

PROBLEM SOLVERS

by Balakrishna Rao, Ph.D

Treating dogwood trees

Problem: We have seen dogwood trees with swellings on the tips of the twigs. Affected twigs look stunted and the portion above the swellings will be killed. What causes these and what can be done to manage this problem? (Tennessee)

Solution: From your description of the problem and symptoms, I feel that the swellings on the dogwood twigs are dogwood club galls, caused by a small reddish-brown fly, *Mycodiplosis alternata*.

In May the female fly lays eggs on young shoots near the terminal bud. The larvae hatch from the eggs, bore into the twig and cause swellings which are noticeable in a month or so.

Larvae grow inside the club galls and then drop to the ground by September to overwinter. The following May, the adult flies will emerge and repeat the life cycle.

If the problem is not very severe, simply prune the galls before August 1 and destroy them to minimize the problem. Galls can be prevented by applying insecticides like Sevin or lindane to the branches between May 1 and June 15. During this time frame, several applications may be necessary to obtain maximum protection. From the time mature larvae drop to the ground, around August 15 till September 15, they can be controlled by the application of insecticides on the ground.

Contact your local cooperative extension agents for the choice of insecticides to use.

Galls: an unknown

Problem: We have seen a number of sugar maples with large galls on the branches. What causes these and will they kill the trees? Is there something that can be done to prevent or cure these? (Ohio)

Solution: We have seen these large tumorous growths on the trunk and branches of red and sugar maple trees. Galls have been attributed to *Phomopsis*, a fungal agent. Very little is known at the present time about this disease. Often infected plants may produce several galls; however, the disease apparently does not spread easily from one tree to another.

There is no recommendation for chemical management of the problem. For aesthetic reasons, the galls can be pruned and removed.

Solving poor rooting

Problem: Last year we repaired a number of lawns which were severely damaged by insects or diseases. We used sod as a means for fast recovery. The problem is that the sod is not rooting very well. What is the problem? What can we do now? How can we avoid the problem in the future? (Pennsylvania)

Solution: Poor rooting of newly sodded turfgrass may be due to several factors such as lack of sufficient moisture, interface, and improper soil preparation at planting.

After sod installation, one must provide sufficient moisture during establishment. During high temperature periods, improperly sealed sod edges can lose excessive moisture. In addition, most sod is grown on muck soils and interface problems can arise when it is placed on clay-type soil without good soil preparation. The difference in soil type leads to incompatibility, resulting in poor penetration and surface runoff whenever watered. This affects proper rooting.

Prior to sod installation, the soil should be tilled and prepared for sod installation. At this time it is easy to incorporate phosphorus, a needed element for root development.

In the same way, any pH correction can be accomplished at this time. In the future make sure that the endrothrips soil is prepared properly for root penetration, and sufficient moisture is provided during the establishment period. The areas showing poor rooting can be helped by core aerifying in fall or early spring. If possible, aerify annually to hasten results.

Football fields, fertilizer, and lime

Problem: When trying to improve turf on football practice fields, can you use fertilizer or lime? How about adding round sand before coring to help increase rooting zone? (Ohio)

Solution: Based on soil test results, fertilizer and lime can be used as needed when trying to improve turf on football practice fields. Adding sand before coring is not as beneficial as adding it after coring. By adding sand after coring, there is a greater chance for the sand particles to fall into the aerification holes. This is the preferred method.

Reports suggest that addition of medium to coarse sand (ranging from 0.25 to 1.2 mm in diameter) is useful to reduce compaction and increase root depth. Continued use of sand could lead to layering or the development of an interface.



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Questions should be mailed to Problem Solver, Weeds Trees & Turf, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.