

Trunk Injection Fact Sheet

- Trunk injection of trees is a way to efficiently treat many different insect and disease problems, as well as nutrient deficiencies, in a manner that limits environmental exposure. This method also uses the least amount of pesticide as compared to other conventional treatment methods.
- Trunk injection involves using a special injection tool which places and seals the insect control directly into the trunk where it is quickly taken up by the vascular system and distributed throughout the tree.

For Emerald Ash Borer pest control:

- Through trunk injection, small doses of insect control are carefully measured and injected directly into the tree's transport tissues, enabling distribution within the tree, but limiting the impact to the environment.
- The best time to treat Ash trees in the upper third of the country is from May through October when trees are most active, and water or nutrients are actively flowing in the tree. The larval (damaging) stage of EAB does its worst from August through October.
- Injections are made in the bottom 18 inches of the tree, at intervals of around 6 inches apart. The depth for the injection is between 5/8" and 1 5/8" into the tree. A 10 inch diameter tree would receive approximately a 1.5 ounce injection for two years of protection.
- Trunk injection formulations can take hours to weeks to move throughout the tree. Most often trees are protected within a few days.
- Trunk injection is widely considered to be the most effective and consistent method available for preventing EAB from attacking a tree, or killing EAB in an infested tree. It can stop damage even if the tree is already under attack without harming the surrounding environment.
- Researchers at Michigan State, Ohio State, Purdue, the University of Illinois, and University of Wisconsin have concluded that Arborjet's trunk-injected systemic insecticides are the most effective treatment options, providing very effective control of EAB for two years, with a single application, even under heavy infestation pressure. It also provided a higher level of control than other products in side-by-side studies.*
- The largest Midwestern cities, including Chicago and Milwaukee, chose and are currently using Arborjet's trunk injection with its two years of protection, for over 115,000 boulevard trees, following careful evaluation of the alternatives.

- The Arborjet trunk injection system uses the Arborplug, a one way port with a self sealing, surgical septum that prevents product from leaking back out of the injection site.
- The cost of tree injection treatment to cities is approximately \$53 per 17 inch diameter tree for two years of protection. The cost of removing and replacing that same tree is about 18 times that or \$750 - \$1000. That means that one could treat a tree for 40 years before the cost of treatment equals the cost of removing a tree. The treatment or removal cost of residential trees is considerably higher.

*Insecticide Options for Protecting Ash Trees from Emerald Ash Borer – 2009 Joint research summary by Ohio State University, Michigan State University, Purdue University, University of Illinois and University of Wisconsin Extension.