

# EMERALD ASH BORER INSECTICIDAL MANAGEMENT



UNIVERSITY OF ILLINOIS  
EXTENSION

Entomology Fact Sheet, NHE-163  
Department of Natural Resources &  
Environmental Sciences

Efforts to manage the emerald ash borer on a large scale are primarily being conducted by federal and state agencies. There are many unanswered questions concerning the prevention or control of emerald ash borer, including the uncertainty of the effectiveness of any insecticidal control efforts on emerald ash borer.

Current large scale activities being conducted to slow the spread of emerald ash borer

- Nursery stock, lumber, wood product, and firewood quarantines
- Infestation surveys
- Tree removal
- Outreach education
- Research on the insect and its management options

Factors when considering whether to attempt insecticidal control

- The only certain method to control emerald ash borer is to remove the tree.
- Healthy trees growing in a location with proper soil, fertility, light, wind exposure, and other environmental factors will survive attack longer than those in poorer health.
- Weigh the value of the tree in the landscape against the cost of treatment.
- If many trees are being removed in an area, it will probably be less expensive to have it removed than at a later date.
- A tree in a regulated area is subject to removal by governmental agencies regardless of whether it has been treated or shows signs of borer infestation.
- Cost of the purchase and planting of replacement trees not susceptible to emerald ash borer should be considered.
- Only ash trees in the genus *Fraxinus* are susceptible. Mountain ash and all other trees are not susceptible to this borer.
- Be sure that a variety of trees is planted in the neighborhood. This ensures that the loss of one or a few kinds of tree in the future will not be as devastating.

Features of insecticidal control efforts

- Preventatively treat ash trees no more than 15 miles from known infestations.
- Control is more effective on smaller trees, those with a trunk diameter of less than ten inches.
- It is more difficult to keep a tree alive that is already infested with emerald ash borer, whether or not dieback is occurring.
- Research is ongoing to determine how long treated trees survive and produce normal growth.
- Follow insecticide label directions.

#### Professional insecticidal control options

- Imidacloprid (Merit, Xytect) applied onto or injected into the soil around the tree annually within two feet of the trunk.

Do not apply into mulch or other dead organic matter

- Imidacloprid (Merit, IMA-jet, Imicide, Xytect, Pointer) injected into the tree annually.
- Emamectin benzoate (Tree-age) injected into the tree annually.
- Apply dinotefuran (Safari) in Pentrabark onto the trunk annually.
- Foliar and bark sprays of bifenthrin (Onyx), cyfluthrin (Tempo), permethrin (Astro), or carbaryl (Sevin) in both mid May and mid June will control visiting beetles.

#### Homeowner do-it-yourself insecticidal control option

- Apply Bayer Advanced Tree and Shrub Insect Control, containing imidacloprid, onto or injected into the soil around the tree annually.
- Soil treatments should be made within two feet of the trunk.
- Do not apply into mulch or other dead organic matter

#### Factors concerning treatment with imidacloprid

- Soil injections take 1 to 2 months to move throughout the tree.
- Trunk injections take about 2 weeks to move throughout the tree.
- Applications can be made at any time of the year, but are most effective in the spring.
- A higher level of control is achieved once the tree has been treated for at least 2 years.

Certified arborists provide expertise in properly treating emerald ash borer as well as expertly maintaining the health of ash and other trees and are listed at: <http://www.illinoisarborist.org/>.

More information on emerald ash borer is available at: <http://www.IllinoisEAB.com> and <http://www.emeraldashborer.info/> .

If you see emerald ash borer or its damage, contact your local University of Illinois Extension Office listed at: <http://web.extension.uiuc.edu/state/> or the Illinois Department of Agriculture at (800)641-3934.

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