

Evaluation of Systemic Fungicides for Preventing Laurel Wilt

Bud Mayfield, Forest Entomologist
Florida Department of Agriculture and Consumer Services, Division of Forestry
1/18/2007

A vascular wilt disease, caused by an *Ophiostoma* (anamorph = *Raffaelea*) sp., is causing high levels of redbay mortality in neighborhoods, parks and forests, and resulting in substantial economic, aesthetic, and ecological impacts. Systemic fungicides have been used successfully to prevent wilt disease development in other tree species, such as elms (Dutch elm disease) and oaks (oak wilt). The systemic fungicides thiabendazole (Arbotect® 20-S) and propiconazole (Alamo®) will be tested for efficacy in preventing wilt disease in asymptomatic redbays at two locations in northern Florida in spring 2007. Field trials will include exposure of fungicide-treated and control trees to both artificial inoculation with the wilt pathogen and natural inoculation pressure from the ambrosia beetle vector (*Xyleborus glabratus*). Sensitivity of the wilt fungus to the two fungicides *in vitro* will be evaluated. Bioassays to detect fungicide in branches of treated trees will also be conducted.