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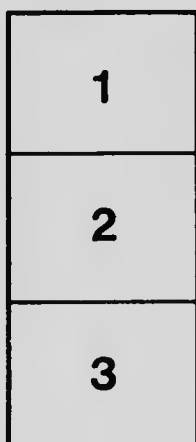
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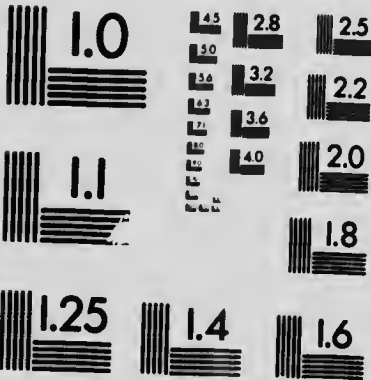
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PROVINCE OF BRITISH COLUMBIA.

DEPARTMENT OF AGRICULTURE
(HORTICULTURAL BRANCH).

THE PEACH-TWIG BORER

(*Anarsia lineatella* Zell.).

THE jaunty little moth, seen below, represents the adult of the insect known to peach-growers as the peach-worm. It should be more correctly termed the peach-twig borer, on account of the early spring habits of its caterpillars, which bore into the growing twigs of peach-trees. It is an insect which is known to occur very commonly on the Pacific Coast, west of the Rockies, being found in California, Oregon, Colorado, and Washington States, as well as in the Province of British Columbia. It attacks the peach, apricot, nectarine, prune, and plum in this Province, causing an annual and serious loss, especially to the fruits of the two first-named trees.

The first adults appear about June and July, depending on the season. They are small, delicate, rapid-flying moths, grey in general colour, with narrow fringed wings. To the orchardist, however, the characteristic poise of its body as it rests on a fruit or on a twig is sufficient to prove its identity.



The adult moth in typical attitude. (After Marlatt.)

The adult moths then lay eggs, placing them, for the most part, rather insecurely on the tender small twigs of the new year's growth, possibly also on the fruit itself. In a few days these eggs hatch and the young worm appears. These caterpillars proceed at once to search for a fruit and burrow into it. They feed and grow in the fruit until

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finally, having attained their full size, which is approximately $\frac{1}{2}$ inch long, they form their chrysalides. The chrysalis or pupa may be found in a variety of places, but frequently in the fruit upon which the larva had been feeding. Moths then appear again and the cycle commences anew. On the approach of autumn the young larva, $\frac{1}{25}$

inch in length, forms a chamber in which to hibernate. These chambers are merely slight excavations of the bark in the axils of the new wood.

On the first touch of warm weather in the spring, the larvæ become active and proceed to tear away the silken linings of their winter quarters. They are usually engaged in this procedure at the time the buds of the peach-trees are commencing to swell, and they issue from their winter chambers at this stage of the development of the tree until the blossoming period. The small larvæ immediately crawl to the new twigs and burrow into them.



Eggs of peach-twig borer in position.
(Adapted from Clarke, No. 144, California.)

Control Measures.

Lime-sulphur solution has proven itself satisfactory as a remedial agent. The most suitable time for spraying would be an application as close to the blossoming period, but previous to it, as possible. The object is to allow a certain quantity of the caustic solution to penetrate the larval burrows and thus reach the small delicate worms, either in their winter burrows or as they commence to migrate to the buds. Special attention must be given to the twigs, to which the spray must be essentially directed.

Arsenate of lead at the rate of 3 lb. to the 40 gallons may be used also after blossoming. Lime-sulphur and arsenate of lead may be combined together, with a reduction in the arsenate of lead from 3 lb. to 2 lb. to the 40 gallons of the solution. In short, the control for

this insect resolves itself down to a strong lime-sulphur spray in the period previous to blossoming. If no application is made at this time, arsenate of lead should be added to after blossom sprays.



Larval burrow between two peaches in late summer. (Author's illustration.)

Infested fallen fruit or culls rejected by the grower, cannery, or fruit-packing establishment should be properly disposed of by burning or burying.



Terminal twig of peach-tree killed by larva of peach-twig borer. (Photo by Lewis, Georgia, No. 17.)

Victoria, B.C., issued March, 1918.

This circular has been prepared by R. C. Treherne, Field Officer for British Columbia, Entomological Branch, Dominion Department of Agriculture, at the request of the Horticultural Branch.

Copies of this circular may be obtained free of charge on application to the Horticultural Branch, Department of Agriculture, Victoria, B.C., or from local branch offices of the Department.

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