

# Insecticide Management Options for EMERALD ASH BORER

**R. Chris Williamson, Associate Professor, Extension and Research Specialist,  
Department of Entomology, University of Wisconsin**

University and federal researchers are studying methods of controlling emerald ash borer (EAB). The latest information on insecticide evaluations can help arborists, landscapers, and homeowners decide if and how they can treat trees for EAB. However, there are many unanswered questions concerning the prevention or control of EAB, including the uncertainty of the long term effectiveness of insecticides.

RESEARCH results suggest that some insecticide treatments are effective, however it is important to consider the following when making a decision to use insecticides:

- Using insecticides preventatively to control EAB on ash trees is an option within an EAB quarantine area but only recommended within 10-12 miles from a confirmed EAB infestation. If your ash trees are located outside of this area, using insecticides is not recommended.
- If your tree is located within an area designated for eradication, it may be removed by regulatory agencies even if it has been treated.
- Insecticide treatments are more effective on smaller trees, with a trunk diameter of less than 10 inches.
- If numerous untreated, infested ash trees are nearby, insecticides and other controls are less likely to protect trees due to the pressure of a large population of EAB.
- Once trees become infested, insecticides may be less effective even if trees are showing few EAB symptoms.
- It is still unclear if insecticides are enhancing tree survival or just delaying tree death.
- When using any pesticide, ALWAYS read and follow label directions. It's the law!

## **Professional Insecticide Treatments**

- Soil injections or drenches of imidacloprid (Merit) applied in a grid pattern around the base of the trunk (< 3 feet from the trunk) on an annual basis may protect ash trees from EAB.
- Trunk injections of imidacloprid (Imicide, IMA-jet, Pointer) and bidrin (Injecticide-B) may provide control of EAB.
- Foliar and bark spray applications of bifenthrin (Onyx), cyfluthrin (Tempo), permethrin (Astro), or carbaryl (Sevin) in late May and June may control visiting adult EAB and hatching larvae.

## **Homeowner ("do it yourself") Insecticide Treatments**

- Soil drenches and injections of imidacloprid (Bayer Advanced Garden Tree and Shrub Insect Control) may provide effective control of EAB.
- Soil treatments are best when applied in a grid pattern to the base of the trunk (< 3 feet from the trunk).

- Trunk injections of acephate (ACECAP 97 Systemic Insecticide Tree Implants and Bonide Systemic Insecticide Bullets) in ash trees > 3 inches trunk diameter may provide control of EAB.
- Due to the potential of insecticide drift and the specialized equipment needed for application to large trees, bark and foliar applications are best left to arborists and professional horticulturalists who are licensed pesticide applicators and have the necessary equipment.

### **Insecticide Treatment Considerations**

- Soil injections and drenches require 1-2 months to move throughout the tree. Smaller trees (< 10 inch trunk diameter) should be treated in April or May while larger trees (> 10 inch trunk diameter) may need to be treated the preceding fall to ensure uptake.
- Trunk injections typically take about 2 weeks to move throughout the tree.
- Repeated trunk injections may cause long-term damage.
- Bark sprays must be applied before EAB egg hatch (June-July) to prevent larvae from burrowing (chewing) through the bark into the tree.
- Foliar sprays should be applied during EAB adult activity (late May-August).

To date, EAB has NOT been discovered in Wisconsin. Thus, using insecticides is not recommended. For the latest information regarding the regulatory status of EAB in your area, please visit the Wisconsin Emerald Ash Borer Program's website ([www.emeraldashborer.wi.gov](http://www.emeraldashborer.wi.gov)) or contact your University of Wisconsin-Extension county office. References to pesticide products in this publication are for your convenience and are not an endorsement of one product over other similar products. You are responsible for using pesticides according to the manufacturer's current label directions. For further in depth information on specific treatment options please refer to: [http://www.entomology.wisc.edu/emeraldashborer/article\\_052407.pdf](http://www.entomology.wisc.edu/emeraldashborer/article_052407.pdf)