

GARDEN AND ORCHARD.

INSECTS INJURIOUS TO SMALL FRUITS
(Continued).

A Raspberry Cane Borer (*Oberia Tripuncta*) is described as a "cylindrical beetle about five-eighths of an inch in length, of a dark colour, and with a pale yellowish thorax, with three spots on the thorax, and with long horns."

Its operations are thus noticed:—

"When attacking the raspberry it selects the tip of the growing cane, and biting with its jaws, makes a series of punctures around the young growth, giving it the appearance of having a ring around it. Then beginning above, it makes a second ring about an inch from the first, and between these two rings it deposits an egg in the substance of the cane. The result is that the tip of the cane withers in a few days. The object in thus biting the cane is supposed to be to lessen the flow of sap towards the parts, as the sap might possibly injure the egg embedded in the substance of the cane. The egg hatches, and the larva as soon as hatched proceeds to eat down into the centre of the cane, and spends its larval period in consuming the interior, completing its transformation within the cane—changing to a chrysalis—and finally the next spring eating its way out of the cane, a perfect beetle."

The pest may be prevented from increasing, by promptly breaking off the cane down to the second ring made by the insect.

The Tree Cricket is another enemy of the raspberry, as well as of the grape vine, in connection with which it is noticed.

A green Saw-fly, too, is troublesome (*Selandria rubi*). Of this insect Mr. Saunders says:—

"There is a green saw-fly, *Selandria rubi*, which attacks the raspberry, and is a very troublesome insect. When full grown it is about three-quarters of an inch long, and is covered with small hair-like spines, arising from small green tubercles. It is the progeny of a small, black, transparent-winged fly, somewhat similar to the gooseberry saw-fly, but smaller. It has a strange saw-like apparatus at the posterior end of its body, by means of which it saws little slits into the substance of the leaf of the raspberry, and places its egg under the surface. There it swells, and finally produces a small larva, which makes its exit to the outer surface of the leaf, and feeds on the substance avoiding the veins or ribs of the leaf and thus skeletonizes it. It is so near the colour of the raspberry leaf that it is very difficult of detection, and it requires a practised eye to find it, but you can see the effect of its work very speedily, and it is easily killed by the application of hellebore."

Another insect, a small geometer (*Aplodes rubivora*), represented in its perfect state by a pretty green moth, also attacks the raspberry, but not very severely. (See Fig. 65.)

The Strawberry's enemies are few in number, and are briefly described by Mr. Saunders as follows:—

"There are few insects that affect the strawberry. One of these is the Crown Borer (*Anarsia lineatella*). It is the larva of a small moth which deposits its egg on the crown of the strawberry. This, when hatched, produces a larva which eats its way in various directions through the crown of the plant, and in a short time so injures it that it is almost useless. In past seasons, Mr. Luke Bishop, near St. Thomas, and Mr. Chas. Arnold, of Paris, have both suffered from it very seriously. It is an insect worth noting, because it may become very widely disseminated, and if it established itself in any of the large strawberry centres, it would become a very serious evil. Lime strewn among the strawberry vines has been suggested as a remedy, but I very much doubt whether we can find any remedy which will be effectual other than digging up the affected vines and burning them."

"The larva of our common May beetle is very destructive. (See Fig. 66.) It feeds on the roots of plants and grasses, and seems to be very partial to the strawberry roots. A few of these insects will work great destruction in a few days; the plants wither, and you see no reason for it until you dig in the ground and find this grub at work. It frequently attacks other plants as well as the strawberry, and sometimes eats the tubers of the potato. It will eat almost anything in the way of a root or tuber, whether small or large, and one specimen is capable of devouring a great deal of food in a year. In its perfect state it is a leaf-eating beetle, and congregates on the leaves of the cherry and other trees, but during the day-time it is torpid, and if the trees are then well shaken the beetles fall to the ground, when they can be collected and destroyed. We have never had them so excessively abundant as to be obliged to resort to any means of this sort. There are two or three small lepidopterous insects, leaf

GREEN (RASPBERRY MOTH).—*Aplodes rubivora*.

Fig. 65.

In Fig. 65 we have the curious larva of this insect shown feeding on the fruit; *b* represents the side of one of the rings or segments of the caterpillar's body much magnified; *c* the moth of a natural size, and *d* one pair of the wings magnified.

COMMON MAY BEETLE.

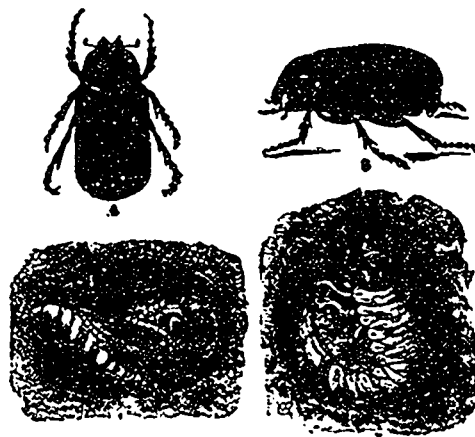


Fig. 66.

