

# PROBLEM SOLVERS

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

## Basagran for nutsedge

**Problem:** We have a problem controlling nutsedge in lawns. We have tried Betasan without much success. What are we doing wrong? (Ohio)

**Solution:** Perhaps you are mistaking Betasan for another product, bentazon (Basagran). Betasan is a preemergence herbicide for grassy weeds. Basagran is a postemergence herbicide which is very effective on nutsedge when applied to actively growing plants in late spring.

Yellow nutsedge is a serious weed problem of warm-season turf. It establishes by underground tubers or from germinating seed in late spring or early summer. Heavy populations can occur in July and August in areas thinned by summer stress, insects or diseases.

Basagran should be applied after seed has germinated in late spring but before tubers are formed. Repeat applications may be needed, but do not apply to newly seeded turf. Avoid mowing three to five days before and after applications.

## Scab on crabs

**Problem:** Scab was devastating last year especially to the flowering crabs. Will it be as bad this year and what can be done to help them? (Ohio)

**Solution:** I agree with your observation that scab (*Venturia inaequalis*) was at unusually high levels in 1983. The weather last spring was ideal, cool and wet, for infection by and development of this fungus leaf disease. My observations were that the red or purple-leaved trees were more severely affected than those with green leaves. Some trees were, for all practical purposes, leafless by late June-July. Since these trees had their full compliment of leaves for less than half the growing season, the photosynthate produced (sugars) and stored (starch) for growth this year must be way below normal.

The fungus which causes scab overwinters in fallen leaves and on the twigs. Removal and destruction of last year's infected leaves helps. If we get a long, cool and damp spring the susceptible species, which include many of the flowering crabapples and hawthorns, will be in trouble again.

Three applications of an approved fungicide, the first applied just before the blossoms open (pink bud) and twice more at 7- to 10- day intervals, should provide satisfactory protection. If it is exceptionally rainy, more sprays will be needed. Fertilization is highly recommended to maximize the new growth you do get. Some states, Ohio being one, recommended late summer or fall fertilization for the scab problem.

The trees really looked bad last year and a few people have gone as far as suggesting that many might not make it throughout the winter. Thus your concern is certainly justified. Fungicide sprays and fertilization are needed to promote recovery and survival of this beautiful popular group of flowering ornamentals. The best solution to future scab problems is the use of disease-resistant varieties.

## Avoiding herbicide contamination

**Problem:** In our lawn care business, sometimes we experience herbicide injury of desirable ornamental plants. Would you please recommend some guidelines to correct the possible herbicide contamination of plants? (Michigan)

**Solution:** Success in rescuing the plants from accidental herbicide contamination depends on several factors.

These include early recognition of the problem, timely and appropriate protective measures and type and concentration of the herbicides involved.

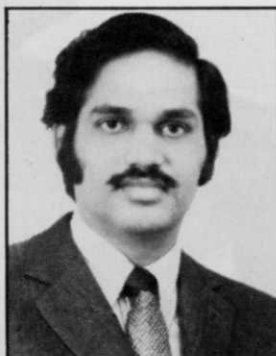
Drift and/or root uptake of lawn-applied materials are the primary cause of contamination from herbicides. Often accidental spillage also can present some problems. Depending on the application technique, delivery system and wind velocity and direction, materials may drift from the target area (turf) to nontarget plants. If 2,4-D, dicamba or other phenoxy herbicides drift onto gardens or ornamentals, apply water to dilute and wash off the chemicals.

These herbicides are less damaging to plants if they remain in soil rather than on the foliage. Reports suggest that any first aid treatment should be performed within three to four hours to get any benefit.

In some cases, light pruning of the affected plants and then watering to wash the chemical will help.

Ester formulations of 2,4-D can volatilize and enter plants rapidly. Therefore, any corrective measures should be performed within one to two hours. Materials like 2,4-D Amine, Banvel and Roundup enter plants more slowly. Reports indicate that protective measures applied three to four hours after exposure could be beneficial.

