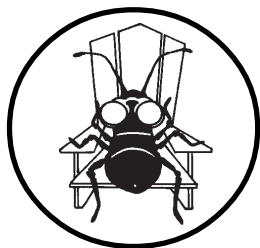


Spring Pests to Watch Out For



Pest Watch

Be sure to properly identify the pest, select a material labeled for the pest, and then apply at the proper rate in accordance with label directions.

Spring is a time of the year when turfgrass pest pressures are not all too bad. There are a few weeds, diseases, and insects, however, to watch out for. Specific control recommendations can be found in the *Cornell 1993 Pest Management Recommendations for Commercial Turfgrass*, available through your local Cooperative Extension Office.

Diseases

The cool, wet weather of a normal spring favors a few diseases. On golf courses and home lawns, watch out for leafspots, especially on bentgrass and susceptible bluegrasses.

Red thread and pink patch may be prevalent during very cool and damp periods, especially on fine fescue and perennial ryegrass.

Pink snow mold may be an early (and sometimes later) spring invader on annual bluegrass, bentgrass and tall fescue.

Low temperature brown patch may be found on bentgrasses and annual bluegrass. Likewise, pythium root rot may have to be dealt with on bentgrass and annual bluegrass.

For a good disease identification book, we suggest the *Compendium of Turfgrass Diseases, Second Edition* (1992), by R. W. Smiley, P. H. Dernoeden, and B. B. Clarke, APS Press, St Paul, MN.

Insects

Sometimes you may not notice the presence of white grubs in a lawn until spring. Generally, spring is not a recommended time to treat for grubs because they are nearing the end of their larval and root-eating stage. If large populations are present to the extent that damage is occurring, treat for grubs as soon as they are at the surface feeding, normally in April.

The presence of moles in a lawn does not necessarily mean grubs are there—moles feed on other soil fauna as well. Applying an insecticide for moles is a waste of the chemical unless you have confirmed the presence of grubs.

Hyperodes weevil is a troublesome insect on annual bluegrass. In areas with a history of Hyperodes, treat with Dursban or Oftanol between forsythia and flowering dogwood “full bloom.”

A good insect identification book is the *Turfgrass Insect and Mite Manual*, by D. J. Shetlar, P. R. Heller, and P. D. Irish, The Pennsylvania Turfgrass Council, Orchard Road, University Park, PA 16802.

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of the weed. If you do not correct the underlying problem, annual bluegrass will return.

Biological Control

Because cultural and chemical control methods have been ineffective, biological control is the next area of exploration. The bacterium, *Xanthomonas campestris* pv. *poannua*, was isolated from diseased turf in Michigan and is currently being investigated as a potential biocontrol agent for this weed. It is thought to be endemic to most stands of *Poa annua* L., but at population levels insufficient to cause disease. Mycogen Corporation of San Diego, California, is developing this bacterium as a biological control agent.

Xanthomonas campestris pv. *poannua* has been found in turf from the West coast of California to New York to the southern states of Texas and Louisiana. This bacterium is a facultative parasite which means that it only kills plants when the conditions are favorable for disease development. Plant death is caused by a vascular wilt; the bacterium plugs the xylem, stopping the flow of water and nutrients.

Xanthomonas campestris pv. *poannua* requires a wound to enter the plant and cause disease. This requirement makes the use of this organism in turf ideal because of frequent mowing.

Xanthomonas campestris pv. *poannua* is more effective on *Poa annua* ssp. *annua* than *Poa annua* ssp. *reptans*. Experiments in the field suggest that its effectiveness is largely dependent on environmental factors, such as temperature and drought stress. Gradual conversion from annual bluegrass to a more desirable species is possible with proper application timing and rates. Good cultural management practices enhance the effectiveness of biological control. Further research is necessary to develop this bacterium as a commercial product for annual bluegrass control.

For best results in controlling or managing *Poa annua* L., use turfgrass management practices that encourage growth of the desirable species and reduce the competitiveness of this pest, annual bluegrass. To obtain acceptable levels of control it is necessary to integrate the cultural and chemical control options. Reduce and alleviate compaction, optimize N fertility and irrigation, collect clippings, choose proper mowing heights, and integrate PGR treatments where possible. Also, with any annual bluegrass management program, it is essential to overseed with the most well adapted desirable turfgrass species and varieties for the site and use.

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▲ A sod installation at Cornell University.



▼ Sod covers a picturesque golf course.

Annual Bluegrass is a troublesome weed on sod farms and golf courses.

Pest Watch

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Weeds

There are a couple of weeds that are best dealt with in the spring. In areas where annual grasses such as crabgrass and goosegrass are a problem, preemergence herbicides need be applied before the grasses germinate in early spring. Consult the Pest Management Recommendations and the product labels for specific recommendations.

Veronica filiformis is a difficult to control broadleaf weed. The best chemical control is to apply Dacthal when the flower is in full bloom. It may take a month for symptoms to occur.

These are the most likely pests you will have to deal with this spring. As in any pest management program, be sure to properly identify the pest, select a material labeled for the pest, and then apply at the proper rate in accordance with label directions.

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For best results in controlling or managing *Poa annua* L., use turfgrass management practices that encourage growth of the desirable species and reduce the competitiveness of this pest.

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