In Fig. 66, *a* represents the larva, *b* the chrysalis, and *c* and *d* the mature insect.

rollers, which attack the strawberry. One is very common—the *Anchylopera fragaria*. It is a beautiful little insect, but sometimes quite destructive. It gathers together the leaves and, folding them, feeds on their substance. It can easily be kept in check with the use of a little hellebore and water.

"There is a saw-fly also, called the strawberry false worm—*Emphytus maculatus*—which destroys the leaves during the month of June. The larva approaches maturity about that time and eats holes in the leaves. This insect can also be controlled by the use of hellebore. There is a strawberry bug—*Corimelana*—a small black insect that looks very much like a beetle, with a shining surface. I have had no personal experience with it, and I merely mention it as one of the insects which occasionally injure the strawberry. On the whole, I consider the strawberry less troubled with insect enemies than any other fruit we cultivate."—Report of the Ontario Agricultural Commission.

To be preserved in health is as great a mercy as to be raised up from sickness; yet men are seldom thankful for it.

CHOICE VARIETIES OF APPLES.

A well-informed correspondent gives our esteemed contemporary, *Farm and Field*, a few useful hints as to the choice of apple trees. Many of his statements appear to be so much to the point that we reproduce a portion of his letter for the benefit of our readers:

"The first really good dessert apple is the Early Harvest, being in its prime about two weeks after the Astrachan begins to be fit for cooking. The Astrachan, of course, cannot be dispensed with, although too sour for table fruit. It makes a large sized and beautiful tree, and in practice is an annual bearer, as about two trees in every five will bear the odd year. Before the Astrachan is gone the Chenango Strawberry begins to ripen, and as a dessert apple, when gathered at the proper time, is without a peer. The tree is a handsome grower, of medium size, and presents a beautiful winter appearance from the bright, golden colour of its twigs. The fruit is conical in shape, of good size, and in colour is a beautiful rose, striped with yellow. Its only fault is an inclination to sometimes rot upon the tree. Following the Chenango Strawberry are three apples which overlap each other in time of ripening, but are different in appearance and flavour. These are the Porter, a conical yellow apple with a pretty red cheek, and, when well grown, of full medium size; the Dyer, or Pomme Royal, an apple somewhat similar to the Early Harvest in appearance, but larger and more productive; and the Ohio Nonpareil, a deep red, slightly striped apple of large size and excellent flavour. These three are all sub-acid and of very fine quality.

The Dyer proved very productive this season; this, with the Astrachan, withstanding whatever destroyed the fruit of nearly all summer, and fall apples. The Ohio Nonpareil is a very strong grower, especially adapted to gravelly soils. For a cooking apple, after the Astrachan is gone, and lasting for two months, or until the Twenty Ounce and King are fit for use, I know of nothing so good as the Star. This is a very large green apple, somewhat similar to a very large Rhode Island Greening in appearance and flavour, and abundant annual bearer. For sweet apples first and best (for early), always, is the Sweet Bough. After this I would plant the Jersey Sweeting, a conical, striped, dark red apple, of more than medium size, and the finest sweet dessert apple that I know of. After this, which only lasts until October 1st, comes the Bailey Sweet, a yellowish red, somewhat rusty, good-sized apple, which is rather too dry for a good dessert apple, but is the best of the season—October and November. Soon after this is gone the Paradise Winter Sweet begins to be fit to use, and continues into February. This is a beautiful apple of pretty fair quality, and a rapid grower. For a late keeper the Tallman Sweet is the best.

"The following would be my list for strictly first-class dessert apples: Early Harvest, Chenango Strawberry, Porter, Dyer, Ohio Nonpareil, Belmont, and Canada Red. For sweet: Sweet Bough, Jersey Sweeting, Bailey's Sweet, Paradise Winter, and Tallman. For cooking: Astrachan, Star, Twenty Ounce, King, and Rhode Island Greening. These lists brings the time to March 1st, when the Roxbury and American Golden Russets come into season and continue until strawberries ripen."

The writer, who dates his letter from Summit county, Ohio, very properly adds (and readers of the RURAL CANADIAN should note the advice in the last sentence):

"These lists are the result of my own experience and observation, and might not fit a locality one hundred and fifty miles distant. The very best guide for any one in planting a new orchard is to plant those varieties that are doing well and are popular in the vicinity. Varieties that are unknown or untried should be touched lightly at first."