



Adult beetle  
Canadian Food Inspection Agency

## Insecticide Controls for Emerald Ash Borer

Scientific Name: *Agrilus planipennis*

**Rainbow Treecare** is working with University researchers to develop products to control Emerald Ash Borer (EAB). Two products have been identified that are effective at controlling EAB. Both products are available through Rainbow Treecare to help protect your ash trees. At this time, treatment is the only way to prevent the eventual death of ash trees from EAB.

### How insecticides work

Control measures for EAB are targeted to the larval stage of the beetle that lives between the bark and the wood of the tree. Only systemic insecticides are effective at controlling the beetle larvae, because these compounds are transported in the circulatory system of the tree. Application method is the primary difference in the two insecticides.

### Soil Application

Xytect™ is a systemic insecticide that is absorbed through the roots of the tree. The insecticide is injected into the soil right at the root flare. The highest rate application is required to control EAB larvae in ash trees with a DBH > 15". This treatment is effective when repeated annually.



*Soil injection application method*



### Trunk Injection

TREE-äge™ is a systemic insecticide that is injected through the bark tissue into the tree using a drill and a needle. Several injections are needed around the circumference of the tree to get enough uptake of the compound to control the beetle larvae. Applications to control EAB larvae last for two years.



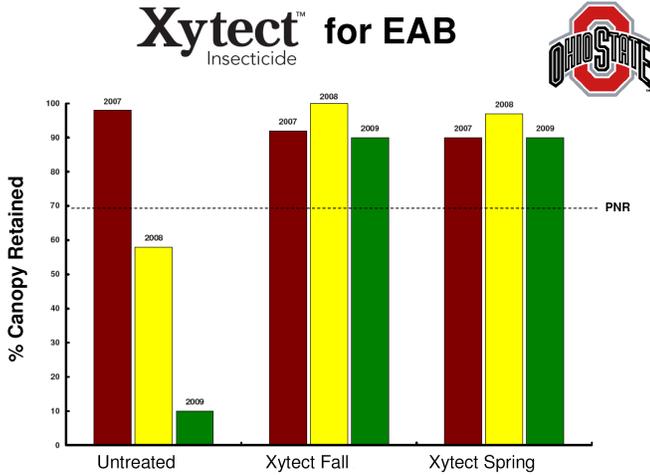
*Trunk injection application method*



# Emerald Ash Borer Management

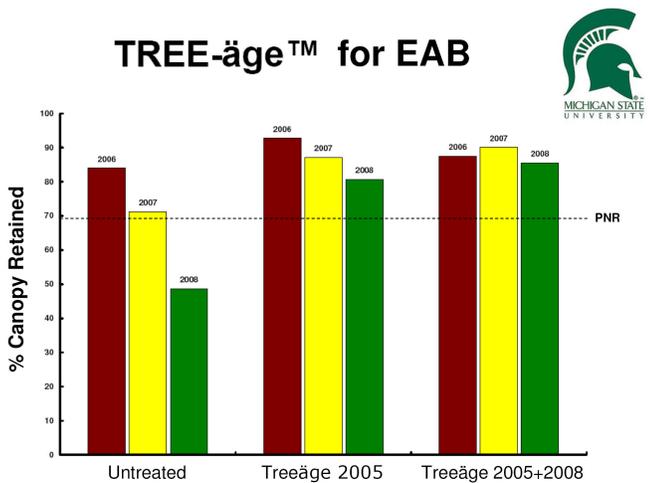
**Rainbow Treecare is committed to being on top of EAB research.**

Researchers at The U.S. Forest Service, The Ohio State University and Michigan State University have worked feverishly over the past seven years to find means for controlling EAB, and preventing EAB from killing trees in communities where ash are the majority of tree species.



While EAB was identified in Detroit in 2002, research into controlling and preventing the death of ash trees has been in high gear only since 2005. To date there are only two products that show consistent results in protecting ash trees from EAB. These products, XyTECT™ (imidacloprid) at the high rate, and TREE-äge™ (emamectin benzoate) at the medium rate. Both must be reapplied for the life of the tree to prevent the infestation and death of ash trees.

Therapeutically, both products are only effective at curing infested trees that show less than 30% defoliation from EAB infestations. The lines labeled PNR (Point of No Return) on the adjacent graphs illustrate how, within one season trees that appear healthy can drop below that 30% threshold. Using this data we are recommending preventive treatments for valuable landscape ash trees.



Rainbow Treecare provides both products to save our clients' ash trees. Current standards are for annual soil treatments of XyTECT™, every two years trunk injections of TREE-äge™, or removal and replacement of susceptible trees. Both products are extremely effective. It is up to you and your Consulting Arborist to determine which treatment will best suit your needs.

Rainbow Treecare remains at the forefront of new research efforts examining tree health products to protect ash against EAB.

## An integrated approach

When caring for urban trees it is important to make a complete evaluation of all environmental conditions to accurately diagnose all stress factors and prescribe care based on specific circumstances. This prescriptive care will help your tree meet its full potential.

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