XHT1181

University of Wisconsin Pest Alert

UW Extension
University of Wisconsin–Extension

Provided to you by:

Homeowner Guide to Emerald Ash Borer Insecticide Treatments

R. Chris Williamson and PJ Liesch, UW Entomology

Emerald ash borer insecticide treatment considerations. *Several insecticide products are available to homeowners for control of emerald ash borer (EAB). However, not all ash trees are worth treating with insecticides. Tree location, value, and health, as well as the cost of treatment are all factors to consider. Based on current research, treatments are suggested only for ash trees located within 15 miles of a confirmed EAB site, or for trees located within a quarantined area. Insecticide treatments are* ***not*** *necessary for ash trees located outside of these areas. Even within the 15 mile radius, not all trees should be treated. Due to the expense of yearly insecticide treatments, one should consider the value of a particular ash tree in relation to insecticide treatment costs before making any treatments. In addition, consider the health of each tree before treating. Research suggests that insecticide treatments are significantly more effective on EAB-infested ash trees with less than 50% canopy thinning. Insecticide treatments are* ***not*** *suggested for trees with greater than 50% canopy thinning. Trees with greater than 50% canopy thinning should be removed and destroyed in accordance with established guidelines. See University of Wisconsin Pest Alert XHT1215 "Is My Ash Tree Worth Treating for Emerald Ash Borer?" for additional guidance on making this important decision.*

Emerald ash borer insecticide treatment options. *Insecticide products available for use by homeowners are summarized in Table 1. They include:*

- *ACECAP 97 Systemic Insecticide Tree Implants (acephate)*
- *Bayer Advanced Tree and Shrub Insect Control (imidacloprid)*
- *Bayer Advanced Tree and Shrub Protect & Feed (imidacloprid)*
- *Bayer Advanced Tree and Shrub Protect & Feed II (imidacloprid + clothianidin)*
- *Bonide Annual Tree and Shrub Insect Control (imidacloprid)*
- *Ferti-lome Tree and Shrub Systemic Drench (imidacloprid)*
- *Green Light Tree and Shrub Systemic Insect Killer w/Safari 2G (dinotefuran)*
- *Green Light Emerald Ash Borer Killer (dinotefuran)*
- *Optrol (imidacloprid)*
- *Ortho Max Tree and Shrub Insect Control (imidacloprid)*
- *Ortho Bug-B-Gone Year Long Tree and Shrub Insect Control (imidacloprid)*

The Bayer Advanced Products, Bonide Annual Tree and Shrub Insect Control, Ferti-lome Tree and Shrub Systemic Drench, Optrol, Ortho Max Tree and Shrub Insect Control, and Ortho Bug-B-Gone Year Long Tree and Shrub Insect Control are systemic insecticides applied as soil drenches around the base of an ash tree in mid-April to late-May and/or early-September to mid-October. Two of the Bayer Advanced Products (Tree and Shrub Protect and Feed, Tree and Shrub Protect and Feed II) and the Green Light products (Tree and Shrub Systemic Insect Killer and Emerald Ash Borer Killer) are available in granular formulations. Be aware that many insecticide products available at hardware stores and garden centers look alike. Carefully check all product labels before purchase to make sure that you've selected the correct product/active ingredient. ALWAYS read and follow the respective pesticide label directions! University research indicates that soil applications of imidacloprid provide excellent EAB protection for small ash trees less than about 18 inches in circumference in the first year following treatment. Current research findings also suggest that EAB-infested ash trees greater than about 50 inches in circumference (16 inch DBH) should be treated in the fall and again the following spring. Additionally, larger trees may require two years of treatment before they are effectively protected. Thus, treatment of large tree should begin before the tree becomes infested. Lastly, insecticide treatments must be repeated each year.

Although ACECAP 97 Systemic Insecticide Tree Implants are available to homeowners, they are not suggested for use by homeowners because they require physically drilling into a tree during their application.

Revised Dec. 18, 2012

University of Wisconsin Pest Alert

UW Extension
University of Wisconsin–Extension

Table 1 Emerald ash borer insecticide treatments available to homeowners			
Product	**Active Ingredient**	**Timing**	**Type of application**
Bayer Advanced Tree & Shrub Insect Control (D) *Bayer Advanced Tree & Shrub Protect & Feed (D or G)* *Bonide Annual Tree & Shrub Insect Control (D)* *Ferti-lome Tree & Shrub Systemic Drench (D)* *Optrol (D)* *Ortho Max Tree and Shrub Insect Control (D)* *Ortho Bug-B-Gone Year Long Tree & Shrub Insect Control (D)*	*Imidacloprid*	*Mid-April to mid-May and/or early-Sept. to mid-Oct.*	*Soil Drench (D) or Granular (G)*
Bayer Advanced Garden Tree & Shrub Protect & Feed II (D or G)	*Imidacloprid + Clothianidin*	*Mid-April to mid-May and/or early-Sept. to mid-Oct*	*Soil Drench (D) or Granular (G)*
Green Light Tree & Shrub Insect Control w/ Safari 2G *Green Light Emerald Ash Borer Killer*	*Dinotefuran*	*Mid-May to mid-June*	*Granular*
ACECAP 97 Systemic Insecticide Tree Implants	*Acephate*	*Mid-May to mid-June*	*Trunk Implant*

Other emerald ash borer treatment options. *Homeowners may also contact a certified arborist or certified pesticide applicator to treat their trees. See the Wisconsin Arborist Association website (http://www.waa-isa.org) for a list of certified arborists in Wisconsin. Professionals have access to some products that are not available to homeowners.*

The University of Wisconsin does not endorse commercially available insecticide products over those available directly to homeowners. Products discussed in this fact sheet have been evaluated in a variety of Michigan State University research tests on EAB.

For more information on controlling emerald ash borer: *Visit http://www.entomology.wisc.edu/emeraldashborer, http://www.emeraldashborer.wi.gov or http://www.emeraldashborer.info, see University of Wisconsin Pest Alert XHT1215, or contact your county Extension agent. For a video demonstration of treating your ash trees using a systemic drench, see http://www.entomology.wisc.edu/new-video-protecting-your-tree-emerald-ash-borer.*

Thanks to Kristin Krokowski, Phil Pellitteri and Robert Tomesh for reviewing this document.

A complete inventory of University of Wisconsin Garden Facts is available at the University of Wisconsin-Extension Horticulture website: http://hort.uwex.edu.