

Goosegrass, silver crabgrass

Using IPM continued from page 3

- mature healthy turfgrass plants have an advantage over newly emerging or immature weed species,
- some weed species grow better in conditions that do not favor turfgrass species,
- higher leaf densities of healthy turf produce lower soil temperatures which discourage weed species that germinate at high soil temperatures.

When to use chemicals

It is true that dense and healthy turf is the best, first line of defense to weed infestations. Maximum beneficial cultural practices, fertilization practices, site varietal selections, site construction, and site utilization practices will produce a turf with little or no weed infestation problems.

Sometimes when funds for maximum beneficial practices are limited, it will be necessary to use chemical herbicides to achieve the desired results. Selecting the right herbicide and formulation from among the many that are available can be challenging. Listed below are guidelines in determining the choice of a herbicide:

- **Efficacy of control of the target weed species.** Will the herbicide work?
- **Longevity of residual control.** How long does the control last if the herbicide is a pre-emergent? Does it require multiple applications and will its use interfere with later plans to reseed?
- **Phytotoxicity.** Will it cause damage to the existing turfgrass species and if it does, can the turfgrass tolerate such damage?
- **Weed growth stage.** Will the herbicide work as a post-emergent if it is designed to be a pre-emergent? Should a post-emergent be used instead?
- **Weed control spectrum.** How many other weeds besides the target species will it control?

Legislative Watch

Herbicide, pesticide bills

The 1994 federal legislative calendar has several new bills and legislative reauthorizations pending that will may have effects on the turfgrass management industry. They are:

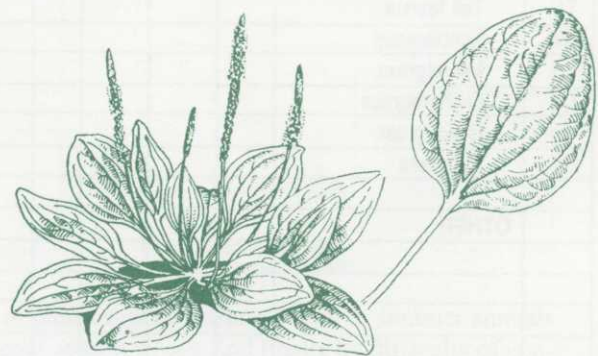
WPS: The Worker Protection Standards become effective in April. The WPS require new labeling of all affected pesticides as well as new training, protective clothing and the establishment of reentry periods for worker safety.

CERCLA: The Comprehensive Environmental Response, Compensation and Liability Act of 1980, the enabling legislation known as the Superfund Law is up for reauthorization in the fall. The reauthorization is expected to loosen the cleanup requirements so that sites can be cleaned up to a level that is appropriate for their probable uses, not the current standard that requires maximum cleanup of all sites regardless of their intended uses. To date the number of actual cleanups has been limited by massive legal wrangling over the high costs of reclaiming sites to the high standards of the existing legislation.

RCRA: The Resources Conservation and Recovery Act has several proposed regulatory changes pending that would reduce business regulatory requirements that would save almost a billion dollars a year.

HR 2543: Is new legislation that would extend certain provisions of the existing "Coastal Zone Management Act" to the whole country and would limit fertilizer applications to no higher than university recommendations.

HR 2199: The Polluter Pays Clean Water Act which is a funding mechanism for enforcing the provisions of the "Clean Water Act" would raise \$4 billion from taxes on fertilizer, pesticides and other chemicals.



Broad-leaved plantain

up in Congress in 1994

S 1114: Water Pollution Prevention and Control Act contains amendments regarding point and non-point source pollution control by mandating site management plans in many areas.

