

You can find more information about emerald ash borer (EAB) at [www.EABcolorado.com](http://www.EABcolorado.com). Contact Westminster City Forester with questions: John Kasza, 303-658-2559, [jkasza@cityofwestminster.us](mailto:jkasza@cityofwestminster.us).

Before making a decision to treat an ash tree, keep in mind that not every tree can or should be saved. Trees that are in poor condition, have structural defects or previous insect damage, are in an undesirable location (under power lines, causing hardscape damage, etc.), or trees that are not in a site that receives adequate irrigation should not be treated. Because pesticide treatments must continue for an indefinite period, smaller trees (less than 8 inches in diameter) should be considered for removal and replanting with other types of trees to increase diversity.

The following products are the most commonly used for EAB. Take your time to gather all the information available to determine if treating your ash trees is the right decision and if you do choose to treat your trees, choose the best product for your particular situation. It is recommended you hire a reputable, experienced pesticide applicator or certified arborist. The information below is compiled from available EAB research and resources.

Product Name	Pros	Cons	Comments
TREE-age Arbormectin (emamectin benzoate)	<ul style="list-style-type: none"> <li>• Most effective product on the market for EAB control.</li> <li>• Most effective control option for larger diameter trees (trees over 18" diameter).</li> <li>• One application works well for at least two years and possibly three years.</li> </ul>	<ul style="list-style-type: none"> <li>• Must be injected into trunk of tree; injection process wounds the tree. Impacts of wounding of ash via injection in Colorado not documented.</li> <li>• Product may only be applied by State of Colorado licensed pesticide applicator.</li> </ul>	<ul style="list-style-type: none"> <li>• Systemic insecticide applied via trunk injection by a licensed pesticide applicator.</li> <li>• Restricted use pesticide that is 99% effective.</li> <li>• Few environmental risks.</li> <li>• Useful for trees between 8" and 24" diameters.</li> </ul>
TreeAzin (azadirachtin – a neem seed oil derivative)	<ul style="list-style-type: none"> <li>• OMRI (Organic Materials Research Institute) certified.</li> <li>• Well-studied, showing minimal environmental impacts.</li> <li>• Provides good control for first year and reasonable good control for second year.</li> </ul>	<ul style="list-style-type: none"> <li>• Must be injected into trunk of tree; injection process wounds the tree. Impacts of wounding of ash via injection in Colorado not documented.</li> <li>• Product may only be applied by State of Colorado licensed pesticide applicator.</li> <li>• May be effective for two years under low-level infestations, but will likely need to be applied every year under heavy infestation.</li> </ul>	<ul style="list-style-type: none"> <li>• Systemic insecticide applied via trunk injection by a licensed pesticide applicator.</li> </ul>

<p>Safari (dinotefuran)</p> <p>Other trade names: Zylam, Transtect</p>	<ul style="list-style-type: none"> <li>• Applied as trunk spray to lower 4' of trunk; no wounding of tree in application.</li> <li>• Can be applied as a soil drench or injection.</li> <li>• Up to 60% effective EAB control, less in trees over 18" diameter.</li> <li>• Less expensive than trunk injected products on a per application basis.</li> </ul>	<ul style="list-style-type: none"> <li>• Highly toxic to bees and other non-target animals.</li> <li>• Available to commercial applicators only.</li> <li>• Effective for only one year.</li> <li>• Highly mobile in water and could leach into water bodies or groundwater.</li> </ul>	<ul style="list-style-type: none"> <li>• Non-invasive systemic trunk spray available only to licensed pesticide applicators.</li> <li>• If this product is used, it is crucial to apply after the tree is leafing out to avoid contamination of pollen.</li> <li>• It is crucial to avoid applications when other flowering plants are nearby to avoid contamination of pollen and toxicity to honeybees.</li> </ul>
<p>Merit and many others (imidacloprid)</p> <p>Commercial product trade names: Merit, Criterion, Lescro Bandit, Xytect, Ima-Jet, Imicide, Pointer</p> <p>Homeowner product trade names: Bayer Advanced Tree &amp; Shrub Insect Control, Ferti-lome Tree &amp; Shrub Systemic Drench, Optrol, Ortho Bug-B-Gon Year-Long Tree &amp; Shrub Insect Control</p>	<ul style="list-style-type: none"> <li>• Least expensive option.</li> <li>• Available as a homeowner-applied product and applied as a soil drench.</li> <li>• Available as a commercial product and applied as a soil drench or soil injection.</li> </ul>	<ul style="list-style-type: none"> <li>• Effectiveness is inconsistent and may be up to 60%.</li> <li>• Effective for only one year.</li> <li>• Highly toxic to bees and other animals.</li> <li>• Toxic to earthworms and other soil organisms and may persist in soil for years.</li> </ul>	<ul style="list-style-type: none"> <li>• Some commercial products are applied via trunk injection by a licensed pesticide applicator.</li> <li>• If this product is used, it is crucial to apply after the tree is leafing out to avoid contamination of pollen.</li> <li>• It is crucial to avoid applications when other flowering plants are nearby to avoid contamination of pollen and toxicity to honeybees.</li> </ul>
<p>Astro, Onyx, Tempo and many others (various chemicals)</p>	<ul style="list-style-type: none"> <li>• No wounding of tree in application.</li> </ul>	<ul style="list-style-type: none"> <li>• Effectiveness is dependent upon thorough coverage of the entire tree.</li> <li>• High environmental risk of spray drifting onto flowering plants visited by bees.</li> </ul>	<ul style="list-style-type: none"> <li>• Apply as a whole tree spray twice a year.</li> <li>• Sprayed on trunk, branches, and sometimes foliage to kill adult EAB beetles and newly hatched larvae.</li> <li>• Will have no effect on larvae feeding under the bark.</li> </ul>