



Taxus Disorders

Bruce R. Fraedrich, Ph. D., Plant Pathologist

Taxus (yews) are among the most popular evergreens for foundation plantings and hedges in the landscape. The **Japanese yew (*Taxus cuspidata*)**, **English yew (*T. baccata*)** and a hybrid between these species known as **Anglojap yew (*T. media*)** are the most widely planted species. More than 100 cultivars of these species are available from commercial nurseries. Taxus is a popular landscape species because of its slow, compact habit of growth, lush green foliage, wide diversity of forms and resistance to pest problems. Occasionally, taxus plantings will fail and the cause usually can be traced to an environmental or cultural problem.

POOR DRAINAGE (“WET FEET”)

The most common cause of death of taxus plantings is excessive soil moisture. This condition usually occurs in heavy, clay soil, low areas where drainage is impeded or adjacent to rainspouts on buildings. Yews are incapable of tolerating the poor soil aeration associated with wet soil. Certain root diseases also tend to develop on poorly drained soils. Yews affected by "wet feet" generally exhibit a gradual decline including foliage yellowing and browning, poor growth, twig and branch dieback and ultimately death. When affected plants are excavated, healthy roots usually are present only near the top of the root ball. The remaining roots appear necrotic and deteriorated.

Where taxus is declining on poorly drained clay soils, replanting with a more tolerant species such as arborvitae, viburnum, or deciduous holly is the best practice. Efforts to improve soil drainage by adding sand, gravel or gypsum to the backfill in planting holes will aid in the establishment of new taxus plantings. However, the plants often will decline when the roots must penetrate the poorly drained parent soil. Diverting runoff from rainspouts away from taxus will help prevent "wet feet" on foundation plantings.

ACID SOILS

Yews often are grown in mass plantings along with ericaceous plants such as pieris, mountain laurel, rhododendron, and azalea. Ericaceous plants prefer acid soils (pH: 4.5-5.5) whereas taxus prefers a more alkaline soil (pH: 6.0-7.0). Acid forming fertilizers, used to maintain ericaceous plants, often are applied to taxus when these plants are grown together. The acid soils often lead to foliage chlorosis on taxus. Where taxus is treated annually with acid fertilizers, apply dolomitic limestone to the soil beneath the crown of the plants in order to maintain a more alkaline soil. Apply three to four pounds of lime per 100 square feet of soil surface area beneath taxus every three years.

BARK WOUNDS

Taxus is very intolerant of bark wounds. Bark injuries as small as 1/3 the

circumference of the branch may lead to death of that portion of the limb distal to the injury. Bark wounds resulting from snow and ice accumulation in winter are the most common cause of branch and twig dieback. Usually this dieback becomes evident during the spring or summer following the injury.

Tying the plants with soft twine in the fall can prevent breakage by snow and ice accumulation. Fasten the twine around the base of the trunk and wind it spirally upward to the top and back down in reverse spiral. The twine must be completely removed in early spring. Any dead and dying limbs also should be pruned out in the spring.

WINTER DRYING

Desiccation of the foliage during winter is a common problem especially on taxus grown in windy, exposed locations. English yew is most prone to winter drying while Japanese and Anglojap yews generally are hardier. Winter drying and its control are described in detail in Technical Report entitled "Winter Drying".

INSECT PESTS

The most destructive pests of taxus are the black vine weevil and strawberry root weevil. Larvae of these pests feed on the roots causing reductions in growth and vigor. Adults feed on the foliage causing characteristic notches in the blade.

Other pests of taxus include mealybugs, mites, and several species of scales, most notably Fletcher and cottony taxus scales.

Control procedures for taxus pests are listed in the Pest Management Recommendations issued by the Bartlett Laboratories.