## **Turfgrass Tolerances**

## Do Differ

## (from page 7)

ing bentgrasses, particularly at the higher rates.

The use of trifluralin is declining since injury to all types of turfgrasses has been reported often enough to question its safety. It also has a very narrow safety margin for application. However, a recent analog of trifluralin, benefin, offers promise for improved safety on turfgrasses while at the same time giving good control of annual weedy grasses.

# Herbicide Selectivity Calls for Careful Usage

Some herbicides exhibit considerable selectivity. Tupersan is one of these. It exhibits a high degree of safety on some grasses but causes serious injury to others. This chemical has appeared safe on newly seeded bluegrass, perennial ryegrass, and creeping bentgrasses, such as Penncross, Seaside, C-1, C-7, C-19, and Highland and Astoria colonial bentgrasses. Mature turfs of red fescue, Kentucky bluegrass and a few creeping bentgrasses show good tolerance, yet warm season grasses such as the bermudagrasses have been severely injured. This chemical has not yet been recommended for use on golf putting greens.

Another herbicide which has caused injury on bermudagrasses and zoysiagrasses is Betasan. This chemical, like tupersan, tends to be safer on cool season turfgrasses. Betasan gives excellent control of annual bluegrass in bent greens with little or no serious injury to the bentgrass. Treatments for annual bluegrass in bentgrass greens should be made in late summer to early fall and again in early spring.

Two excellent herbicides for general turfs are Zytron and Azak. At recommended rates these chemicals are safe on most turfgrasses but can cause some injury to bentgrasses. They are not normally recommended for use on bentgrass greens.

Bandane and chlordane are two herbicides which are usually safe on turfgrasses. Due to their tendency to persist and build up to toxic levels under droughty conditions, the turf should be adequately irrigated throughout the season following their use.

Two preemergence arsenical herbicides which have been available for several years are calcium arsenate and lead arsenate. Although bermudagrasses show good tolerance to these herbicides, cool season grasses can be easily injured. These inorganic arsenicals are not recommended for use on St. Augustine or around ornamental plants with shallow roots. They are good herbicides and give a high level of persistence for a second year's control of annual weedy grasses. They give good control of annual bluegrass. Lead arsenate is still favored by many golf course superintendents for the control of annual bluegrass and crabgrass in golf greens.

The important fact to remember in using any herbicide is to apply it at the correct rate at the proper time. Use an herbicide only on a turfgrass known to be tolerant to it and read the label and follow the directions precisely.

# Friend Announces TracTank Sprayer

The TracTank Sprayer, a new compact sprayer for herbicide application, was recently introduced by Friend Mfg. Corp. It can be used with 2- or 3-point hitch tractors and is effective for weed and brush control, while a specially designed tree boom provides swath or individual tree base herbicide application, the company reports. Available with 2- or 4-cylinder plunger-type pump, the sprayer features a mechanical agitator for its 100-gal. epoxy-lined tank, and is said to have the easiest pickup and dropoff operation in its field.

Specifications and more information on the TracTank Sprayer will be sent WTT readers who ask for them from Friend Manufacturing Corp., Prospect St. & East Ave., Gasport, N. Y. 14067.

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