

Spring Strategies For Winter Weeds



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Most of the weeds we encounter in cool-season turfgrasses are either summer annuals (which germinate in spring, grow and set seed in summer, then die in the fall) or perennials (which persist for multiple seasons).

Some weeds, however, germinate in the fall, and bloom and set seed in the spring. These winter annual weeds are nuisances primarily in late winter/early spring because when they bloom they are quite noticeable.

The most common of the winter annuals are common chickweed, henbit and hairy bittercress, though there are others, such as shepard's purse, veronica and purple deadnettle. Like summer annual weeds, they spread by seed, not vegetatively like ground ivy or other perennial weeds. Some other weeds persist vegetatively year over year, but their foliage is noticeable primarily in late winter or early spring. These plants include wild garlic, wild onion and star of Bethlehem.



Henbit. PHOTOS: OSU, BUGWOOD BUGWOOD

In some years, winter annuals may warrant control with an herbicide. Therefore, some understanding of the ecology and life cycle of these weeds can be of assistance in determining control strategies.

Winter annual broadleaf weeds

Henbit and chickweed have always been around. However, hairy bittercress has only recently become a problem in parts of the Midwest, possibly due in part to the more mild winters we have experienced in recent years.

Each of these weeds is highly competitive in thin or dormant turf or in newly seeded areas. However, a vigorous lawn will tend to out-compete them. So, the

best defense against henbit, common chickweed and hairy bittercress is to properly maintain turfgrass. This includes selecting the right species for the location and usage and proper cultural practices (proper mowing, fertility, irrigation and aeration).

If, however, an herbicide is required, the timing of application is very important for optimal control. The chief concern is that a dense mat of winter annual weeds, after they die in the spring, will open a bare spot in the turf that may be filled in by crabgrass and other summer annual weeds. Since winter annuals thrive in cool, moist conditions, germination depends on a combination of lower soil temperatures and increased precipitation. In years in which there are very warm temperatures and little precipitation in early fall, germination is delayed. Therefore, timing of preemergent and especially postemergent herbicides would need to be delayed.



Common Chickweed

A fall application of a preemergent herbicide will control most annual broadleaf weeds. However, this application will likely degrade and not be as effective against annuals or crabgrass the following spring, so a specific preemergent application targeting these weeds would only be justified in the most severe cases of weed infestation.

A late fall application of a postemergent herbicide to actively growing plants provides the best control of winter annuals. Read and follow manufacturer directions and recommendations on the label. Ideally, winter annuals can be controlled with the same fall application that targets dandelions and other perennial broadleaf weeds. However, if the application is made too early in the fall, these species will continue to germinate from seed, which will require reapplication for effective control. If necessary, postemergent herbicides can be used on winter annuals in the spring.

Use extra caution with spring-applied herbicides, since newly emerging leaves of ornamentals are extra sensitive to broadleaf herbicides. Avoid applications when temperatures are above 80 degrees Fahrenheit or when it is windy. Also, target the herbicide application no later than when the weed is flowering. Since they are annual weeds, control after they have set seed is not warranted, unless it is for aesthetic considerations.



Wild garlic

Tough-to-control monocots

Wild garlic, wild onion (*allium* sp.) and star of Bethlehem (*ornithogalum* sp.) become noticeable on lawns in late winter or early spring when they green up. These weeds begin growing a few weeks before the turf, and tend to be visible as clumps of foliage up to 12 inches in height.

These weeds are monocots, like grass, but they are not grasses. Just as sedges are different than grasses, so too are the *allium* and *ornithogalum* species. In fact, these are closely related to *amaryllis* and daffodils. For a

long time, dedicated selective controls for star of Bethlehem did not exist. However, recent research has shown that the herbicide sulfentrazone, either alone or in a tank mix, can be up to 95 percent effective for star of Bethlehem control.

A selective control for the alliums remains elusive though. If you have a serious problem, you can attempt to treat them with the three-way, post-broadleaf herbicide of your choice, but with the caveat that these herbicides are not specifically designed to control these weeds and therefore your results may be variable. 2,4-D alone is also a good choice.



Bittercress

Your best option may be to keep them cut short, either by mowing or with hand shears. As bulbs, they persist vegetatively for a period after flowering and then the foliage dies back for the season. If you mow or otherwise defoliate them early, you weaken the plant and diminish its ability to develop next year.

Winter annual and perennial weeds are usually not our most serious weeds in turf. However, they can, on occasion, become quite noticeable. The key is to recognize the uniqueness of the life cycle, and target your herbicide application for the right time of year.

COVER PHOTO: STAR OF BETHLEHEM—BRETT MARSHALL, SAULT COLLEGE, BUGWOOD