

Brown Rot—Monilia

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THE disease known as brown rot is among plum diseases what the curculio is among plum insects—the most serious. It also affects cherries, peaches, apples, pears and a number of fruits. As the name implies, it causes other a brown decay of the fruit. It usually makes its appearance about the time the fruit matures, though often not until after picking. The decay spreads rapidly from the point of infection, especially if the weather, or storage room in the case of stored fruit, is not. Often the entire fruit will be discolored in a few hours after decay has started, though more frequently several days are required. During the hot weather at this season of the year the disease also spreads with great rapidity from one fruit to another. Sometimes the fruit of an entire tree will appear to be perfectly sound one day, and the next nearly every specimen will show signs of decay. The spores, or germs, of the disease gain entrance to the fruit through punctures in the epidermis, made by

insects or other agents, and sometimes through the unbroken skin. A sound fruit touching a decaying one is almost sure to be infected.

REMEDIES AND TREATMENT

Most of the decayed fruits fall to the ground, but some shrivel up and remain clinging to the trees. The "mummy" fruits thus formed are a common sight in most plum orchards. As they serve to carry the fungus through the winter and are the chief source of infection for next year's crop, their removal from the trees in the fall materially aids in the control of the disease. As the punctures made by the curculio and other insects are usual points of infection, keeping them under control also helps to hold this disease in check. Some varieties are much more subject to brown rot than others. The susceptibility of the variety to this and other diseases should always be borne in mind in making a selection for planting. In some localities and during some seasons, it is much more prevalent than in others.

There are a number of sections otherwise suitable for plum growing where at least the European and Japanese varieties cannot be grown because of its virulence.

SPRAYING WITH BORDEAUX

Outside of these general points to be taken into consideration in dealing with brown rot, there is one specific thing that can be done to control it. Spraying the trees thoroughly with Bordeaux mixture soon after the fruit has set and again about two weeks later, will probably be found the most satisfactory treatment that can be given. Another spray shortly before the fruit ripens, also, is often recommended. If this is given, a weak solution of copper sulphate (one pound to 300 gallons of water) or the copper carbonate of ammonia mixture should be used, as Bordeaux mixture will stain the fruit at that stage of maturity. Another application of Bordeaux mixture shortly before the buds open in the spring has been found beneficial in many cases.

An Experience With Asters

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THE accompanying photograph illustrates a bed of asters that I grew last year. The spring previous the soil was heavily fertilized for dahlias, and in August the dahlias were mulched with a half-rotted compost of coarse horse manure and sod from which the soil had been shaken. Early in November, after the dahlias had been removed, the ground again received an application of coarse manure, which was dug in. Early in the spring, almost as soon as the frost was out of the ground, the bed was again dug, and the manure, which had been dug in the previous fall, was thoroughly incorporated with the soil.

On May 15, I came to the conclusion that the aster plants which I had started indoors, and which were intended for this bed, were a failure and I planted more seed in one end of the bed, in rows, keeping each shade separate. After the plants were fairly well started, the ground between the rows was kept loose by constant hoeing, and the plants well watered. On June 16, or one month from the time the seed was sown, the plants were large enough to transplant. They were then taken up and the ground again dug. The plants were placed every nine inches, in rows that were twelve inches apart. This is much too

close for the proper development of each individual plant, but for effective massing it is about right, although where the growth is sturdy, a few inches further might perhaps be just as effective. Another reason why I think close planting advantageous, is that the branches become interwoven and each plant supports the other, thereby reducing the necessity of staking, and the possibility of the plants being uprooted by the wind.

For the first two or three weeks after transplanting very little perceptible progress was made, but during this time, the plants were throwing out roots and feeders underground. Having

completed, or sufficiently advanced, this under-ground work, top growth commenced with great rapidity. The ground was soaked with water almost every



Great Results in Growing Asters

evening during hot weather until the plants were large enough to protect their roots from the blazing sun. The surface of the ground was kept loose with a hoe,