

PROBLEM MANAGEMENT

by Balakrishna Rao, Ph.D.

Deactivating pre-emergents

Problem: When dealing with newly-seeded lawns our technicians may once in a while accidentally spray pre-emergence herbicides such as Pre-M or Betasan. Is there something that can be done to correct this problem in the future? (Michigan)

Solution: It is important not to apply pre-emergents such as Pre-M or Betasan onto an area recently seeded. However, if they are applied accidentally, a Lesco Inc. representative says activated charcoal can be used at 1 lb./1 gal./150 sq. ft. to deactivate the herbicide. The residue can then be washed off the leaves and the area reseeded after at least 24 hours.

Be sure to test this treatment before trying it in your clients' lawns. If it doesn't work well, then follow the product label recommendations for waiting period for reseeding.

On planting trees

Problem: We are interested in landscaping several residential properties in a new development with no trees. When is the best time for planting, and can you give some guidelines on transplanting plants? (Ohio)

Solution: Landscaping a property is an art as well as a service. A number of books on this subject can be found in local libraries that will help you determine proper plant material for a specific location.

Plant selection is a very important factor in good landscaping. Your local cooperative extension service should be able to furnish helpful information on recommended plants and their tolerance to environmental and soil conditions and major pest problems in your area.

Several factors, such as age; size; species; adaptability to the site (soil type and location in relation to other features of the property); timing; method; pre- and post-transplanting treatment; and use of anti-transpirants can affect transplanting results.

Reports suggest that spring transplanting is best for most plants, while some will adapt to fall transplanting. Spring transplanting is most successful after the danger from frost and prior to bud swell or new growth. Cool temperatures and spring rains help prevent excessive drying, especially of the root system. Younger trees, 1 to 1½ inches trunk diameter, transplant more successfully than larger plants.

As a general rule of thumb, larger plants will take a longer time for recovery and establishing than younger plants. It may take three to four years for recovery after transplanting for trees under 2 to 3 inches in diameter. Larger diameter trees may take five to 10 years for proper establishment.

Different species may respond differently for transplanting. During this recovery period, proper watering, fertilizing and pest management should be provided as needed. Improper planting method, poor postplanting care, improper site and transplant shock may claim a few plants.

Before planting, perform a percolation test to deter-

mine proper drainage. This involves digging a hole and filling the hole with water and letting it drain once. Refill the hole with water, allowing 24 hours to drain. If it drains too fast or too slow, provide needed corrections for better drainage. An average percolation rate of 1 inch per hour is desirable for most species.

The planting hole should be twice the width of the root ball, the soil should have good drainage, and the plants should be planted at the same depth as they were in the nursery. If planted too deep, the root system may suffocate; if too high, plants will be subjected to excessive drying. Reports indicate that soil taken out of the planting hole should be reused while transplanting.

For more detailed information, I suggest you refer to books in your library, specifically, "Tree and Shrub Transplanting Manual", by E. B. Hemelick, Illinois, National History Survey, Urbana, Illinois.

A reader responds

A representative from The Doggett Corporation made the following comments about a December article concerning oak iron deficiency:

"The treatment you recommended to green-up iron chlorosis oaks is purely a symptomatic approach. Generally, the problem of iron chlorosis arises from an alkaline soil condition which ties up otherwise available iron.

"Application of soluble iron chelate will get into the tree's system; but the problem will continually reoccur unless the pH of the soil is corrected. Applications of elemental sulphur into the root area will correct the pH and make iron and other tied-up elements available.

"The sulphur we refer to is a wettable powder which can be injected into the soil. In conjunction with this application of sulphur, it would be advisable to apply an EDDHA Iron Chelate which works best in soils with a pH of 7.5 and above. This sulphur application lasts for a good many years; and after the tree has turned around, only maintenance levels of a good quality tree fertilizer would be necessary."

I agree with the above comments concerning alkaline soil and its role in nutrient availability. The problem is lowering the pH of alkaline soil.

I am not familiar with any information in literature to show that Doggett Corporation's findings can reduce the pH of alkaline soil. Our experience and other research findings suggest that it is difficult to lower pH through the use of sulphur. Even after using it for several years, only a slight lowering of the pH is expected.



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Questions should be mailed to Problem Management, LANDSCAPE MANAGEMENT, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.