

hatches into a small white grub that spends a year in the limb, appearing the next year as a beetle. The wood is cut very smoothly and one would hardly suspect this shy, modest colored beetle of being the author of the mischief.

The limbs that have fallen should be burned, thus destroying the eggs and "sawycrs."

THE FLEA BEETLE (*Graptodera* [*Haltica*] *chalybea*).

This has been quite prominent as a pest in vineyards, destroying vines, especially the European and Northern varieties. They are brilliant metallic blue, green or purplish, oblong oval beetles, about one-fifth of an inch in length. They hop like fleas, but drop to the ground and act as if dead when disturbed.

These beetles, both as larvæ and as perfect insects, are injurious, eating the leaves of the plum, grape and peach. The eggs are deposited in groups of five or six on the under side of the leaves, and in March hatch out into smooth brown worms, with dark heads and black legs.

These feed on the upper side of the leaves, soon reducing them to mere skeletons. In five weeks they descend into the earth, to become perfect beetles in another month. I am not certain but in this climate there are two broods a year. For this species, and others of the same family, that often destroy seed-beds of beets, cabbage, rutabaga and collards, as well as tobacco, melons, radishes, mustard and cucumbers, I would recommend Pyrethrum powder, kerosened lime or sulphureted lime sprinkled over the plants. For grapes, spray with weak emulsion of kerosene.

THE STRAWBERRY BEETLE (*Haltica ignita*).

This flea beetle has been the source of much trouble to strawberry growers, and has been sent me from various sections of the State. It is a trifle larger than the grape flea beetle, and of a bronzy yellowish-green color. Its habits are similar to the *Chalybea*, and the same treatment for extermination recommended.

THE PROCRIS WORM (*Procris* [*Harrisonia acoloithus*] *Americana*).

This tiny worm, naturally, lives on the wild grape, or the Virginia creeper, but seems to prefer cultivated grapes, especially if exotic or choice!

The moths are small, expanding barely an inch, bluish black with a yellowish spot back of the head and a forked tail.

In April and May they can be found warm evenings hovering over grape vines, and a few days later, troops of small transversely striped, yellow and black worms appear, side by side, marching backward, feeding on the under side of the leaf. At first they barely eat the surface, but at last the entire leaf is skeletonized.

The worms are yellow, but tufts of black hairs on each ring gives them the appearance of being striped. When grown, they hide under