healthy tree to feed while its ovaries mature, the nematodes leave the insect to penetrate the tree through the feeding sites. The nematodes enter resin canals and invade the entire tree. The disease was found in Missouri in 1979 and is now known in 32 states on 20 species of pine as well as on spruce, cedar, larch, and fir. There are differences among pines in susceptibility. *Pinus sylvestris* suffers damage in ornamental plantings and in Christmas tree nurseries. Other species are also affected in forests. Although not now a major problem, pine wilt is potentially serious in the U.S. The only practical control now available is to remove and burn infected trees before the beetles can emerge. In the long run genetic control should be feasible.

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ABSTRACT

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Urban environments impose severe stresses upon landscape vegetation, making simple solutions quite difficult. When selecting plants for a specific site, a landscaper must consider the site's problems, such as poor soil conditions and temperature stresses. Proper plant selection increases the effectiveness of any design by ensuring that the plant adapts to its proposed habitat. The roots of trees and shrubs are aerobic. There must be an exchange of oxygen and carbon dioxide between the air and the soil for them to survive. In saturated or poorly drained soils, roots suffocate; the plant declines and dies. The best way to avoid problems with excess moisture is to determine the soil moisture and drainage patterns of an area. Avoid planting in areas that retain water after rains or that are flooded in spring, unless water-loving trees are used in the design. Excessively wet soil also favors root disease fungus attacks and thus affects roots indirectly. Poor aeration also prevents roots from absorbing minerals from the soil solution. Root development near the soil surface is also a result of poor aeration. We have provided lists of plants that perform well under varying soil conditions.