

CONSIDERATIONS

- Is my tree a good candidate for treatment?
- Am I willing to make a long term investment in the continued treatment of this tree?
- Would it be easier to just remove the ash tree and plant a different species?

Removing small trees and replacing with a different species may be more economical and more sustainable than lifelong treatments for EAB.



- Am I aware of the potential environmental impacts of treatment?
- Have I read the pesticide label, and am I aware of what is needed to treat the tree properly?
- Is my tree within 15 miles of a current EAB infestation? It is not recommended that you begin treatments until EAB is known to occur within 15 miles of your tree. To view current boundaries please see the treatment consideration map at www.eabne.info

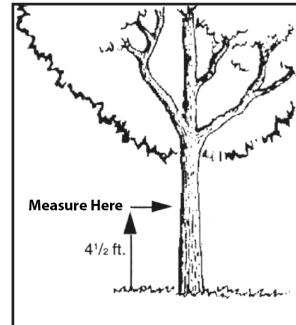


Bees and other pollinators are sensitive to some insecticides.



MEASURING TREES

Knowing the size of your tree is critical for proper treatment. Use a flexible measuring tape to find the distance around the trunk in inches at 4 1/2 ft above the ground. If more than one trunk is present, add the values together and multiply by 0.75. Check the pesticide label to determine the amount to apply based on the trunk size.



CONTACT US

For more free resources about the emerald ash borer, please visit www.eabne.info.

David Olson and Laurie Stepanek
Nebraska Forest Service, University of Nebraska
T: (402) 472-2944
E: trees@unl.edu

Photo Credits:
Ash Tree, David Cappaert, Bugwood.org
Bee: Johnny N Deli, Bugwood.org
Tree DBH, The Ohio State University



The University of Nebraska does not discriminate based upon any protected status. Please see go.unl.edu/nondiscrimination.

SOIL TREATMENTS EMERALD ASH BORER INFORMATION FOR HOMEOWNERS

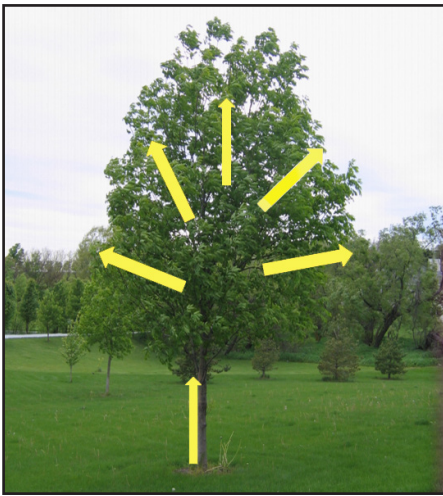


NFS.UNL.EDU

FH28-2019

WHAT IS A SOIL TREATMENT?

Soil treatments are applied to the soil around the base of a tree. The chemical is picked up by the roots, carried up the trunk, and distributed throughout the plant, providing protection from pests feeding on the tree. Soil treatments can be effective in controlling emerald ash borer (EAB), a destructive pest of ash trees.



Soil-applied systemic insecticides are taken up through the roots and distributed to the foliage.

IS MY TREE A GOOD CANDIDATE FOR SOIL TREATMENTS?

Trees should be:

- In good health, with little to no dieback or damage.
- Valuable to owner.
- Located within 15 miles of a confirmed EAB infestation.
- Small to moderate in size: Maximum trunk size of 45 inches in circumference or 15 inches in diameter.
- Larger trees must be treated by a professional arborist. See back panel for guidance in measuring trees.

More information on selecting trees for treatments, including a map of EAB infestations, can be found at www.eabne.info

BEST PRODUCTS FOR TREATING EAB

Currently the best soil-applied products available for homeowners to treat for EAB contain the active ingredients imidacloprid or dinotefuran. They are available under a number of commercial names and formulations. Be sure to check the label for use against EAB in ash trees.

WHEN IS THE BEST TIME TO TREAT?

Research has shown soil applications are the most effective if applied in the spring. For products containing imidacloprid, apply in April just prior to or during leaf out. For products containing dinotefuran, treat in mid May to early June. Make applications only once per year.

HOW IS A SOIL TREATMENT APPLIED?

- Remove excess mulch and loose soil from around the base of the tree (mulch can bind up the product before it ever reaches the roots of the tree).
- Read and follow all pesticide label instructions.
- Mix the insecticide into water at a concentration consistent with the label and the size of the tree being treated (wear proper protective clothing).
- Pour the mixture slowly around the base of the tree, making sure it has time to absorb and is not running off.
- Stay close to the base of the tree to limit the amount of product being wasted on the lawn, and to limit exposure of non-target organisms to insecticide.
- Replace mulch around the base of the tree.



WILL SOIL TREATMENTS SAVE MY ASH TREE?

While soil treatments have been shown to be effective against EAB, there is no guarantee that the tree will be saved. Success is dependent upon several factors including tree health, environmental conditions, and the level of the infestation. Trees that are already stressed or damaged may not be able to move the product to the upper portions of the tree.

Soil treatments will have to be conducted on an annual basis to keep the tree protected; it is not a one-and-done deal. As the tree grows larger, soil treatments will become less effective, and professional treatments will need to be considered.

ADVANTAGES AND DRAWBACKS OF SOIL TREATMENTS

- Generally soil treatments are easier to apply than other application methods, are less expensive, and do not cause tree damage the way trunk injections do. However soil treatments have several drawbacks.
- The active ingredients in soil-applied products (imidacloprid and dinotefuran) have been shown to be extremely toxic to bees. Although ash is wind pollinated, bees have been shown to gather ash pollen. Thus treating trees could expose bees and other pollinators to the insecticide.
- Flowering plants growing in the treatment area may take up the insecticide and expose pollinators to the chemical.
- Soil treatments have also been shown to decrease numbers of earthworms and other decomposers in the soil surrounding the tree.
- Label restrictions only allow so much product to be applied to an area in a single year. Imidacloprid is frequently used in lawn treatments to control grubs, therefore overapplication may occur. Be aware of what is being used in your lawn as well as your neighbor's lawn.
- Treatments may not be effective against a number of other borers that attack ash trees.
- Soil treatments are less effective in large trees.