

VEGETATION MANAGEMENT

By Balakrishna Rao, Ph.D., and Thomas P. Mog, Ph.D., Davey Tree Expert Co.

Q: We are thinking of using Roundup for renovation purposes. We are concerned about its effect of drifting or leaching on nearby landscape plants. Will it cause injury? (North Carolina)

A: Roundup (glyphosate) is a nonselective, broad-spectrum, systemic herbicide. The isopropylamine salt rapidly degrades in the soil, but is quite resistant to decomposition in higher plants. In recent years, people have used Roundup for lawn renovation purposes and weed control under trees. Roundup is a very useful tool when used as a directed spray.

Often, contaminated desirable plants or areas can be saved from damage by heavy watering to wash off the chemical. This should be done immediately or within three to four hours after exposure. The action of the herbicide will be less in the soil than on the plant. Reports from Minnesota indicate that Roundup is damaging to the foliage and young bark of deciduous plants, but somewhat less injurious to the evergreen species. Depending on the amount of chemical reaching the plant, the symptoms may appear immediately or by the fifth week after exposure.

Symptoms include chlorosis, defoliation, twig dieback, malformed growth and death. In general, the deciduous plants were more sensitive to Roundup than the evergreen species. To avoid these problems, keep Roundup away from desirable plants.

Q: What is the best way to clean clothing contaminated by pesticides? (New York)

A: Pesticide-contaminated clothing should be washed daily and should not be mixed with other uncontaminated laundry. Contaminated clothing should be either stored in a plastic bag until washed or put directly into the washing machine soon after removal.

Use hot water (140°F) at full level and the recommended amount of heavy-duty phosphate-based detergent. Dry the clothing in an automatic dryer for thirty minutes at the regular fabric setting. Make sure to remove any leftover pesticide from the washer by running it through all cycles using detergent, but without the clothes.

Reports suggest that this procedure should remove 99.8% of the pesticide from clothing.

Q: What kind of chemicals would you recommend for renovating an old lawn? I do not like the type of grass species we have in our lawn as it is very susceptible to *Fusarium* blight disease. (Michigan)

A: Diseases such as *Fusarium* blight and Stripe smut are difficult to eliminate once they are established in a lawn. However, with the proper cultural and chemical treatments for *Fusarium* blight management, the disease incidence can be minimized.

It is also important to either reduce or remove stress factors, particularly moisture stress, which are conducive to the disease development. If the management practice fails to provide satisfactory turfgrass response and quality, then the best method would be to consid-

er total renovation, which would involve killing the existing vegetation and re-establishing with resistant grass cultivars. 'Adelphi,' 'Majestic,' 'Parade,' 'Touchdown,' 'Brunswick,' 'Baron' and 'Cheri' Kentucky bluegrass cultivars have shown better resistance to *Fusarium* blight. Contact your local extension personnel for cultivar recommendations for Michigan.

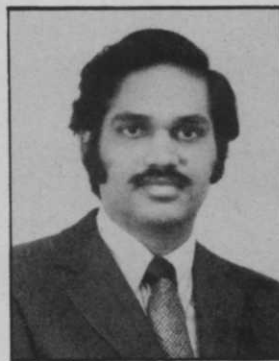
The unwanted vegetation can be best removed by the combination of chemical treatment followed by tilling. Re-establishing new grass cultivars should be timed so that seeding can be done between September 1 and September 15.

Herbicides such as Roundup, Amitrol or Amitrol-T plus dalapon, and Amitrol-T alone are labeled for lawn renovation. In recent years, Roundup is more commonly used for lawn renovation because of its short soil residual which allows seeding and sodding seven days after application.

Roundup is a water soluble, nonselective herbicide that generally controls most green vegetation and causes discoloration in about seven days. A combination of Roundup treatment and tilling gives good control of most grasses. A repeat application may be necessary for better control of rhizomatous perennial grasses.

Q: Our birch tree has several bumps on the stems. When I pressed one, sap came out. I also found some small holes on the stems, and the tree is defoliating

Continued on page 104



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

Questions should be mailed to Vegetation Management, Weeds Trees & Turf, 7500 Old Oak Blvd., Middleburg Heights, Ohio 44130. Please allow 2-3 months for an answer to appear in the magazine.