

# ALERT: Emerald Ash Borer—A 100% Fatal Pest!

## I. Treat or Remove?

Unfortunately, anyone with an Ash tree will need to make the difficult choice to protect it with treatment or let it die. If you have Ash trees you love, you need to take action now.

## II. Emerald Ash Borers Kill Ash Trees

Without treatment, Ash trees are doomed. Once infested with Emerald Ash Borer, Ash trees die within 1-3 years.

By the time you notice that your Ash tree doesn't look healthy, Emerald Ash Borer have already done significant internal damage. That's why, it is critical to begin treatment now before the tree is damaged beyond repair.

*Pictured: Healthy Ash trees protected with Tree-age® Trunk Injections growing right next to untreated Ash trees killed by Emerald Ash Borer. (Photo Credit: Daniel Herms, The Ohio State University)*



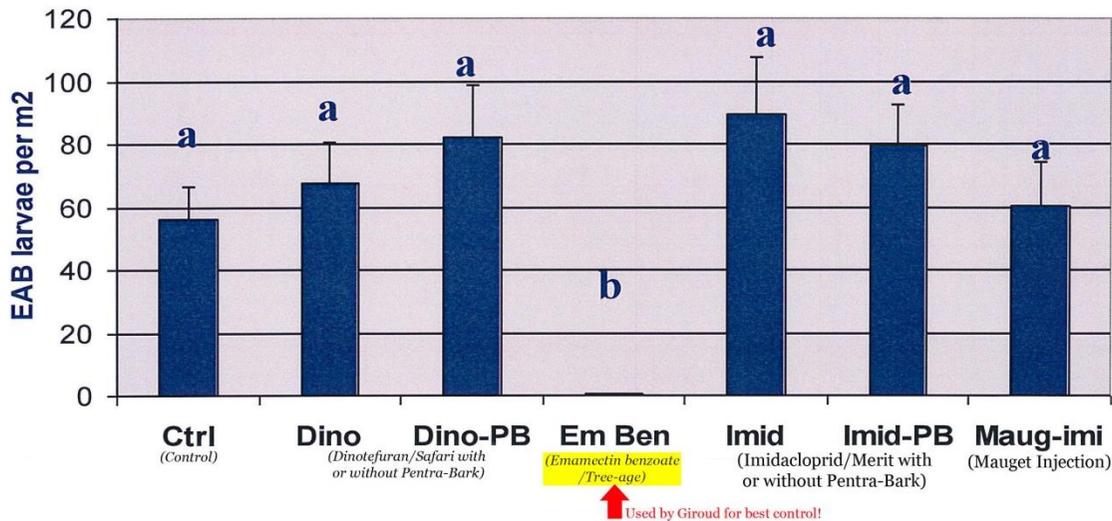
## III. Treatments Vary in Effectiveness and Cost

Extensive research has been done to determine the best way to protect valuable Ash trees and control Emerald Ash Borer. Researchers at Michigan State University tested the effectiveness of the leading treatments. Their findings have become a cornerstone for how to defeat this fatal pest.

To identify the most effective treatment, researchers treated trees with each of the products below and then monitored the results over a two year period. The top performing treatment was Tree-age ("Em Ben") which Giroud uses for best control.

## Emerald Ash Borer Found in Ash Trees After Tree-age Injection? Almost ZERO!

Research Proves Tree-age Is Most Effective Control for Emerald Ash Borer \*



\*McCullough, et al. 2011. Journal of Economic Entomology 104:1599-1612 (Deb McCullough, PhD and Professor Depts. of Entomology and Forestry at Michigan State University)

## IV. Treatment Options

1. **Tree-age® Trunk Injection:** In performance tests, researchers at Michigan State determined that the best results are achieved with systemic trunk injections using Tree-age® (*Em Ben/Emamectin Benzoate*). Virtually no Emerald Ash Borer larvae were found after two years in trees treated with Tree-age. To ensure uninterrupted control, the Tree-age injection is done every two years.

*Pictured: **Tree-age trunk injection:** Trained technicians calculate the correct dosage for the size of the tree; properly set-up the injection system and, monitor to be sure the tree fully absorbs the treatment.*



2. **Soil Injection/Soil Drench:** Applied to the soil at the base of the tree, the insecticide, Merit® or Xytec® with Imidacloprid, is absorbed up through the canopy. Control has been inconsistent. Experience and research indicate that this treatment is most effective on smaller trees. The treatment must be applied annually in mid to late Spring or mid Fall.
3. **Basal Trunk Sprays:** Like soil treatments, control of Emerald Ash Borer with Dinotefuran basal trunk sprays has been variable in research trials. Dinotefuran was found to reduce EAB larval density by approximately 30 percent to 60 percent compared to heavily infested untreated trees. The treatment is effective for only one year and needs to be applied annually. In general, control is better and more consistent in smaller trees than large trees.
4. **Topical Cover Sprays:** Studies at Michigan State have shown that applications of Tempo® or Sevin®SL provided good control, especially when the insecticides were applied in late May and again in early July when the adult Borer are feeding on the leaves.

## V. Action

### **Early detection is required to save your Ash Trees.**

Take the following actions now:

1. Have your Giroud ISA Certified Arborist survey your property for Ash trees.

*Pictured: Emerald Ash Borer killed this untreated Ash Tree in Blue Bell, PA*

2. Determine the value of each Ash to your landscape:
  - Highest value Ash should be treated with Systemic Trunk injections every two years.
  - Ash of lesser value may warrant a lower cost treatment or be left untreated.
  - Untreated trees may require removal in the future.
3. Verify that the tree service company and technicians have the qualifications and training required to successfully perform the treatment.
4. Begin treatment at the optimum time and continue treating each tree on the schedule prescribed by the type of treatment.
5. Remove deadwood and promote healthy growth with regular pruning in combination with treatment.



**Protect Your Ash Trees—Get a *Free* Evaluation Today!**



**Call Today: 215-682-7704**  
**Or, visit: [www.giroudtree.com](http://www.giroudtree.com)**