

# PROBLEM SOLVERS

By Balakrishna Rao, Ph.D and Thomas Mog, Ph.D

## Bayleton is preventative

**Problem:** I recently heard that Bayleton would prevent *Fusarium* blight, but could not cure it. Is there more research on this subject? (Michigan)

**Solution:** Mobay's technical representative indicated that Bayleton will work best as a preventative when applied about 30 days before the incidence of disease and followed up with a second application after 30 days. So far, it has not shown any curative action and no additional research is being planned.

## Yellow oxalis is stubborn

**Problem:** I manage a four-acre property and have tried to get rid of yellow oxalis growing within mesembryanthemum for some time with only spotty success. We have sprayed magnesium sulfate, Roundup and others and have only killed the flowers and stems, but not the bulbs. Can you recommend a herbicide and/or application procedure that may help stop this perennial from reoccurring. We believe our pest is *Oxalis pes-caprae* (Bermuda buttercup). (California)

**Solution:** *Oxalis* sp. is considered to be one of the more difficult to control broadleaf weeds. Reports suggest that application of herbicides, such as Trimec Turf Ester, Weedone DPC or Professional Turf Herbicide 123, can provide satisfactory control of yellow woodsorrel (*Oxalis stricta*).

Since you are not very sure about the *Oxalis* species you are dealing with, I would suggest applying and determining the efficacy of the products on *Oxalis* sp. in a small area before using it in larger areas. The following information should help you to verify the species.

The Bermuda buttercup (*Oxalis pes-caprae* syn. *O. cernua*) is a winter-blooming weed. It is the only tender, yellow flowered, stemless *Oxalis* in cultivation that has clusters of flowers; others have solitary flowers. It has scaly bulbs, a deep, thick tap root, and very long-stalked leaves with three obcordate leaflets fringed with hairs. Flowers are about 1-1 1/2 inches wide and bright yellow.

Herbicide application should be made during early spring or late fall when the weeds are actively growing. Repeat application may be necessary for satisfactory results. These herbicides contain ester formulation of 2,4-D which can volatilize and may cause injury on non-target, desirable plants. Therefore, be careful while applying these around ornamental plants. Read and follow label specifications for further details.

## From asphalt to turfgrass

**Problem:** At my place of employment we are planning an expansion of turf and/or landscaping in areas formerly covered by asphalt. Are there any precautions that should be taken, such as soil replacement, to avoid possible contamination of the root

zone by oils or residues having leached into the subsoil? If so, how deep should the soil be replaced from these areas for trees (probably oak) and turf? (Indiana)

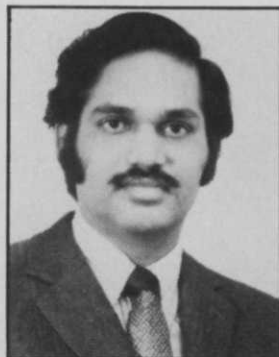
**Solution:** In an area which was formerly covered by asphalt, I would suggest that you take the following precautions before establishing any turf or landscape plants.

First, try to find out whether any total control (nonselective) herbicides were used in the area before the asphalt was laid. If so, depending upon the product and rate of application, the materials may still persist. If the materials are known, have the soil tested for residual concentrations which would affect the growth of plants.

If information concerning herbicide use cannot be determined or as a further precaution, I would suggest that you perform a radish and ryegrass seedling bioassay either directly in the field or in the laboratory using the soil in question. Sample the soil at various locations and depths. Testing soil to a depth of 10 inches is usually sufficient unless herbicide residues are found.

If herbicide residues or oil are found, the removal of 6-10 inches of soil is usually sufficient to replace the affected soil. Add new topsoil and till into the underlying soil.

If necessary, add topsoil in layered increments, tilling between layers. Planting the trees in a mound of soil above grade will provide further protection from traces of herbicide in the soil. If the bioassay tests indicate that the soil is free from contamination, then pursue the soil improvement, planting, etc., based on soil test results and recommendations which can improve the soil.



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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.