

# Insecticide Options for Protecting Ash Trees from Emerald Ash Borer



There are several factors to consider when deciding whether to treat your ash trees in order to protect them from the destructive emerald ash borer (EAB).

In general:

Insecticides can effectively protect ash trees from EAB.

Unnecessary insecticide applications waste money. If EAB has not been detected within 10 to 15 miles, your trees are at low risk. Be aware of the status of EAB in your location.

Trees that are already infested and showing signs of canopy decline when treatments are initiated may continue to decline in the first year after treatment, and then begin to show improvement in the second year. Trees exhibiting more than 50-percent canopy decline are unlikely to recover even if treated.

Emamectin benzoate is the only product tested to date that controls EAB for more than one year with a single application. It also provided a higher level of control than other products in side-by-side studies.

Soil drenches and injections are most effective when made at the base of the trunk. Imidacloprid applications made in the spring or the fall have been shown to be equally effective.

Soil injections should be no more than 2 to 4 inches deep, to avoid placing the insecticide beneath feeder roots.

Systemic trunk and soil insecticides should be applied when the soil is moist but not saturated or excessively dry.

Research and experience suggest that effectiveness of insecticides has been less consistent on larger trees. When treating very large trees under high pest pressure, it may be necessary to combine two treatment strategies.

Xytect™ soil treatments are labeled for application at a higher maximum rate than other imidacloprid formulations. Trees larger than 15 inch DBH (diameter of the trunk at breast height) should be treated using the highest labeled rate. Merit® imidacloprid formulations are not labeled for use at this higher rate. When treating larger trees with Merit® soil treatments, best results will be obtained with two applications per year. Imidacloprid formulations for homeowners (Bayer Advanced™ Tree & Shrub Insect Control and other generic formulations) can be applied only once per year.

Homeowners wishing to protect trees larger than 15 inches DBH should have their trees professionally treated.

All treatment programs must comply with label restrictions on the amount of insecticide that can be applied per acre in a given year.

**For detailed information on insecticide recommendations, visit University of Minnesota Extension's emerald ash borer webpage: [extension.umn.edu/issues/eab](http://extension.umn.edu/issues/eab)**

Source: U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS) and the U.S. Forest Service, Northeastern Area, Forest Health Protection.

University of Minnesota Extension is an equal opportunity educator and employer. For Americans with Disabilities Act accommodations, please call 800-876-8636. Reviewed June 2009. Copyright © 2009 Regents of the University of Minnesota. All rights reserved.