



**USDA Forest Service
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Laurel Wilt: A new scourge strikes the South

Issue: A pathogen carried by *Xyleborus glabratus*, a newly arrived exotic ambrosia beetle, is rapidly killing redbay, swamp bay, Silkbay and sassafras in southeastern United States. The disease threatens host trees from Canada to South America is devastating local ecosystems.

- *Xyleborus glabratus*, an ambrosia beetle native to Japan, Burma and India, vectors a fungus that is deadly to redbay, swamp bay, Silkbay, sassafras, avocados and other members of the family Lauraceae, including two endangered species, *Lindera mellissaefolia* (pondberry) and *Litsea aestivalis* (pondspice).
- A single beetle was initially detected in an Early Detection Rapid Response trap near Savannah, Georgia in 2002. Subsequent trapping did not catch additional beetles and the beetle was assumed to not be established in the U.S. By January 2007, tree hosts in 29 coastal counties in Georgia, South Carolina, and Florida were experiencing extensive mortality. The infestation is spreading at about 20 miles per year.
- The beetle and disease are too widespread to eradicate and could spread to hosts from Canada to South America
- Inoculations confirmed that the pathogen is a *Rafaella* species, new to science and is highly virulent, and related to the Dutch elm disease fungus.
- Tests show *X. glabratus* can vector the fungus successfully to known hosts. White oak was not attractive to the beetle, and red maple was marginally attractive.
- The beetles are active most of the year and are not readily attracted to ethanol and other standard lures used by the Early Detection and Rapid Response Program but apparently are attracted to camphor, cinnamon and other aromatic trees.

Forest Service Research is focusing on the beetle biology and behavior, developing detection and control technology, and the epidemiology of the disease, pathogen identity and host range.