

ASK THE EXPERT

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Killing annual bluegrass

Problem: Is there a post-emergence herbicide to selectively remove annual bluegrass from desirable turfgrass in lawns? (North Carolina)

Solution: Annual bluegrass presents a serious weed problem in established turfgrass because of its prolific growth and seedhead production, shallow rooting, and poor drought tolerance.

Not many post-emergence herbicides are labelled for selective-ly removing annual bluegrass from desirable turf. Prograss from Nor-Am Chemical Co., however, is so labelled. According to the label, Prograss has both pre-emergence and early (two-leaf stage) post-emergence activity.

Prograss, an emulsifiable concentrate, is labelled to be used by professional applicators on ornamental turf only, and on home lawns by licensed or certified applicators only.

It is labelled for use on established perennial ryegrass, Kentucky bluegrass, creeping bentgrass, turf-type tall fescue, St. Augustinegrass and dormant bermudagrass. It is intended for professional use only on ornamental areas such as golf courses, parks, commercial landscapes and home lawns.

According to the label, Prograss application is most effective on healthy, actively-growing turfgrass. Some application tips:

- Avoid overlapping when treating turfgrass to prevent possible injury.
- A soil fertility test is recommended prior to treatment.
- Do not apply to zoysiagrass, hard fescue or fine fescue because it may cause severe injury.
- Be careful while using Prograss on overseeded and/or newly-seeded lawns.
- Read and follow label specifications for additional details and recommendations.

On aquatic weed control

Problem: We have to manage small ponds in our clients' properties. We have a problem with managing floating weeds such as algae and duckweeds. How can we get rid of them? (Ohio)

Solution: The most common floating weed in Ohio is filamentous algae, also known as "moss" or "pond scum." It grows on the bottom of submerged vegetation and hair-like fibrous filaments float to the surface. The weed can cover a large area of the pond.

Most algae growth can be managed by using low concentrations of copper sulfate. General rate recommendation is 2.7 lbs. per acre-foot of water. If the pond water is very hard, higher rates would be beneficial.

For best results, dissolve the copper sulfate in water and treat the surface of the algal mat. Reports indicate that finely ground "Sno grade" or "instant" copper sulfate dissolves easily.

Remember that copper sulfate is corrosive to galvanized containers. The solution should be mixed in stainless steel, plastic or copper-lined containers.

Also, if the pond has too much algal growth (more than half of the total pond surface) and is treated, this may deplete oxygen and kill fish. The problem would be greater during hot and over-

cast weather. In this situation, it is better to treat half the pond area, wait for 10 to 14 days, and then treat the other half.

At the recommended rate, the copper sulfate is very diluted. If inactivated after 12 hours, it should not have any adverse effects on livestock. Do not apply copper sulfate when fish are spawning because it will kill the newly-hatched young fish.

To manage the duckweeds (*Lemna* sp.), apply herbicides such as Reward or Sonar. Measure the area to be treated and mix and apply these according to label directions.

Some aquatic herbicides also help manage certain algal species. It helps to first identify the weed species you have in the pond and then apply the right product.

Read and follow label specifications for better results.

No-herbicide weed control

Problem: We used to manage weed problems along highways using Roundup. Last year, we were told not to use any herbicides in these contracts. Any advice about managing weeds without using herbicides? (Victoria, Canada)

Solution: You might consider using Sharp Shooter, says Richard Rathgens, Davey's senior agronomist. Sharp Shooter is a potassium salt of saturated fatty acids from Mycogen Corp. It is a contact, non-selective herbicide. (I am not sure if this product is registered in Canada. Check with your Ministry of Environment.)

It is very difficult to selectively manage weeds without using the proper herbicides. An alternative approach would be to remove the weeds through cultivation and/or physically digging prior to flowering.

Another option is to encourage stands of desirable vegetation such as turfgrass or groundcovers to compete for the same space. Many broadleaf weeds have difficulty competing with properly-mowed turfgrasses.

Frequent site inspection and proper sanitation practices should help manage the problem along highways.

Another option is to eliminate the existing weeds, then overseed the thinned-out areas with desirable plant materials such as turfgrass, groundcovers or wildflowers. Provide good cultural practices to ensure their establishment and maintain density.

Another approach is to use natural mulch, black plastic sheets or fabric mulch around desirable plants. Even with this method, airborne weed seeds can contaminate the area, in which case mechanical hand-weeding may ultimately be needed.

Although desirable, there are no bio-herbicides on the market that can help manage weed problems. However, a number of scientists are working with a few candidate micro-organisms to manage such weeds in the future.

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Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.