

EMERALD ASH BORER INSECTICIDAL MANAGEMENT



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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 eradicate emerald ash borer or slow its spread

- 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, including its eventual removal.
- 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 likely to be removed 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 10-12 miles from known infestations.
- Control is more effective on smaller trees, with a trunk diameter of less than 10 inches.
- If many infested untreated ash trees are nearby, insecticide and other controls are unlikely to protect the tree due to the heavy onslaught of beetles from nearby infestations.
- 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 if tree survival continues or if insecticidal treatment is just delaying the death of the tree.
- Follow insecticide label directions.

Professional insecticidal control options

- Imidacloprid (Merit, IMA-jet, Imicide, Pointer) injected into the tree or the soil around it annually appears to be the best option to protect the tree from EAB. Soil treatments should be made within two feet of the trunk.
- Foliar and bark sprays of bifenthrin (Onyx), cyfluthrin (Tempo), permethrin (Astro), or carbaryl (Sevin) in both mid May and mid to late June will control visiting beetles and hatching larvae.

Homeowner do-it-yourself insecticidal control options

- Apply Bayer Advanced Garden Tree and Shrub Insect Control, containing imidacloprid.
- Due the chances of insecticide drift to other areas, and the specialized equipment needed for application to large trees, foliar and bark application is best handled by certified arborists or other professional horticulturists.

Factors concerning treatment with imidacloprid

- Soil injections take 1 to 2 months to move throughout the tree. Apply them within two feet of the trunk.
- Trunk injections take about 2 weeks to move throughout the tree.
- Larger trees, those with a trunk diameter of more than ten inches, take longer for the insecticide to move throughout the tree so soil treatment in the late summer or early fall when the leaves will stay green for several weeks is recommended. Trunk injections can be made in the spring.
- Smaller trees can be treated in the spring, but soil treatment should be made in the first half of May. Trunk injections should be accomplished by early June.
- 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.agr.state.il.us/Environment/Pest/index.html> 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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