

## THE CURCULIO.

This insect is one of the most troublesome enemies with which the fruit-grower has to contend. It is sometimes known by the appellation of the gum moth, and ordinarily commences his attacks upon the plum tree early in the spring. Its appearance, however, depends in a great measure upon circumstances. Its eggs are deposited in the embryo fruit, and may be easily destroyed by a preparation formed of one bushel of wood ashes, one quart of soot, and half a pound of sulphur. The most favourable time for applying this is in the morning, when the foliage is wet with dew. The quantity applied should be sufficient completely to cover the leaves, limbs, and fruit. The application rarely, when properly made, fails to destroy the insects, though they are extremely shy in their habits, and are not easily got rid of by any other means.

In isolated positions and in places surrounded by salt marshes, the smooth-skinned fruits are usually prolific and seldom subject to disease. This exemption is frequently experienced in cities and towns on the sea-board, and it has been remarked that trees growing in the vicinity of salt water—especially if near it—are rarely, if ever, attacked by the gum moth. On the contrary, the plum, the nectarine, the apricot, &c., fruits which are invariably infested by it in interior localities, and in open and exposed situations, are rarely injured by it when so situated as to enjoy the sea breezes, or the spray of the ocean during storms.

As a general thing, the curculio, though it will attack most fruits, seems to have a peculiar *penchant* or preference for those which are smooth and thin-skinned. Few of these escape its ravages. The various descriptions of the cherry, though to a limited degree obnoxious to its depredations, if growing in exposed situations, frequently escape. This exemption has been attributed by promologists to the superior hardness of the skin of that fruit, but I am inclined to think it is indebted for its escape to other causes. The farmer and gardener who devote a part of their time to the cultivation of stone fruit, often tell us that their choicest selections fail, cast their fruit prematurely, and, indeed, seldom if ever fully remunerate them for the labour and expense involved in their cultivation. For this they are unable oftentimes to assign any adequate cause; and yet it is the result of the injuries inflicted by the curculio, and one of the surest indications of its presence. The small minute egg, which by means of a nidus prepared by a small puncture, is deposited in the soft palaceous substance of the incipient fruit, becomes in time a worm, which eats its way to the stone and causes the fruit to drop. Immediately upon this result, the worm forsakes its former *nidus*, prepared for it by its parent, and seeks a lodgment in the soil, and early the next spring, about the time the fruit becomes visible on the bough, it emerges from its terrene bed a winged insect, and endued with the same instincts, and prepared to pursue the same round of action as that pursued by its parent of the year before. Although furnished with wings, it is seldom seen to use them—ascending to the scene of its depredations generally by the bark of the trunk, and but rarely trusting itself to the air when it can exercise or find use for its legs. It is frequently the case that on examining the fruit of a tree infested by the curculio, every plum or cherry will be found to have a small puncture on its surface which indicates the position of an egg. The motions of this insect are surprisingly quick and agile, and it is only by the most exact and persevering attention, that one is able to discover them; they seem to have been endowed by nature with an instinct which teaches them to shun the human face and to secrete themselves at his approach. Dr. Gage remarks that he had a tree of the "Prince's Imperial Gage Plum," a variety, although the most productive of its class, that could never be made to produce a crop of fruit on account of the injuries produced by the curculio. He however adopted the following method, and finally succeeded in securing a crop of fruit. Early in the spring, or about the period of inflorescence, he deposited near the tree a hen-coop, containing an early brood of chickens. After the insects had emerged from the soil, and before they were able to ascend the tree, every one of them was taken up and destroyed by the brood.

The most effectual method of warding off the attacks of this troublesome insect, is by showering the mixture above named over the foliage, and permitting hens to run among the trees. If this course is adopted, and the soil about the trunks thoroughly and frequently irrigated with a solution of salt and water, valuable fruit may be raised in any and every section and without fear of the curculio.