is a common parasite on aphides in the old country, but not before known in this country, Osten Sacken not recording it in his recent catalogue. I have reared another species here from an aphid on hickory, *Schizoneurus caryæcola*, Ashm, and I find a record of Prof. Comstock having reared a species from a coccid in California."



Fig. 21.

#### CURRENTS.

Currants of all kinds were little troubled by insects. The value of Hellebore for the Imported Currant worm (*Nematus ventricosus*, Hartig.) is now universally known. Nevertheless there is frequently considerable loss from carelessness on the part of the growers who wait until the injury is done before they procure the Hellebore. An effort was made last season with good results to prevent this loss, by writing letters to the press in the middle of May warning fruit growers to be on the alert.

My attention has been drawn by Rev. C. J. Young, of Renfrew, to the fact that an erroneous idea prevailed with regard to Hellebore. He writes: "Some people here have an idea that 'Hellebore' has a deleterious effect on the bushes and prevents them from bearing, so are shy in using it; as a consequence the currant and goose berry worms are worse than ever this year and have stripped many a bush of its leaves already."

White currants were again attacked at Ottawa by the Currant Weevil (*Antho-*