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## BLACK-ROT (PHYSALOSPORA CYDONIAE ARNAUD).\*

A FUNGOUS DISEASE OF APPLE, PEAR, AND QUINCE.

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THIS disease has been recorded from North America, Australia, and Europe. In certain parts of North America it is considered as a serious parasite of the apple, second in importance only to black-spot, but in Europe and New Zealand it is comparatively a minor disease. In New Zealand it is a common canker of apple and pear, and in North America it has been recorded on many additional hosts, among which may be enumerated elder, hawthorn, lilac, mulberry, oak, and rose. In our earlier reports cankers caused by it were attributed to European canker, *Nectria galligena* Bres., but fortunately this fungus is not known to occur in New Zealand.

### APPEARANCE AND EFFECT ON THE HOSTS.

Black-rot infects shoots and branches, fruits, and leaves. On the laterals and branches, but more frequently on the latter, it forms definite cankers. These at first appear as small elliptical areas, noticeable on account of their colour differing from that of the healthy bark. Shortly after its formation the cankered area becomes separated from the normal bark by a crevice. Then the diseased bark shrinks so that the canker appears slightly sunken (Fig. 1). Usually the healthy bark at the margin of the canker becomes slightly raised, due to the development of corky tissue in this region. The diseased area then

\* Synonyms: *Sphaeropsis malorum* Berk.; black-rot canker; black-rot leaf-spot; body-blight; body-canker; frog-eye; fruit-spot; New York apple-tree canker; ring-rot.