Peach and nectarine production represents a newly developing industry in Florida which is currently valued at 5 million dollars annually. Cytospora canker occurs in all major peach and nectarine growing areas of Florida (1), and has caused serious losses to peach orchards in Colorado, New York, Idaho, and Illinois. Cytospora canker can occur on as many as 90% of the trees in a young orchard of 2- to 3-year-old trees with an average of one to 2 cankers per tree. More commonly, on first year plantings cankers can affect 10% of the trees. Older, more mature trees do not appear to be as susceptible (4).

Cytospora canker is caused by Cytospora leucostoma (Pers.) Sacc. (perfect state, Leucostoma persoonii (Nits.) Hohn.) and is associated with sun scald (2), winter injury, pruning, mechanical wounds, drought injury (3,4,5), and to some extent, injuries caused by insects (2,4). Pruning wounds are considered the most important contributing factor to the incidence of Cytospora canker. Infection occurs through injured or dead tissues as might be associated with buds, leaf scars, shoot internodes, fruit pedicels, blossom spurs, and cankers caused by other fungi. During periods of high humidity, spores are exuded from diseased tissue and are disseminated by insects, propagative buds, man, and undoubtedly by splashing rain (4).

Fig. 1. Cytospora canker of peach showing underlying discolored infected tissue of a stem canker.
SYMPTOMS. The symptoms characterizing this disease are cankers, sunken bark, gummosis, tissue discoloration (fig. 1), and dieback of branches.

CONTROL. Injuries induced by the use of orchard equipment should be avoided, and all pruning tools such as knives, shears, and saws should be disinfected with denatured alcohol, 10% formaldehyde solution, or Clorox. Diseased or injured bark should be excised with a sharp knife disinfested with 70% ethyl alcohol, particularly when cankers are young, and followed with wound dressing such as asphaltum or similar material. In Florida, keeping trees in good vigor and delaying pruning until just prior to blossoming help reduce the incidence of Cytospora canker. Pruning, which promotes numerous interior branches in addition to normal spreading scaffolds, as well as topping after each harvest, helps reduce sunburn injury to limbs and increases yields (2).

Literature Cited