Reduced Herbicide Application Rates: Crabgrass and Goosegrass Control in Bermudagrass

by B. J. Johnson

Effective cultural and chemical management practices are needed to maintain high quality turf on home lawns, golf courses, athletic fields, parks, and other turf-grass areas. A good weed control program begins with good management practices that encourage a dense, healthy turf (McCarty and Colvin, 1990). A thick, dense turf produces competition to emerging weed seedlings and minimizes the physical space available for weeds to become established. However, regardless of management practices, herbicides must be used to maintain optimum weed control.

Crabgrass (*Digitaria* spp.) and goosegrass (*Eleusine indica* (L.) Gaertn.) are problem summer annuals that actively grow in turfgrasses throughout the spring and summer. Preemergence herbicides — for convenience, referred to here as PRE herbicides — are toxic to crabgrass and goosegrass (Bhowmik and Bingham, 1990; Dernoeden and Krouse, 1991; Johnson and Murphy, 1987; 1989; 1993; