

THE BLACK APHIS OF THE PEACH.



Ll. growers of the peach, both nurserymen and orchardists, have reason to be on the lookout for this new pest. It is very common in the peach sections of New Jersey, Maryland, Delaware and Virginia, and is said to come next to the yellows in destructiveness, having ruined in one nursery some 100,000 young trees in about three weeks. It has been introduced into Niagara County, State of New York, on trees imported from Delaware. This aphid feeds on the roots and swelling buds and young twigs and leaves. Often it does not appear in any considerable number on the tree, but works on the roots, stunting the trees, and causing the leaves to turn a sickly, yellowish-green color.

Also it has two forms: one without wings, which is the more common form, the other with four wings. The one without wings is nearly one-tenth of an inch long; color, a dark shining brownish-black, parts of the legs yellowish. The winged form is more slender and a little longer: the antennæ are longer, and the wings transparent. All of these that have as yet been found are females, neither males nor eggs discovered. These females of both forms give birth to other females, which in turn give birth to more females, and thus keep up a succession of female breeders. Doubtless there is a period in their life history when males appear, but how many generations of female breeders intervene is not yet known. It is only the winged form that works on the roots, there they multiply and are to be found at all seasons, but some of them come out when the buds begin to swell, and by means of their wings fly to other trees and to neighboring orchards.

This pest in both forms feeds by suction, being provided with a beak and fine bristles or *sclæ* with which it penetrates the tissues and sucks up the sap. Therefore they cannot be killed by spraying with poisons that must be taken into the alimentary system. Spraying with kerosene emulsion, diluted with ten parts of rain water, or a strong decoction of tobacco, say five pounds of stems steeped in three gallons of water for three hours, diluted to seven gallons, will kill those on the branches. Spraying should be done early in the season, for the aphid begins its work as soon as the buds swell. But this will not destroy those on the roots. No experiments have come to the writer's knowledge made for the purpose of killing those on the roots. It is suggested by Mr. Sling-

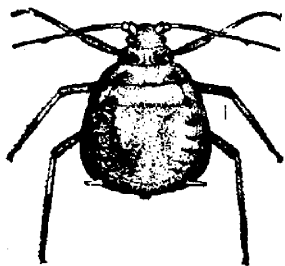


FIG. 569. - WINGLESS FEMALE
MAGNIFIED.