

# TREATMENT FACTS for Emerald Ash Borer

Agrilus planipennis (Fairmaire)



Photo By Dave Cappaert

## About Emerald Ash Borer

The Emerald Ash Borer (EAB) is an invasive pest introduced from Asia that attacks ash trees. This metallic wood boring beetle was found in Detroit, Michigan and Ontario, Canada in 2002, and has continued to spread into neighboring states, threatening to eventually spread across the U.S. and Canada. EAB larvae live under the bark of the tree and feed in the vascular cambium disrupting the flow of water and nutrients essential to a tree's health.

## Evidence of Emerald Ash Borer

- Dieback in the tree canopy
- New sprouts forming from the tree's base
- "D" Shaped exit holes
- Woodpecker damage



## TREATMENT FACTS for Emerald Ash Borer

### Cost

- Treating with trunk injection is no longer expensive.
- The removal of ash trees can be over 10x the cost of treatments.
- TREE-äge® Insecticide applied every 2 years for 20-40 years can cost less than the cost of tree removal.

## Treatment Frequency

• TREE-äge® controls EAB for 2 years with a single application, and one application typically takes 10-15 minutes or less.

## Efficacy

• Independent university tests<sup>1</sup> have proven Arborjet's injections provide maximum EAB control.



Untreated Ash Trees





Treated Ash Trees with Arborjet's TREE-äge® and IMA-jet

### Environment

- If left untreated, EAB may result in severe devastation of the country's ash tree population.
- It's not necessary to remove all ash trees, you can save these most valuable trees.
- Arborjet equipment applies a small & precise dose inside each tree, eliminating the need for chemical applications to the soil and spraying.

## The National Tree Benefit Calculator Shows:

Trees pay us back in annual savings for things like storm water runoff, property value, and energy.

Calculate the value of trees near you! www.treebenefits.com

Calculator developed by Casey Trees and Davey Tree Expert Co.

Example Graph: 15" Ash Tree in the Midwest

One 15" diameter ash tree can provide benefits of \$144/year.
Additionally: 17" diameter white ash can provide benefits of \$217/year.

**I**UN. 15

JUL II

AUG. I

Imi+P: Imidacloprid + Pentra-Bark®

Imi: Imidacloprid (soil application)

Mauget: Mauget's Imicide® (injection caps)

(sprayed on the bark)

90 80

70-

50



## **Treatment Works!**

TREE-äge® is the ONLY product to achieve 2 years of control for Emerald Ash Borer.

Independent university studies<sup>1</sup> have shown TREE-äge<sup>®</sup> to be the most effective treatment of Emerald Ash Borer on Ash trees.

For complete reports, go to Arborjet.com > News & Events > Research > Reports

Treat trees only 4 inches or larger. Results are best when trees are preventively treated prior to an infestation.



#### Published by McCullough, D.G. et al. (2007) in the USDA EAB Research & Development Review Meeting 2007

Mauget

Dino+P

Dino

+ Pentra-Bark® (sprayed on the bark)

Dino: Dinotefuran (Safari®) (soil application)

Dino+P: Dinotefuran (Safari®)

TREE-äge: Arborjet® Tree Injection

TREE-age EAB Control Vs. Other Treatments

<sup>1</sup>Insecticide Options for Protecting Ash Trees from Emerald Ash Borer. Herms (The Ohio State University), McCullough (Michigan State University), Smitley (Michigan State University), Sadof (Purdue University), Williamson (University of Wisconsin-Madison & University of Wisconsin at Urbana-Champaign). 2009

## Why Trunk Injections Instead of Soil Applications?

Arborjet trunk injections seal formulations directly inside a tree's vascular system assuring an accurate dose that moves quickly to the target. Trunk injections limit the need to make foliar or soil applications, and research shows greater efficacy with trunk injection.

## Why Use Arborjet?

Arborjet's TREE I.V. and QUIK-jet® injection systems along with its full line of formulations have been designed by arborists for arborists. Similar to a hospital I.V. or injection, Arborjet products are designed to deliver a controlled dosage of formulation directly into the transport tissue of a tree where it is then distributed throughout the tree.

## What Products Do I Use?

Independent research has shown that TREE-äge® is the most effective and efficient management option for Emerald Ash Borer. TREE-äge® provides up to 2 years of control for Emerald Ash Borer.

## The Arborjet Method is Easy, Effective and Efficient.



DRILL
 PLUG
 INJECT



- Uses Arborplug<sup>™</sup> technology
- Fastest product delivery times
- No risk of cambial infection
- Closed injection site
- Lowest wound profile



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## EAB ESSENTIALS



#### World Class Formulations

**TREE-äge** and **IMA-jet** have both been identified by independent researchers as effective methods for treating against Emerald Ash Borer. *MICRO-jet* can be added to *IMA-jet* as a nutritional boost.





**Arborjet's TREE I.V.Two Pack Kit** is our most popular product due to its low cost and flexibility



**Arborjet's Deluxe Kit** is designed for frequent use where time of treatment is important. With three TREE I.V. bottles and a QUIK-jet® tool, the professional Arborist is never waiting for a bottle to empty.





QUIK-jet® and QUIK-jet® PRO are designed to be fast, affordable and effective. If you are looking for a low cost way of getting professional results, and you are treating trees with good uptake, the QUIK-jet may be the tool for you.

## **Arborjet For You**

Arborjet's complete tree care system has been designed to meet your most challenging tree care needs. Whether you're a professional arborist, city forester, landscape professional or resort superintendent, Arborjet has the right solution for you.



Arborists – Arborjet provides a variety of tools and formulations which give the arborist excellent control for an EAB outbreak. Arborists can tailor their treatments to each client's property offering a number of unique value added solutions.



Resort Care – If your resort is in an EAB quarantine area, Arborjet recommends treating the trees that define your golf course, ski slopes, or entrance ways that are far too valuable to be put at risk.



Municipality – If your municipality is in an EAB quarantine area, Arborjet recommends treating your healthiest ash trees along roadways and in parks. Trees bring tremendous economic value to your municipality. Treatment typically costs less than 10% of removal.



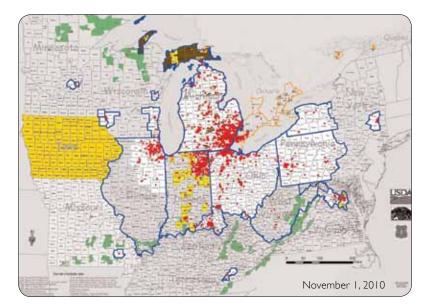
Homeowner Care – If you live in an EAB quarantine area, Arborjet recommends calling a tree care professional to treat ash trees on your property as soon as possible. Be sure to protect and maintain your property value. Visit arborjet. com to find an approved Arborjet service provider.

## Emerald Ash Borer Findings and Quarantines

EAB locations in Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, Wisconsin, West Virginia and Canada.

#### Map Key

- EAB Positive
- Site Under Evaluation
  (Symptoms, Found in Firewood, or Eradicated)
- Federal EAB Quarantine Boundaries
- State Quarantine Generally Infested Area
- State Quarantine
- State Quarantine Other (MI)
- National Forests
- Canadian EAB Regulated Areas



Find out if TREE-äge® Insecticide is registered in your state and start treating for EAB now!

Call us at 781.935.9070 to speak with an Arborjet consultant today or visit arborjet.com to find a distributor or a service provider.

