

container-grown trees. Evidence that Franklinia crowns were susceptible to this fungus by wound inoculations, but resistant without wounds, would indicate that the crown canker phase of the disease would not likely occur in nature unless trees were mechanically damaged.

Evidence from these tests and general observations of other Franklinia plantings would indicate a relation between wilt and susceptibility to winter damage. Usually, trees showing wilt late in the summer but living through the winter were more subject to dieback attributed to winter damage. Conversely trees that exhibited winter damage were more susceptible to wilt. Apparently physiologically weakened plants are more susceptible.

The general morphology of the *Phytophthora* isolates from Franklinia when grown under the test conditions reported, was similar to known isolates of *P. cinnamomi*. Although few cultural or pathogenic differences were noted among the Franklinia isolates, some strain differences may occur between these isolates and *P. cinnamomi* from other plants. Since an isolate of *P. cinnamomi* from rhododendron was also pathogenic to Franklinia, there was no host specificity indicated, although some differences in virulence between the isolates from the two sources was indicated.

Disease control was achieved with Truban, Banrot and Nurelle (an experimental compound

now withdrawn from testing). Benlate was included originally in the experiment because of the nature of the root damage and in the event organisms other than pythiaceous fungi were involved in the root rot phase. Benlate was ineffective and appeared to enhance the disease when compared with the untreated check.

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#### ABSTRACT

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A city environment demands hardy trees. The ideal choices are disease-resistant, and cope well with soil compaction and variations in soil moisture. They must also withstand air pollution, extremes in weather and injuries from cars and lawn mowers. When selecting a tree, think of the space available and the size of the tree at maturity. A low-growing tree may eventually interfere with vehicular traffic. One with a compact root system will interfere less with sidewalks, sewers and utility lines. Other things to consider include soil drainage and water table level, pH, and exposure to wind and sun. An extensive list of suitable trees, begun in the April issue of Grounds Maintenance, continues in this issue with hackberry to mulberry. The final section, covering oak to Zelkova, will be presented in a future issue.