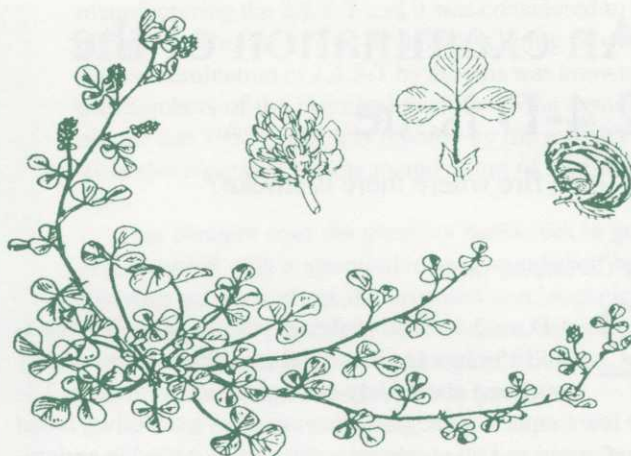
S 1547: Safe Water Drinking Act reauthorizing legislation that extends the provisions of that legislation to cover all surface and groundwater drinking water supplies.

HR 1360/ S 389: Would establish new containment standards on above ground storage tanks by establishing standards.

HR 1627/S 1478: Would replace the Delaney clause that prohibits any residues of pesticides that are potential carcinogens with a risk threshold of residues that may cause cancer in one in one million people exposed. Additional provisions would target agriculture to have 75% of all acreage under integrated pest management by the year 2000 and streamline the Environmental Protection Agency's (EPA) ability to remove suspect materials from the market place.

HR 967/S 985: The Minor Crop Pesticide Act would amend current standards of the legislation authorizing pesticide registrations, to allow or preserve pesticide registrations of minor-use pesticides whose registration is not being renewed for economic reasons.

HR 2910: The Risk Communication Act would require the EPA to conduct risk assessment studies on all matters regarding public health, safety and environment hazards and discuss information on the data, the methodology of the study, and use scientifically objective information when evaluating these risks.



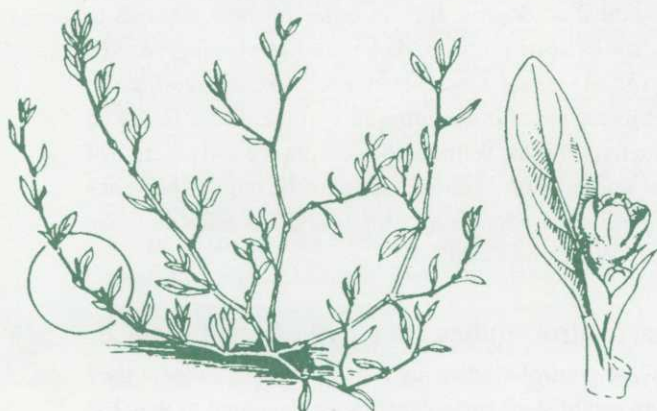
Black medic

- **Application equipment requirements.** Do you have the proper equipment to make the application?
- **Environment at the time of applications.** Does the label preclude the herbicides use at your site because of minimum weather standards, location of bodies of water, site usage, or site topography?
- **Proximity of susceptible non-target species.** Are there landscape plants or trees that would be adversely affected by its use?
- **Environmental and mammalian toxicity.** Does the herbicide pose a safety problem to humans, animals or the environment?
- **Economics.** What will the use of the herbicide cost? What are the total labor, equipment and product costs?

Once you have made your preliminary selection, take two more steps. First, contact your local cooperative extension office, the state department of environmental control or the licensing agency to make sure that the herbicide is registered for use in your state. If it is a restricted-use pesticide, make sure that you know about the circumstances for the use of the product in your state. Second, contact the facility or site manager for approval of the herbicides. It may be required or you may just do it as a courtesy. You may be required to notify your client with the details of any restricted-use pesticide within 30 days before the use of it. If a nonrestricted-use pesticide has been applied, make sure that the application does not pose a hazard to people or pets. Post the area with signs or barricades, whether your state requires such action or not.

IPM is the future

The adoption of IPM weed control strategies will maximize the health and density of the turfgrass and minimize your weed pest infestations while dramatically reducing the potential for adverse effects to people, animals and the environment. ■



Knotweed