

Weed-free lawns create beauty and added usefulness to home landscapes. Although proper turf management creating a dense stand of grass can reduce the need for chemical weed control, unfavorable conditions like harsh weather, insects, and diseases can thin turf enough to allow a weed invasion. Under such conditions, careful use of properly selected and timed herbicides may be the answer.

## **CRABGRASS**

Crabgrass is the most common annual weed that infests home lawns. Crabgrass seeds germinate when the soil warms in the spring. The plant sends out its five-pronged seed heads in July, and dies with the first frost. Crabgrass is best controlled with a spring application of a pre-emergence herbicide. These herbicides act by forming a chemical barrier in the soil prior to weed seed germination or emergence. The chemical is toxic to the young seedlings as they emerge, never allowing them to develop.

It is important to select an herbicide that is safe for the turfgrass species in your lawn (such as Kentucky bluegrass, fescue, and others) Most pre-emergence herbicides have long residual activity in the soil, so consult the label for the waiting period needed before overseeding. For maximum effectiveness, pre-emergence herbicides should be applied uniformly to create the needed barrier.

The timing of the pre-emergence herbicide application is critical for an effective control program. Pre-emergence herbicides need to be applied one to two weeks prior to expected weed seed germination in the spring, and commonly no later than April 15. Although a rough guide for timing is when the forsythia flower petals drop, this is not always reliable. It is best to rely on local university recommendations, and not when you see the product advertised. But don't delay; once you see crabgrass, it's too late to control it this year.

## **NOT A GRASS**

Yellow nutsedge, also called watergrass or nutgrass, is a troublesome, difficult-to-control weed that is becoming more common in home lawns. In contrast to annual crabgrass, nutsedge is a perennial plant that reproduces primarily by underground stems called rhizomes or nutlets. Nutsedge will produce a seedhead if not mowed, but seeds rarely germinate.

# Mowing and Bees

Do you like the idea of diversifying your lawn with more flowering plants like dandelions and white clover as habitat for pollinators? However, what happens to the bees when you mow? Unless the lawn is disturbed enough during mowing for bees to fly away, bees do not survive very well as they pass under a mower, especially mulching mowers.

Research has shown that more flowers develop (and therefore attract more bees) in yards mowed every two to three weeks. Mowing at lower heights, or the addition of a deflector (perhaps cardboard) placed in front of the mower tends to brush the flowers, causing the bees to fly away before getting mowed.

Multiple applications of a post-emergence herbicide may be needed to rid a lawn of white clover.

▼ A complete barrier is needed for effective crabgrass control. This can be especially tricky in corners and along driveways.





Nutsedge is very noticeable since its leaves grow faster than the lawn and stick out above it. Large patches of nutsedge will require herbicide applications. Nutsedge is neither a grass nor a broadleaf weed, but a sedge, which has a triangular stem. Traditional broadleaf and grass herbicides are ineffective. Multiple applications of herbicides containing halosulfuron or sulfentrazone may be needed, using a nonionic surfactant to allow the spray to adhere to the leaves.

# **BROADLEAF WEEDS**

Dandelions, plantain, clover, and other broadleaf weeds are noticeable in home lawns, since they contrast greatly with the uniformity of well-maintained turf. Most broadleaf weeds are prolific seed producers, and their seeds can come from miles away. Post-emergence herbicides for controlling these weeds are usually a mixture of materials such as 2,4-D, MCPP, and dicamba, and are applied after weeds appear.

Both granular and liquid formulations are available. If you only have a

few weeds in your lawn, simply spottreat them rather than treating the whole lawn. Spray just enough to wet the leaves, since soaking them does not improve performance, and might actually harm the surrounding turfgrass. If applying post-emergence herbicides in late spring, choose a calm day to spray, and be cautious spraying near ornamental beds and vegetable gardens since these plants may be damaged by a mere "whiff" of the spray.

### MOSS IN TURF

There are few desirable turfgrass species that do well in shade. As the grass thins due to lack of sunlight, moss capitalizes on the bare soil and shady conditions. Compacted traffic areas are also common sites for moss growth. Although there are products available to kill moss, it is best to determine why the moss is there. To grow grass in these shady areas, increase the amount of sunlight reaching the ground, and resolve any soil compaction problems. In contrast, it might be better to give up on

growing grass in deep shade, and plant a shade-loving ground cover.

### **CHEMICAL WEED CONTROL**

Herbicides can also be divided into groups based on how discriminating they are in controlling weeds. Selective herbicides are those that control the target weeds without damaging the desirable turfgrass species. Nonselective herbicides kill all vegetation they come in contact with, including turfgrasses. Those dead spots in the neighbor's yard may not be from a dog, but the result of erroneously using a nonselective herbicide to kill dandelions. Be sure to read the label before using any herbicide, and if applied by spraying, be sure to designate (and label) separate sprayers for each type. 🔄

Douglas A. Spilker, Ph.D., is a consulting ornamental plant pathologist and entomologist, garden writer and lecturer.

**∀** Creating a dense stand of grass can reduce the need for chemical weed control.

