PROCEEDINGS, 1913.

Two species of this group are injurious to fruit-trees. The peach-tree barkbeetle (*Phlæotribus liminaris*) and the fruit-tree bark-beetle (*Eccoptogaster rugulosus*) are important pests in southern Ontario. The former breeds also in wild cherry in Quebec Province; but *E. rugulosus* does not apparently occur elsewhere in Canada.

The clover bark-beetle (Hylastinus obscurus, Marsh) cuts tunnels similar to those of true bark-beetles in roots of red mammoth alsike and crimson clovers, and is injurious in parts of Quebec and Ontario.

The deciduous trees of Canadian forests are less subject to injury by members of this family. Several destructive species found in the northern half of the United States have apparently not yet ventured to cross the boundary. We have many species, but, in the experience of the writer, few attack green bark.

Ambrosia-beetles, although belonging to the same family, have quite different habits. The adults bore round tunnels through the bark and into the wood. These tunnels are invariably stained dark brown or black by fungi which grow upon the walls. The eggs are deposited free in the tunnels (*Anisandrus* and *Xyleborus*) or in niches similar to those of the bark-beetles, cut along the tunnel-sides (*Gnathotrichus*, *Trypodendron*, *Pterocyclon*). The larvæ of these species enlarge the niches to elongate cavities, larval cradles, slightly more than their own length. Each species has invariably associated with it, growing in a dense layer upon the walls of the tunnel and larval cradles, a particular species of fungus. Several species of these ambrosiafungi have been carefully studied by the writer. Under the proper conditions the conidia germinate readily and pass through the conidial cycle in about sixty hours.

Both beetles and larvæ feed upon the fungus. The larvæ of *Anisandrus* and most species of *Xyleborus* feed upon the fungus exclusively; and with the larvæ of all ambrosia-beetles, of this country at least, the fungus is a necessary diet. All our coniferous trees are subject to attack by species of *Trypodendron* and *Gnathotrichus*. Poplar, oak, birch, beech, maple, and alder are attacked by species of *Trypodendron*, *Anisandrus*, *Xyleborus*, and *Pterocyclon*.

The ambrosia-beetles do not, as a rule, attack sound trees in Canadian forests. They enter dying trees, or their parts, and recently felled logs and stumps, in which chemical changes have apparently rendered the sap more suitable to the growth of their fungi. With us their injury is only noticed in felled timber left out of water or in fire-injured stuff.

## RESOLUTION RE QUARANTINE MEASURE.

"Whereas this Association at the annual meeting in Victoria last January did pass *unanimously* a resolution introduced by the Inspector of Fruit Pests, requesting the Dominion Government to enact such legislation as would prevent the importation of fruit and other vegetables from countries and Provinces infected with insect pests, bacterial and fungous diseases, not widely prevalent in this Province:

"And whereas the Dominion Government has admitted that the legislation requested may properly be enacted by the Provincial Legislature, and has graciously signified its desire that a Quarantine Act, with such provisoes as may be necessary to meet the peculiar conditions of this Province and the wishes of the people, as voiced by the Boards of Trade, Fruit-growers' Associations, Farmers' Institutes, this Association, and other public bodies throughout the Province, may be speedily enacted:

"Be it therefore *Resolved*, That this Entomological Society, in convention assembled at Vernon, B.C., in the month of July, 1913, hereby reaffirms its opinion that the legislation requested is necessary and expedient, and renews its appeal to the Provincial Government to bring down such legislation at the first meeting of the Provincial Legislature as will adequately protect the agricultural and horticultural ' industries of this Province from pests and diseases not widely prevalent in British Columbia."

Moved by G. O. Day, seconded by Lionel E. Taylor.

