It is then spread out in a thin layer and shovelled over at intervals until as dry as required. It may be sown as soon as dry enough to run through the drill, about 20 per cent. more seed being allowed in this case on account of its swollen condition; or it may be completely dried and stored. In this case, however, there is more danger of reinfection, and injury to the germinating power is more likely to occur if kept for any length of time. Sacks, canvas, drill, and, in fact, everything that is to touch the treated grain should be similarly disinfected, otherwise there is danger of smut-spores being again mixed with the grain and the work being spoiled. If the grain is sown before completely dry there is less danger of this. One gallon of the liquid will treat approximately 1½ bushels of grain.

Another method is to immerse the grain, in sacks of coarse material not more than half-full, in the same strength of liquid, moving the sack up and down to ensure thorough wetting of the seed. After being allowed to drain for a few moments the contents may be piled and treated as above, or the grain may be left in the sacks the same length of time, then spread out and dried. Bluestone, which is often used against wheat-smut, should not be used for oats, as it is liable to injure the germinating power of the grain very seriously.

COVERED SMUT (*Ustilago levis*).

This differs chiefly in the chaff of the ear not being so extensively destroyed, the spores thus remaining enclosed for a longer period. There are also minute differences in the spores themselves. It is controlled, however, in precisely the same way as the last.

ONION.

DOWNY MILDEW (*Peronospora schleideni*).

Reported only from the Coast sections. In the earlier stages the disease may be recognized by the presence of a purplish velvety appearance on the attacked leaves, best seen when the dew is on them. This appearance is the result of the formation of numerous spore-bearing threads (conidiophores) of the fungus, which are pushed out through the pores of the leaf. Such leaves rapidly turn yellow, fall down, and decay. The spores are carried by the air to other leaves and other plants, and rapidly produce new infections if the weather is warm and moist. New leaves are put out to take the place of those destroyed, but these also may become attacked. In any case the growth of the bulb is checked, and its size reduced to an extent depending on the severity of the attack. Inside the tissues of the attacked leaves resting spores are produced which persist through the winter in the remains of such leaves, thus carrying the fungus over the winter and furnishing a means of infection for the onion-crop the following spring.

Control.—Destroy the refuse from an attacked crop as completely as possible. Do not plant onions for two or more years on land where there has been an epidemic of the disease. Spray with Bordeaux mixture often enough to protect the new growth. The date of the first application will depend on the time when the disease has been observed to appear. Spraying must be done sufficiently before this to protect against the first infection, rather than after the disease has been noticed. Owing to the smoothness and waxy covering of the onion-leaf, ordinary Bordeaux mixture runs off, and it is necessary to use the resin Bordeaux in order to secure its adhesion.

PEACH.

BROWN-ROT.

In most peach-growing districts this is a very serious disease. In British Columbia, however, peaches are only grown commercially in the Lower Okanagan District, where the climate is dry enough to render this disease of little importance. Where the disease occurs much loss may take place through rotting during transportation. With us, such cases of rotting during transit as have been examined have been due mainly to such mould-fungi as *Rhizopus nigricans* and *Penicillium sp.*