

Ash dieback caused by construction

A number of 10- to 40-inch dbh ash trees are showing various degrees of dieback and declining symptoms. This area is a four- to five-year-old development. I think it is related to construction damage. What do you think is the probable cause, and how can it be corrected?

—MICHIGAN

Based on the information you provide, the problem does indeed sound as if it is related to construction activity. The dieback and decline symptoms you've seen could relate to some of the following factors:

1. Soil disturbance and root injury
2. Bark injury on trunk
3. Compacted soil caused by equipment traffic and poor aeration
4. Fill damage
5. Insect and/or disease activity

Fill damage is one of the major causes of tree decline. Generally, this would be more noticeable three to four years after the building is completed.

Often, it is too late. Ideally, the problem should be addressed before or during land development and construction. Where feasible, excess soil within the tree's dripline should be removed to the original grade. Install "wells" as needed and aerify compacted soil. Fill damage causes injury by suffocating the root system and changing water tables. Proper aeration, water, fertilizer and mulch should help improve

plant health.

Once the plants are weakened by the abiotic stress factors, the plants can be predisposed to a number of insect and/or disease problems. Among these, canker diseases and borer insect problems are the most common and destructive problems.

Inspect the affected trees closely for evidence of canker and/or borer problems.

Sunken and discolored areas with fungal fruiting bodies would suggest the possibility of fungal canker disease. Small exit holes or frass would suggest borer activity. If these problems are detected, promptly remove and discard affected plant parts.

Consider using a product such as Dursban for borers. There are no effective fungicidal treatments for cankers. To help plant vitality, be sure to water, fertilize and mulch as needed.

Systrex Nutrient, a systemic fungicide and micronutrient solution—it contains Bayleton fungicide and micronutrient—is made by Tree Tech Microinjection Systems in Florida. It is labeled for treating tree decline caused by several fungal agents.

Systrex can be injected into a declining tree with a microinjection delivery system, similar to microinjection of Alamo fungicide for oak wilt disease treatment.

Information on this treatment and its effect on declining trees is limited. Secondly, it is not clear whether the product can be used for ash decline.

Another cause of ash dieback and decline may be related to ash yellow disease caused by mycoplasma. However, at this time, there is no known effective treatment.

Products such as Tetracycline injection systems are being researched to determine the feasibility of managing this disease.

Read and follow label for better results.

Broadleaf weed control without 2,4-D?

Are there any herbicides which do not contain 2,4-D that can be used on lawns to control broadleaf weeds?

—NEW YORK

Gallery, a pre-emergence herbicide, can be applied before weeds germinate. The weed seeds will germinate, but the seedlings will not emerge out of the soil.

You can also use post-emergence herbicides such as Trimec Encore, which contains MCPA; MCPP and dicamba; or, Confront, which contains triclopyr and clopyralid. Some of these are slightly slower-acting than herbicide formulations which contain 2,4-D.

The slow response may cause customer dissatisfaction, so discuss a change in herbicide and control expectations with customers.

Apply post-emergence herbicides during active weed growth. **LM**



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