

Homeowner Guide to Emerald Ash Borer Treatments

Dave Cappaert, MSU



Emerald ash borer adult

Several insecticide products are available to homeowners for control of emerald ash borer (EAB). Treatments are needed every year to protect trees from EAB. Treatments are recommended only for homeowners in the quarantined area; it is not necessary to treat ash trees outside of this area. Treatments may be more effective if overall tree health is maintained. Therefore, it is important to fertilize trees in the fall or spring and water regularly.

Treatment Considerations

Because of the expense of yearly treatments, it is important to weigh the decision to treat carefully. Consider the value of the tree in relation to treatment costs. Also consider the health of the tree. Research suggests that insecticide treatments may be able to save infested trees exhibiting low to moderate dieback (20 to 40 percent), but the outcome is less certain than with healthy trees showing little or no sign of infestation.



Healthy ash tree: no dieback.

Treatment Options

Insecticide products available for home use are Bayer Advanced Garden™ Tree and Shrub Insect Control, Bonide® Systemic Insecticide Bullets and ACECAP® 97 Systemic Insecticide Tree Implants. Caution: read all label instructions before using any pesticide, avoid skin contact, and store pesticides where children cannot reach them.



Eric Rebek, MSU

Ash tree exhibiting 40 percent dieback.

Active ingredient	Product	Timing	Type of application and instructions
Imidacloprid	Bayer Advanced Garden™ Tree and Shrub Insect Control	May to early June	Soil drench Mix with water and drench around base of tree
Acephate	ACECAP® 97 Systemic Insecticide Tree Implants Bonide® Systemic Insecticide Bullets	May	Trunk implant Follow directions for drilling holes and correct placement of implants or bullets



Emerald Ash Borer



Application of soil drench around tree base.



Proper insertion of implant just below cambium surface.

Product Descriptions

Bayer Advanced Garden™ Tree and Shrub Insect Control is a systemic insecticide applied as a soil drench around the base of a tree. There are several Bayer Advanced Garden™ products — be sure to purchase the one with “Tree and Shrub” in large print on the label and imidacloprid as the active ingredient. Label instructions say to use 1 ounce of the insecticide for every inch of distance around the tree trunk (circumference). Applications should be made in May or early June. This product is available at most local hardware and garden stores. More information about the product is available at www.bayeradvanced.com.

Bonide® Systemic Insecticide Bullets and ACECAP® 97 Systemic Insecticide Tree Implants are similar products, both containing acephate as the active ingredient. The insecticide is delivered through small cartridges implanted at 4-inch intervals around the trunk base. Follow label directions for drilling holes and inserting implants or bullets. Both products should be applied in late May, during the period of maximum upward flow of tree sap. ACECAP® 97 is available through authorized dealers (<http://www.treecareproducts.com>); Bonide® Bullets are available through hardware and garden stores. For more information on this product, see the company web site at: <http://www.bonideproducts.com>

Treatment Recommendations

- Small trees — trunk diameter of 3 inches or less — should be treated using **only** Bayer Advanced Garden™ Tree and Shrub Insect Control.
- Trees with a trunk diameter between 3 and 6 inches should be treated with **either** Bayer Advanced Garden™ Tree and Shrub Insect Control **or** the ACECAP® 97 implants or Bonide® Bullets.
- Larger trees — trunk diameter greater than 6 inches — should be treated with **both** ACECAP® 97 implants or Bonide® Bullets **and** Bayer Advanced Garden™ Tree and Shrub Insect Control for the first 1 to 2 years. In subsequent years, use implants no more often than every other year to avoid possible trunk trauma from the implant holes.
- Note: Homeowners may also contact tree care professionals to treat their trees. Professionals have access to **some products that are not available to homeowners**. Michigan State University does not **endorse the** insecticide products discussed in the bulletin over other options. **These products are discussed because they have been evaluated in MSU research tests on emerald ash borer.**

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For more information visit: www.emeraldashborer.info