

juices from the interior and, therefore, are not subject to control by poisons on the surface of the leaves, bark, or fruit. Instead some material must be applied directly to the insects and thus cause death by contact. Such materials are called contact insecticides.

A few insects of the peach are not readily controlled by either contact or poison materials, but require special means of control.

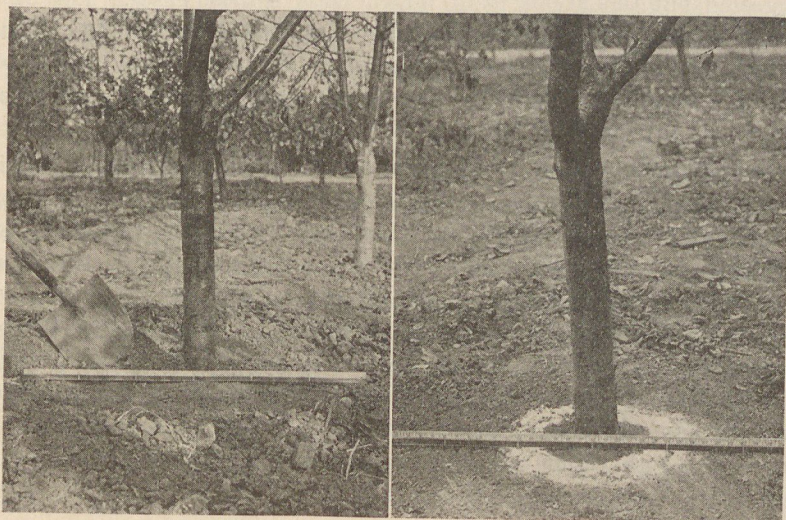


Fig. 11.—Using paradichlorobenzene for control of peach borer. Left, the ring method, first step: leveling the surface of the ground for a space of two or three feet in diameter about the tree. Right, second step: the paradichlorobenzene applied in a ring two or three inches wide, the inside about three inches from the bark of the tree. (From California Agr. Exp. Sta. Bul. 411.)

Pacific Peach Tree Borer, *Aegeria opalescens* Hy. Edw.—This insect is serious in certain counties and is distributed throughout coastal, central and southern parts of the state. The dark wasp-like moth lays its eggs in the early spring on the trunk of the tree a few inches above the ground. The larvae which hatch in fifteen to thirty days, burrow into the trunk and main roots, and may girdle the tree, thus killing it. Gum and frass indicate the presence of the borer. Control measures are simple since the discovery of the paradichlorobenzene treatment. This crystalline material is sprinkled in a circle around and near the base of the tree and covered with soil (fig. 11). The heavy vapor penetrates the soil and burrows, killing the insects. The material should be applied in the late summer and fall when the soil is warm and the moisture not excessive.

Flat-headed Apple Tree Borer, *Chrysobothris mali* Horn.—The beetles lay their eggs, especially in sunburned or injured areas or on