

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

Builders leave weeds

Problem:Our landscaping firm establishes lawns in new housing developments. Often, the builders leave the property in the back undisturbed about 20 to 25 feet from the house foundations. In these areas we find lots of annual and perennial weeds. Even though we follow standard lawn establishment procedures, we still find a lot of perennial, grassy weeds later. The clients think the weeds are in our seed mix. Can we use Roundup or fumigation to kill the weeds prior to establishment?(Ohio)

Solution:Perennial grassy weeds in lawns present serious turf quality problems. Prior to tilling, grading and seed bed preparation, the first step in soil preparation should be to control persistent weeds. This requires use of nonselective herbicides or soil fumigation.

Use of nonselective herbicides such as amitrole, dalapon, or glyphosate should make the existing vegetation easier to manage. However, these chemicals will not have any effect on viable seeds in the soil which may cause problems later. In your situation, soil fumigation is preferred so that all the viable weed seeds in the seed bed are killed.

Application of herbicides or fumigants will add to your job cost. You should explain the weed situation to your customer and tell them how weed control now will save them time and money later.

If the customer selects fumigation, you have two choices, methyl bromide or metham (Vapam). Only certified pesticide applicators can apply methyl bromide, a gas.

Topdressing selection

Problem:Every year we have used either Dacthal or Betasan in the spring for preemergent control of crabgrass in lawns. Still we get a number of calls from clients in the summer about crabgrass problems. What are we doing wrong? We are thinking of using post-emergent materials like DSMA or MSMA. (North Carolina)

Solution:The best approach to crabgrass management in established turf areas is the use of preemergent herbicides like the ones you mention. If you are getting too many calls about crabgrass in the summer, it is important to make an on-site evaluation of the problem to understand why crabgrass is present in the specific areas.

Several factors could contribute to the crabgrass problem. Preemergents herbicides provide a thin chemical barrier which is toxic to germinating crabgrass seddlings. Variable results will occur when this barrier is disturbed by raking, traffic, insect activity, heat, and/or photodegradation of the active ingredient. Check your application timing and consider a second application at half rate.

Success in managing crabgrass with post-emergent materials, like DSMA or MSMA, dependss upon proper timing of the application. For best results, the mateiral should be applied to juvenile seedlings(two-leaf stage). Depedning on the number of seeds carried over from the previous year, the best you can expect is only 60 to 65 percent control.

Quite often the problem is recognized only when the crabgrass is mature. Variable results have been observed when DSMA or MSMA were applied to mature stands.

Crabgrass after spraying

Problem:Please give some of the benefits of topdressing and the things we should consider when selecting topdressing materials.(Pennsylvania)

Solution:Topdressing is being used widely in the management of quality, golf course putting greens. If properly managed, there are several benefits of top-dressing, including thatch control, leveling and smoothing of the soil surface, improvement of soil properties, and winter turf protection.

The topdressing mix should be compatible with the existing soil for the best results. For example, the addition of sand on turf growing on silt loam soil may cause layering and problems in water movement and retention. These will lead to restricted root development.

Since all sands are not the same, as far as water movement and retention, it is important to use only sand which will allow percolation of 4 to 10 inches of water per hour. The United States Golf Association recommends sand sizes from 1.0 to 0.1 mm for topdressing.

Peats also show different properties. If feasible, use excellent, laboratory-tested, commercial mixtures. If you are making your own mixtures, have the sands, peats, and soil tested by a recognized laboratory for percolation rates.



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.