



## HORTICULTURAL PESTS OF REGULATORY CONCERN

### Granulate Ambrosia Beetle

Name: *Xylosandrus crassiusculus* Motschulsky, 1866.  
Location: New Jersey (Statewide)  
On: Numerous deciduous & evergreen trees  
Order: Coleoptera  
Family: Curculionidae

Originally from Asia, the first U.S. detection of the granulate ambrosia beetle took place near Charleston South Carolina in 1974. Since then it has migrated steadily away from this site and can now commonly be found infesting young trees in New Jersey. Adult beetles do not appear to show significant preferences to weakened trees therefore otherwise healthy young trees are vulnerable to infestation.<sup>1</sup>

The first symptoms of granulate ambrosia beetle infestations are usually the characteristic 'pitch tubes' left behind by the adult females as they excavate tunnels in the host tree for protection and egg-laying. Like other ambrosia beetles *X. crassiusculus* introduces fungi from which it will feed on into galleries it has made in the green wood of the host tree and do not actually feed on the host it has infested. Adult females mate from within this colony, emerge, and move to infest new sites on this host or to new host trees.

Managing granulate ambrosia beetle has proved difficult for most nurseries since the beetles usually go unnoticed as they migrate into nursery fields and begin excavating their tunnels. If detected early, and the openings to the galleries being excavated have not yet been sealed by the 'pitch tubes', then adequate control may be met through spraying. However, in most cases the infested trees are already beyond spraying and should be removed and destroyed.

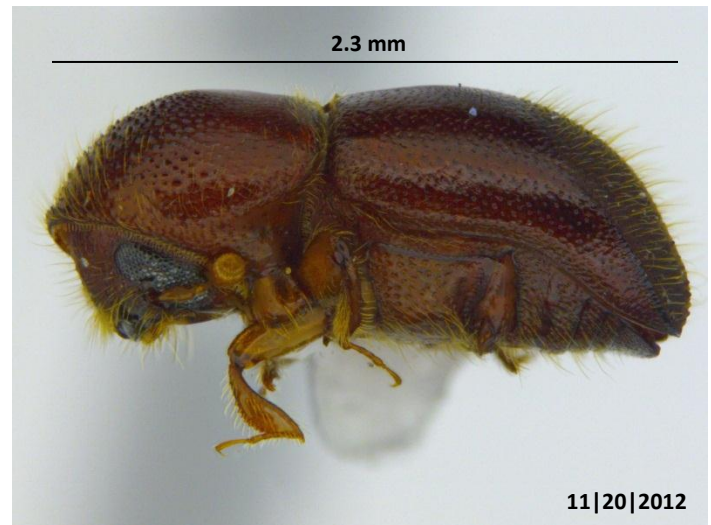


Figure 2. Adult *X. crassiusculus*.



Figure 1. *X. crassiusculus* damage on *Gleditsia* sp.



Figure 3. Frass 'Pitch tubes' extending from entrance of galleries.

<sup>1</sup>Rutgers Cooperative Extension of Cumberland County: Asian Ambrosia Beetle: Concerns For the Nursery Industry, 2004