

VEGETATION MANAGEMENT

By Roger Funk, Ph.D., Davey Tree Expert Co., Kent, Ohio

Q: Hybrid poplars planted in a development area have grown rapidly and sent out strong feeder roots which are lifting the curbs and sidewalks and erupting in blacktop areas. They also clog water and sanitary systems. The feeder roots seeking nourishment send out new leaf systems which erupt in lawns and driveways causing considerable damage.

We can not spray systemic herbicide because of wind drift and our only alternative seems to be to remove these trees. Other than girdling the tree, is there any injection that you could recommend to kill the tree and its damaging root system? If so, how long will the killing process take? (New York)

A: Garlon 3A, produced by Dow Chemical, is effective on poplars and can be used with the frill or girdle method or trunk injection on existing trees or as a stump treatment to the cambium immediately after cutting. All of these techniques are included on the label as cut surface treatments in right-of-way, other non-crop areas and forests to kill unwanted trees. As a precaution, you should not treat trees in close proximity to desirable trees, since, although Garlon 3A has a low potential for root transmission, all cut surface treatment chemicals may be passed through connecting root systems into adjacent trees.

Trees treated before bud break are normally dead by mid-June. Results from summer application may take longer but the effect can be seen on the outermost leaves in two to three weeks.

For more detailed information, contact your local cooperative extension agent or Dow Chemical representative.

Q: I realize this is not your normal technical question but could you tell me how to remove grass stains from children's clothes? Some of our clients feel that, since we are in the lawn care business, we have all the answers.

A: According to the American Institute of Laundering, the best way to remove grass stains from white fabrics is by a thorough washing with detergent and an ordinary household bleach. For colored fabric or wool, use denatured or rubbing alcohol. Place the stain face down on a clean rag or paper towel, pour the alcohol through the fabric and tamp it with your fingers. Move the stained area to a clean spot on the absorbent material and repeat the process until the stain disappears.

Q: Is it better to dethatch in the spring or fall? (Pennsylvania)

A: Cool-season turfgrasses should have a least a 30-day period of favorable growth conditions following mechanical dethatching. Both early spring and late summer are recommended, although spring may be less desirable because of the potential for summer heat and drought stress before the turfgrass fully recuperates and the increased potential for crabgrass.

Q: How important are mycorrhizae in the growth of trees?

A: There is much evidence that mycorrhizal fungi and roots of trees exist symbiotically. The tree supplies carbohydrates and other metabolized compounds beneficial to the fungus, and the fungus increases the absorption of nitrogen, phosphorus and other nutrients. There is also evidence that the mycorrhizal fungi protects the tree from pathogenic fungi by acting as a physical barrier and by secreting fungistatic substances.

Although trees can grow successfully without mycorrhizae in soils with high fertility, they appear to grow much better with mycorrhizae.

Q: Every year many of our client's lawns turn brown in the summer and we have trouble justifying a continuation of the program. Is summer dormancy caused by heat or moisture stress? If clients watered, would their lawns stay green? Most of the lawns are Kentucky bluegrass or mixture of bluegrass and fine fescue.

A: Summer dormancy is controlled mainly by the availability of water in most cool-season turf grasses, including Kentucky bluegrass and red fescue. Watering not only provides an adequate level of available moisture but also helps cool the turfgrass through evapotranspiration.

Q: What is your opinion of reseeding bluegrass lawns every year as practiced by some local lawn care companies? (Massachusetts)

A: Kentucky bluegrass is by nature self-renewing. Annual seeding into an existing lawn is almost always a waste of time unless bare spots are larger than about 8 inches in diameter. Your time and money are better spent improving growth conditions for existing grass.

Comment: Regarding my response to a reader inquiry on oil sprays which appeared in the August 1981 column, more recent information indicates that the caution statements on temperature are unnecessary.

Dr. Johnson reiterated his findings at the recent International Society of Arboriculture meeting in Boyne Falls, Michigan. He also feels that it is doubtful if there are any deciduous trees sensitive to lightsuperior oil if the dosages are in line with prescribed rates and the plants are not under moisture stress. For more detailed information, read Dr. Warren Johnson's article entitled "Spray Oils as Insecticides" which appeared in the July 1980 issue of the Journal of Arboriculture.

If any readers are aware of injury from superior oil which was applied properly, please let me know.

Send your questions or comments to: Vegetation Management c/o WEEDS TREES & TURF, 757 Third Avenue, New York, NY 10017. Leave at least two months for Roger Funk's response in this column.