Usually, a very low volume of material will be



Balakrishna Rao is plant pathologist and Thomas Mog is pest management specialist for Davey Tree Expert Co., Kent, OH.

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.

delivered through drift. Therefore, if proper corrective measures are followed, it will not produce permanent injury. Roundup is absorbed only through green, living tissue and reportedly breaks down when it contacts soil. Thus it seldom presents problems of contamination unless it is through a directed spray.

If rain or irrigation has caused a problem with Banvel, use activated charcoal as an antidote. Reports indicate that herbicide rates of four pounds or less of active ingredient are counteracted with one pound of activated charcoal per 100 square feet incorporated to a depth of six inches. It may take six months to correct the contamination.

Since corrective measures are time-consuming, expensive and may produce variable results, it is best to correct the causes of possible contamination and, if possible, keep away from sensitive, desirable plants.

## Rock salt the culprit

**Problem:** *The trees and shrubbery near our driveway and sidewalks are dying. Someone told me that the rock salt I use to melt the ice is killing them. How can I tell if salt is the problem and what can I do about it? (Minnesota)*

**Solution:** Rock salt is commonly used to de-ice roads and walks because it does the job and is inexpensive. Too much salt can injure plants. Look for discoloration of the leaves or needles. A marginal browning or

tip burn of evergreen foliage may show up in winter or early spring.

Plants which are leafless during the winter will show similar scorch-type symptoms the following year. Less obvious is a gradual reduction in plant growth. Sometimes there is a premature fall coloration and leaf drop. This is especially true of salt-sensitive species such as sugar maple.

The fact that you use salt and that the plants closest to the salted areas are dying, makes rock salt reasonably suspect.

Rock salt is mostly sodium chloride and both sodium and chloride can be toxic to plants. You may want to use calcium chloride. Calcium chloride is more expensive, but not nearly as toxic to most plants. Be aware that although calcium chloride is safer, too much can cause salt injury.

You might consider using sand, sawdust or something like kitty litter to improve traction on icy surfaces. If there are white deposits on the plants, wash the salt off with water when the temperature gets above freezing. Plants appear to be more readily damaged by salt that is blown or splashed on them than by salt taken in through the roots.

The soil beneath the plants should be tested in late winter for soluble salts to determine whether salt is present at phytotoxic levels. If there is a problem, gypsum (calcium sulfate) applied at a rate of 50 to 75 pounds per 1,000 square feet can be used to "neutralize" the adverse effects of sodium chloride. Depending on your particular drainage situation, you may want to install curbing or channel salty runoff away from the trees and shrubs.



## Turn your pickup into a 15 mph sweeper

In just 5 minutes a TENNANT® 717 Air Sweeper installs in your ¾ ton pick. Detaches easily too, freeing truck for other uses. Cleans a 76" path at speeds to 15 mph. Sweeps right up to curbs with rear-mounted pickup head; backs into tight spots, corners, dead ends. Sweeps moving backward or forward; loads into 2 cu. yd. hopper. Quiet, dependable 36 hp liquid-cooled engine. Sweeper backed by 2-year or 1500 hour factory warranty. Lease/time purchase/rental plans.



Unit stands alone on legs (included), to free truck for other uses.



Call Toll Free: 800-328-5727  
Ext. 768D

Circle No. 151 on Reader Inquiry Card

## BEAUTY LAWN ZOYSIA SOD

(Meyer Z-52) for your  
FAIRWAYS, ATHLETIC FIELDS, PARKS

- Zoysia saves big on water, fertilizer, insecticides, fungicides, mowing.
- Zoysia provides an outstanding playing surface for fairways.
- Stands up to hard usage.
- Truck-trailer shipping throughout U.S.

### ROW PLANTING SERVICE

100 Mile Radius of Louisville, Ky.



Jay and John Frick  
The Zoysia Men



The Solution to Old Problems

BEAUTY LAWN ZOYSIA

603 Union Road • Lebanon, Ohio 45036  
Near Cincinnati, Ohio (513) 424-2052

Our 35th Year

Circle No. 103 on Reader Inquiry Card