1-1-1977

Yew Dieback

Paul C. Pecknold
YEW DIEBACK
Paul C. Pecknold, Extension Plant Pathologist

One of the most popular evergreens in the home landscape is the yew (Taxus). It lends itself well to close clipping for formal type plants and hedges, but presents an attractive informal appearance as well. Unfortunately, all too often yews are afflicted by a dieback condition which damages the plant and often results in plant death. Consideration of those factors responsible for dieback will enable you to take preventive and corrective measures to help in controlling this problem.

Foliar Symptoms

Dieback symptoms begin with sparse yellow foliage of the entire or portions of the plant and poor growth during the growing season. At first yews frequently turn yellow at the growing tips; this is followed by needle browning and needle drop resulting in dieback of individual branches. Dieback generally progresses from the top of the plant downward. Several months may elapse from the time the first symptoms appear to the complete dieback and death of the plant.

Figure 1. Sparse foliage and poor growth are indicative of yew dieback.

Rounded notches eaten out of leaf margins could indicate the presence of the black vine weevil. Information on the black vine weevil can be found in the Department of Entomology publication E-41.

Root Symptoms

If root damage is caused by excess soil moisture, look for blackened roots with a
wet, slimy appearance. The bark will readily slough off exposing a mushy, brown, rot of internal tissues. Frequently roots will appear healthy in the upper 2 to 4 inches of soil where soil drainage is not a problem, while the deeper roots are rotted because of poor drainage in the lower soil profile.

Root injury caused by root rot fungi will frequently show the same symptoms as described above. One key symptom to look for if root rot fungi are the problem is a dark brown streaking in the sapwood at the soil line area (where roots and stem join).

Small white-bodied larvae in soil at the base of the plant could indicate presence of the black vine weevil.

**Causes**

The three most common causes of dieback are: (1) excessive soil moisture, which damages roots, (2) root rot fungi or (3) an insect pest, the black vine weevil. Each of these alone or in combination can damage the root system with the accompanying dieback of the above-ground plant parts. The most common cause of dieback is root damage from excessive soil moisture. High soil moisture is usually associated with poorly-drained planting sites and/or heavy, clay-type soils.

The root rot fungi associated with dieback are common soil organisms favored by heavy, wet soils. They usually infect the root system after it has been injured by excessive soil moisture.

Refer to publication E-41 for information on the black vine weevil.

**Control**

Because dieback is likely in poorly-drained and/or heavy, clay-type soils, plant in only well-drained, light-textured soils. Before you plant, carefully consider drainage and soil type. Future problems are best avoided before planting, not after.

Improving drainage is the primary aim for controlling dieback whether it is caused by excess soil moisture or root rot fungi. If subsurface drainage is a problem, the only remedy may be the installation of 3-

![Figure 2. Dark brown streaking in the sapwood caused by root rot fungi.](image)

or 4-inch drainage tile at depths of 30 to 36 inches through the area where yews are to be planted. Planting high on a mound rather than digging a hole and creating a cup in the soil is another method of avoiding subsurface drainage problems. If tilling or planting on a soil mound is not feasible or desirable, move plant to a more favorable growing site. Problems with surface drainage can often be improved with little effort. Run-off water from roof gutters, paved surfaces, lawns, etc. should always be directed away from plants.

It is difficult to alter the soil type, but you can improve drainage by adding organic matter such as compost, manure, or leaf mold. Coarse or ungraded sands, containing a large proportion of 1/16- to 1/8-inch particles, will also bring about improved water drainage when added to a clay soil.

Along with heavy, poorly-drained soils, root rot of yew is often associated with acid soils, pH 4.7 to 5.4. It therefore might be beneficial to add ground limestone, according to the recommendations of a soil specialist, to increase the pH to about 6.5.

Chemical control is generally not effective for yew dieback in the home landscape; emphasize soil type and drainage problems as outlined above.

If black vine weevil is causing the yew dieback, refer to publication E-41.