

Ontario Department of Agriculture.

ONTARIO AGRICULTURAL COLLEGE

Insects Affecting Vegetables.

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Before taking up in order the insects that attack the various plants grown in our vegetable gardens, attention may be drawn to a number of kinds that are general feeders, not limiting themselves to any particular varieties, but attacking almost everything that comes in their way; on that account they are the most serious foes that we have to contend against and in many cases the most difficult to keep under control.

APHIDS (Plant-lice)—Figs. 1 and 2—are minute pear-shaped, soft-bodied insects that may be found on almost every kind of plant, usually in dense colonies clustered thickly on the terminal twigs and buds, on the under-side of leaves, on stems and other parts, and even under ground on roots. Wherever situated they are occupied in the same manner—sucking out the life-juices of the plant and multiplying their own numbers by constant reproduction of living young all through the summer. There are a great variety of species, most of them varying shades of green in color, some are shining black, others bright red; some again are covered with waxy filaments resembling threads of cotton wool, and others with a dusting of a mealy substance composed of the same material. Singly they are insignificant creatures, but occurring as they do in enormous numbers and multiplying with amazing rapidity, they are able to seriously injure and often to destroy the vegetation that they attack. Fortunately they are devoured by many predaceous insects, such as lady-bird beetles and their larvae and those of lace-winged and syrphus flies and other creatures (Figs. 3 to 8); washed off and drowned by heavy rains, and reduced in

NOTE.—The object of this Bulletin is to furnish the vegetable grower, whether on the farm or in the garden, with a convenient manual for the identification of the ordinary insect and fungus pests which injure his crops, and to describe the remedies which experience has proved to be the most effective in each case. As a general rule it will be found that thorough tillage of the soil, a short rotation of crops, ample manuring and clean cultivation are the best of all remedies. All refuse remaining on the ground after the crop has been removed, such as stalks, roots and leaves, should be got rid of by burning or burying in order to leave no shelter for wintering insects and no diseased material for the spread of fungus diseases. Weeds of all descriptions, especially in fence corners and waste places, should be cut down before going to seed, or plowed under from time to time; they harbor many of our worst pests in summer and winter, and often afford convenient breeding places for enemies which the vegetable grower is endeavoring to combat on his cultivated plants.