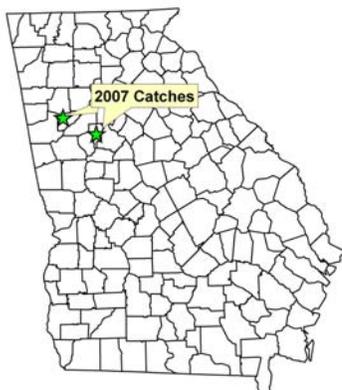




New Ambrosia Beetle Species Detected in Georgia

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The Georgia Forestry Commission participated in the Early Detection Rapid Response (EDRR) trapping program, funded by the USDA Forest Service and APHIS (Animal and Plant Health Inspection Service, Plant Protection Division), which helps detect exotic woodboring beetles entering our state. Our trapping in Georgia for 2007 detected a new introduction of the camphor shot beetle, *Xylosandrus mutilatus* (*Xm*), an exotic ambrosia beetle from Asia (photo: Doug Stone, Mississippi State University, Bugwood.org). Three *Xm* beetles were trapped in 2007; two were caught in Douglas County and one in Clayton County (see map). In 2008, traps were again deployed in Douglas and Clayton counties where the *Xm* was initially trapped, but no *Xm* were caught. In 2009, in addition to Clayton County, adults of *Xm* were caught in Clarke and Oconee counties in northeastern Georgia. This suggests that *Xm* may be established and perhaps, spreading in northern Georgia.



No damage has been reported due to this insect and its exact distribution within Georgia is unclear. At this time we do not consider this insect to be a major threat to Georgia's forests, but we still remain on the lookout for potential problems.

This insect is indigenous to Asia and is reported from China (Anhui, Sichuan, Yunnan and Zhejiang Provinces), India (Adaman Islands, Assam), Indonesia (Batoe, Borneo, Java, Sumatra), Japan, Korea, Malaya, Myanmar, Papua New Guinea, Sri Lanka, Taiwan and Thailand (Rabaglia 2003).

Xm was first detected in Mississippi in 1999, and later found in Florida, Texas, Alabama and Tennessee. Its ability to adapt to new hosts, compete with native ambrosia beetles or cause significant damage is not completely understood. Reports from these states about *Xm* attacks on stressed urban trees and damage in at least one nursery location in Alabama are cause for concern. Its potential to spread to new areas is high. Female adults are capable of flight and can travel 1- 3 miles in search of suitable hosts. They are subject to dispersal by air currents. The species has a high reproductive potential, a broad host range and unknown habits, which would make it difficult to detect and eradicate (Rabaglia 2003). *Xm* has been detected in several states and rather extensively in Mississippi with no reports of serious damage to healthy trees. Based upon reports from other southeastern states, *Xm* isn't likely to be a major problem in Georgia, but we remain cautious since there is still not a lot known about this beetle.

Xm constructs galleries in the xylem of host trees and introduces a symbiont fungi which is utilized by the beetles. These galleries, and the staining caused by their associated fungi, degrade wood products. Since this insect appears to have a preference for small diameter material, it could become a pest of urban trees, especially those stressed by recent planting (Rabaglia 2003).

Xm has a wide host range. Reported hosts in its natural range include: *Acer* spp., *Albizzia* spp., *Benzoin* spp., *Camellia* spp., *Carpinus laxiflora*, *Castanea* spp., *Cinnamomum camphora*, *Cornus* spp., *Cryptomeria japonica*, *Fagus crenata*, *Lindera erythrocarpa*, *Machilus thurnbergii*, *Ormosia hosiei*, *Osmanthus fragrans*, *Parabezion praecox*, *Platycarpa* spp., and *Sweetenia macrophylla* (Rabaglia 2003).

There are approximately 40 native species of ambrosia beetles in the United States, and 14 new species have been introduced since the early 1970s. Most are considered to be pests of dying or recently killed trees, and don't normally cause problems in healthy trees.

Web links:

[Rabaglia, Robert. 2003. *Xylosandrus mutilatus*](http://www.invasivespecies.net/database/species/ecology.asp?si=963&fr=1&sts=)

<http://www.invasivespecies.net/database/species/ecology.asp?si=963&fr=1&sts=>

<http://www.fcla.edu/FlaEnt/fe90p191.pdf>