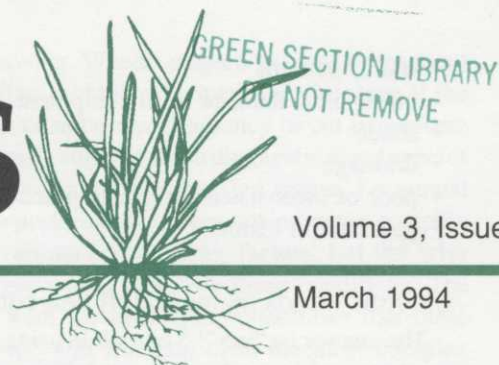


Turf Grass TRENDS



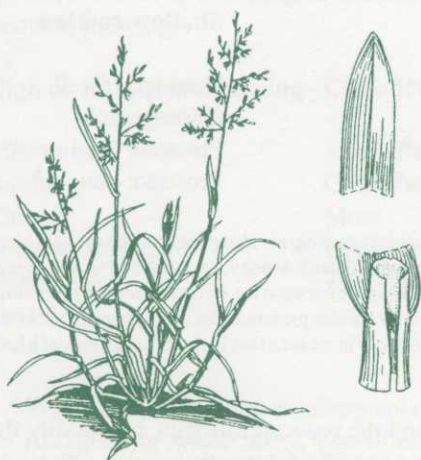
Volume 3, Issue 3

March 1994

Using IPM to manage weeds in turfgrass

by Dr. Joseph C. Neal

Integrated Pest Management (IPM) can keep weed infestations below a predetermined treatment threshold by using all suitable techniques and methods appropriate for a site. That may be as simple as a change in cultural practices or site usage, or as complex as the use of best management practices for control of other pests such as diseases or insects. Using IPM to control weeds does not preclude the use of traditional chemical herbicides, rather chemicals can be one weapon in an arsenal that can be used at a given site to accomplish the task.



Annual bluegrass

The first task: identifying weeds

To develop an effective IPM weed control strategy, you must first identify the weed species present. This means the systematic scouting of the site to determine which species are present, an estimation of their populations, some measure of their condition, and a way to record their distribution. A good scout can also often estimate the so-called confounding factors, such as compact soils or turf thinned by insect or disease damage.

Identifying each dicot and monocot weed species can be a simple matter of visual identi-

fication for scouts with considerable experience, but it can be bewildering to someone who lacks first-hand knowledge. For beginning scouts or others whose chief duties do not necessitate exact weed identification, see table on page 3. It gives a selected list of weed identification references that can be helpful.

Identifying some weed species in the field can be a daunting task even with the help of guide books. Carefully take a sample and store it in a plastic bag with an identifying label. When taking a dicot weed sample, include any flower, as flowers are an easily identifiable part of dicot weeds. If the sample is a monocot weed, include any seed heads that are present. Many monocots can only be properly identified by their inflorescence.

Once you have identified a weed, mark its distribution on the site map with some estimate of the population density, such as light, moderate, or heavy. (See scouting story, map and key on pages 4 and 5.) If one person scouts, then a scale to represent population, i.e. 0-10% of the area infested equals light, 10-20% equals moderate and >20% equals heavy, may not be necessary. But, if scouting chores are shared, then a defined population scale and its uniform application are important for data consistency.

Next, document the growth stage of the weed. Phrases like "newly emerged", "immature", "mature" or "in decline" can be helpful in making control decisions. For ease of recording, both the population density and the growth stage, information could be coded as part of the identification key.

Finally, note any confounding factors, cultural practices or patterns that may contribute to the observed weed infestation or may help in the control decisions. Note such things as:

- thin turf areas caused by disease or insect damage

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