

Recent investigations connect the disease with a fungus (*Stereum purpureum*), the mycelium of which lives perennially in the tissues, and only comes to the surface to fruit upon the dead wood, where the tree, or some portion of it, has been killed.

No control measures have been properly worked out as yet, but the fact that the fruiting-bodies of the fungus only appear upon the dead wood suggests that, at least, the grower should be careful to remove all dead wood from affected trees.

Fruit-growers and others who have observed this disease in British Columbia are of the opinion that only trees weakened by winter injury or other cause are subject to the disease. Apparently sound trees, however, may sometimes be attacked. In any case, it is advisable to keep the trees as strong and healthy as possible. A special effort should be made to mature the trees in the fall, by avoiding too late or excessive irrigation and cultivation, and by planting cover crops.

This disease is at present under careful observation by several investigators, and further and more definite information will be available in the near future.

FRUIT-PIT OR BALDWIN SPOT.

This disease is so well known to all those engaged in fruit-growing that a description seems hardly necessary. Dark-coloured sunken spots, visible at first beneath the skin, appear upon the surface of the apple, being more numerous at the blossom end. Dead brown, spongy areas of tissue, sometimes found when the outside of the apple appears quite normal, extend inward from the spots, sometimes almost to the core. Several forms of the disease occur, but all injure the appearance and saleability of the fruit, and may render it unfit even for cooking. The spot may occur upon apples on the tree, but very frequently the fruit appears quite healthy until stored for some time.

The disease is found in all districts, irrigated and unirrigated, though, as a general rule, is more destructive in the irrigated sections. It is to be found on all types of soils, and no variety seems to be altogether immune from attack, though there is a great difference in the degree of susceptibility of the different varieties. Nearly all the fruit on a tree may be affected, or only that on a single limb. One tree may have its fruit badly spotted, while another of the same variety, grown under apparently identical conditions, will be comparatively immune.

Several theories have been advanced to explain the cause of fruit-pit. One is that too rapid transpiration of water from the cells of the fruit brings about too great a concentration of the sap in these cells, and as a result.

Another attributes the trouble to the rapid change in temperature from warm days to cold nights. During the day rapid transpiration of water from the fruit will occur. At night this will be rapidly checked, and as respiration still remains active, owing to the warmth of the soil, water will still be carried to the fruit and accumulate there to such an extent that an actual bursting of the cells will occur.

Others believe that in dry seasons insufficient mineral matter reaches the fruit, owing to the premature dryness of the soil, and that consequently, certain groups of cells will die of starvation.

Lately experimental evidence has been brought forward to show that the pitting of the fruit is, strictly speaking, not a disease at all, but a symptom