

PROBLEM MANAGEMENT

by Balakrishna Rao, Ph.D.

Applying insecticides

Problem: In our lawn care service, we use surface insect control insecticides during May and June. We are happy with the results except for billbug problems. We see a large number of adults, particularly during late August. Can we expect good control of billbugs if we apply insecticides in August and September instead of around May and June? (Pennsylvania)

Solution: As you have observed, billbugs can cause serious damage to turfgrass unless they are properly managed. For best results, as with any pest management program, it is important to have proper identification of the pest, proper pesticides, methodology and timing. If these are not followed, it may result in variable performance and might explain the reasons why you are having problems in managing the billbugs.

In addition, it is also important to know the life cycle of the billbug in order to provide pesticide programs during the vulnerable stage of development. The following discussion might be helpful in understanding and managing the problem. Billbugs overwinter as adults and become active in early spring. They feed on turf and lay eggs in feeding holes on tillers from mid-May through July. The eggs hatch in a week or so, and the young, legless larvae tunnel through the tiller and crowns and eventually become soil-inhabiting pests, feeding on grass roots from June through August.

During the feeding activity, their presence may go undetected because the damage will be masked by drought symptoms, often in many areas. These drought symptoms are often mistaken for moisture stress. Therefore, if the brown spots fail to green up with the onset of cool and moist weather in the fall, a close examination may reveal insect activity.

In some situations, one may find billbugs alone or with infestations of chinch bugs or sod webworms. It is not uncommon to find all three of these pests in a brown and declining lawn.

In answer to your question, August is not a preferred time for insecticide application for adult billbug control, because the majority of the adults might not have emerged or some of them might be moving to overwintering sites in nearby plant materials during this period. Because of the lack of information about fall treatment for billbugs, I suggest that you try fall treatments on a small test plot first to learn more about the effectiveness. Reports from Ohio State suggest that a mid-April application of insecticide gives best billbug control. The objective is to control the egg-laying population to reduce any future generations.

The second-best time would be directed against the larvae when they are active from June through August. Remember that larvae management is difficult because they are in a protected site in the stems, or may have moved into the soil, becoming soil-inhabiting pests. This would explain why you were having variable results with your program. Preferably, make a note of the se-

verely-damaged lawn in the fall. Severely-damaged lawns should be overseeded with compatible turfgrass cultivars. Treat these lawns in early spring for adult control.

Controlling weeds around fences

Problem: What would be the best way to manage a wide variety of weeds and grasses around a fence? We are looking for chemicals to obtain pre- and post-emergence control of weeds. (New York)

Solution: "Oust" weed killer, manufactured by Du Pont, is recommended for pre- and post-emergence control of many annual and perennial grasses and broadleaf weeds on non-cropland areas. It may not provide adequate control of hard-to-kill perennials.

When using this product, make sure that the spray drift doesn't contact any desirable plants along the fence. Consider using some drift control agent to minimize drift. Oust is absorbed by both roots and foliage of weeds, resulting in growth reduction, reddish-purplish coloration, chlorosis, necrosis, vein discoloration and death of terminals. Although symptoms may start showing up two to three weeks after application, it may take four to six weeks after application for final effect.

Be careful not to use Oust where there is potential for desirable plant roots to come in contact with the treatment. Oust can be applied at any time of the year except when the ground is frozen. For better results, use this as a pre-emergent or post-emergent during early stages of weed growth.

Another choice is to tank-mix Elanco's Surflan with Monsanto's Roundup to deal with difficult weeds and grasses. Reports suggest that mixing 3 ozs. of Surflan A.S. plus 3 ozs. of Roundup in 1 gal. water to cover 1,000 sq. ft. would provide six to eight months' control of annual weeds and grasses. Make sure to avoid any spray drift coming in contact with desirable plants when using this combination tank mix. Read and follow label specifications for better results.



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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.