

fungus-cushions of a brownish colour on the affected areas. These cushions, or tufts, are composed of spore-producing threads (conidlophores) of the causal fungus, from which summer spores are produced in great numbers and scattered by the wind. As the fruit approaches maturity it becomes more susceptible, and decay during transportation is one of the most serious consequences of the presence of the disease. Fruit apparently sound and free from injury of any kind when packed, but with the spores adhering to the surface, may rot extensively in the course of two or three days. Rotted fruits gradually shrivel up, forming the so-called "mummies," and these form the source of infection in the succeeding spring. The hibernating fungus may behave in two ways, according to conditions. In the case of mummies left hanging on the tree the fungus produces spore-bearing cushions similar to those formed during the earlier stages of the rot. These spores may disseminate the disease exactly as in the preceding summer. Where the mummies have fallen to the ground and become lightly covered with earth, or kept moist amongst grass or



Fig. 8. Brown-rot in plums.

a cover-crop, the fungus may produce a totally different kind of spore-bearing structure. In this case a delicate fleshy cup of a brown colour, $\frac{1}{4}$ to $\frac{1}{2}$ inch in diameter, is pushed above ground on a slender stalk. The inner surface of this cup is lined with minute sacs, each of which when ripe contains eight spores. These spores are liberated about blossoming-time.

In addition to the fruit, the blossoms and twigs may be blighted, but in the latter case the infection has in all probability come about through the previous infection of the flower or fruit working back through the pedicels or flower-stalks.

Control.—Since the "mummies" form the means of carrying the fungus over the winter, it is essential that these be knocked off the tree, if they have not fallen naturally, collected and destroyed, unless they can be ploughed in deeply enough, in the spring to prevent them from becoming sources of infection. They would have