

# PROBLEM SOLVERS

by Balakrishna Rao, Ph.D., and Thomas P. Mog, Ph.D.

## Summer fertilizer safety

**Problem:** Our lawns are dethatched, limed (50 lbs./1,000 sq. ft.) and fertilized (10-6-4, 50% fertilizer) each spring and fall. The lawns consist mainly of Kentucky bluegrass and creeping and tall fescue with very little ryegrass, and all the clippings are picked up after mowing. Our summer fertilizer is 20-4-10, 40%. If this is applied before July (mandatory) would it be too strong for summer? (New Jersey)

**Solution:** Not knowing the exact amount (lbs./1,000 sq. ft.) of different fertilizers being used during different times of the year, it is difficult to respond to your question. However, if you are using these fertilizer formulations to provide no more than 1 lb. of actual nitrogen per 1,000 sq. ft. per treatment, then it should be safe enough to use in summer.

## Sandburr control in Texas

**Problem:** What will eliminate sandburrs in the east Texas area between Dallas and Shreveport? (Texas)

**Solution:** You can use the preemergent materials like diphenamid, trifluralin or EPTC for sandburr weed control on turf and ornamentals in Texas. Although results may vary, you can expect some level of control from the use of these products.

You can expect better results using arsenical materials such as DSMA or MSMA as postemergent herbicides. These arsenical materials, however, may have phototoxic effects and produce temporary discoloration of the treated area. Treat the area when weeds are young and actively growing which would be during late spring and early fall.

## Needle drop on Douglas fir

**Problem:** One of my account's Douglas fir trees are turning color and dropping their needles. What's really strange is that two trees may be right next to each other; one will be healthy and the other appears to be dying. Do you know what is causing this? (New York)

**Solution:** There are two possibilities; 1) a needle disease and 2) natural shedding of the older needles. So-called "evergreens", like the pines, spruces and firs, shed their foliage just as the broadleaved or deciduous trees do. Most conifers hold their needles for two or more years, after which they are shed.

Needle drop usually occurs in the fall and is a natural process which normally takes several weeks. Sometimes adverse environmental conditions trigger color change and shedding of the older needles at times other than fall. When this happens, the trees' appearance may change from normal to abnormal in a period of days. In both instances the newest needles are still on the tree.

Several different fungi can cause somewhat similar symptoms. The fungi responsible for a diseased condition that results in premature shedding of the foliage are collectively known as needlecast fungi.

With needlecast, one tree may be diseased and a nearby tree of the same species can be free of symptoms. This phenomenon is often attributed to differences in genetic makeup and is called host resistance.

If all firs were showing similar patterns of injury involving only the older needles, then one would suspect natural or environmentally induced shedding of the foliage and not disease.

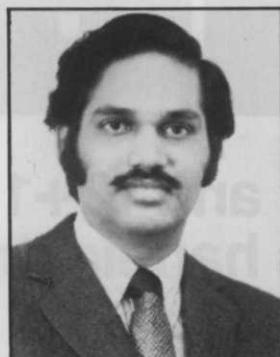
## Wood ashes as fertilizer

**Problem:** What kind of nutrient value is there in wood ashes from fireplaces? Some of our clients are thinking of using these around trees. I would appreciate your comments in this regard. (New York)

**Solution:** Recently, there has been increased interest in the use of wood ashes produced from fireplace burning as a fertilizer source. The wood ashes from fireplaces contain about 5% K<sub>2</sub>O (potassium) and 25% Ca (Calcium). Many people use these ashes as fertilizer in their gardens. Hardwood ashes are frequently used as fertilizer for tobacco growing. From this information, I would imagine that the ashes from fireplaces could be used as fertilizer to supply the above nutrients.

## Fruit or shade, rates differ

**Problem:** I plan on using Benlate to control scab. The label says use four to six ounces per 100 gallons on apples. For shade trees the rate is one pound per 100



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

gallons. The apple rate would be cheaper. Why the big difference? (Pennsylvania)

**Solution:** The "apple rate" is for apples as a food crop. Tolerance levels have been set for pesticide residues on food crops. At the shade tree rate the fungicide residue on apples might exceed permissible levels. Finally, most commercial fruit growers spray their trees weekly or bi-weekly thus reducing the need for a long-lasting residual.

Satisfactory control of scab on shade trees can be achieved with two or three applications of Benlate at the rate of one pound per 100 gallons. Follow the label instructions as to timing and possible use of wetting agents.

### Multi-use spray tanks

**Problem:** If washed, can a spray tank which is used for weed control be used for fungicide spraying of trees and shrubs? (New Jersey)

**Solution:** It is difficult to remove some herbicides after they have been used in a sprayer. This is particularly true of the phenoxy herbicides that are used for broadleaf weed control.

The following suggestions are from the Ohio Cooperative Extension Service publication, Chemical Weed Control In Commercial Nursery and Landscape Plantings.

1. 2,4D - It is difficult to remove 2,4D compounds from sprayers. It is advised that sprayers used for

applying these materials NOT be used for any purpose other than applying herbicides.

The 2,4D type materials can be removed if the following recommendations are followed immediately after use (as soon as spraying is completed).

a. Flush out the entire system with water detergent solution immediately after the solution (1 gallon of household ammonia in 10 gallons of water) and let stand for 12 to 24 hours. Disassemble the nozzles and soak the caps, screen, etc. in the ammonia solution.

b. Rinse thoroughly with water and let circulate through the sprayer.

c. Test spray a few plants which you know to be susceptible four to five days before using sprayer on larger areas.

2. PRINCEP - Rinse thoroughly with a detergent immediately after use. Check screens for clogging and, if present, soak in ammonia solution for 12 to 24 hours.

3. OTHER HERBICIDES - Any sprayer used to apply herbicides should be cleaned immediately after use. Special instructions for particularly troublesome herbicides have been previously outlined. If the procedures for cleaning out other herbicides are not specifically outlined,

a. Flush the sprayer system with clean water.

b. Rinse thoroughly with a detergent solution.

c. Rinse again with clear water.

The herbicide label may carry cleaning instructions. If so, follow the manufacturer's recommendation.

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