

VEGETATION MANAGEMENT

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Q: How do you tell maple wilt from maple decline? Is there anything you can do to treat these diseases?

A: Maple wilt is caused by the fungus *Verticillium albo-atrum* and is first evidenced by the sudden wilting and dying of leaves on individual limbs. Sometimes the wilting is preceded by a slight yellowing of the leaves. The sapwood may be discolored (olive-green), particularly near the base of the tree. However, since other fungi may cause a similar staining, a positive diagnosis can be made only by culturing the discolored tissue.

Infected trees may die within a few weeks or over a period of several years depending upon the degree of infection and whether the infection occurred through the roots or branches. Occasionally an infected tree will recover and "wall off" the infection with subsequent new growth.

Treatments with high nitrogen fertilizer in the spring have reportedly aided the walling-off process by stimulating new growth.

Maple decline is not associated with any particular insect or disease but apparently is caused by environmental and other abiotic factors. Among those suggested to trigger the decline are drought, road salt, mechanical injury and nutrient deficiencies. Other problems such as root rot are thought to be of a secondary nature.

The symptoms are twig and branch dieback involving initially the upper crown, premature fall coloration, chlorosis, scorch and leaf dwarfing. Sugar maples are more often affected than other maple species and appear to be especially susceptible along roadsides.

Fertilization with high nitrogen fertilizer often dramatically improves declining maples, particularly when supplemented with trunk injections of manganese salts. Of course, if road salts are involved, any action which would reduce the salts in the root area would be beneficial.

Q: I have a myrtle bed where one-third of the plants are rotten or loose from the ground, needing to be raked out. Why is so much of the planting dead or loose? There has not been any change in bedding conditions.

A: Assuming the myrtle to which you refer is *Vinca*, we have had reports of cases of both canker (*Phoma exigua*) and root rot (*Pellicularia filamentosa*) in your area of Pennsylvania. Both of these diseases can cause a dieback or decaying of stems and are usually more prevalent during rainy periods of the growing season.

Recommended controls include the removal of infected plant parts and a periodic soil drench with benlate (benomyl). Root rot is difficult to control in established plantings. Check with your local extension agent and/or refer to the product label for use and timing instructions.

Q: Many so-called "tree surgeons" make much of their living from "topping" trees, even though they are aware that the practice is unsound. These specialists often perform this service at the request of ill-advised or uninformed homeowners. Can you recommend a way to eliminate this senseless tree butchering without hurting the income or reputation of tree surgeons?

A: Topping not only is aesthetically unattractive but also results in weak crotches and a greater potential for decay in the "nests" of branches.

Topping requires less skill and time than selective pruning and allows an untrained person to "trim" a tree for less money than a more knowledgeable tree surgeon. Unfortunately, many homeowners are unable to appreciate the quality difference and judge service by the size of the bill.

We all need to do a better job of educating our industry as well as the public. Organizations such as the National Arborist Association (NAA) and the International Society of Arboriculture (ISA) help to set industry standards and promote public awareness. On a more local basis, each of us can become involved in community activities involving tree planting and maintenance, and participate in civic and garden club programs.

Q: I have a garden center and during the summer I have to weed every ten days. I want to eliminate this as it can become very expensive. I keep the plants above ground, but what can I use to prevent weeds from coming up?

A: Without knowing the major weeds or the nursery plants involved, I cannot recommend herbicides for application around a variety of existing plants.

Prior to bringing in the nursery plants, the area could be treated with an herbicide such as Roundup which would kill existing weeds but would not affect subsequent weed germination. Soil fumigants such as methyl bromide could also be applied and would control most weeds for a season. However, fumigants are dangerous and expensive to use and should be handled only by professionals.

Possibly the best solution would be to cover the area with black plastic and a light topping of organic mulch to provide a surface suitable for foot traffic.

Q: What causes spit spot on oaks?

A: We have not had many reports of spit spot, but in most cases it was associated with large, recently transplanted pin oaks. Generally, it appeared as small spots of froth or foam on the trunk and disappeared as the tree became established. To date we have been unable to associate an insect or disease with the spots. Perhaps one of the readers has a suggestion.

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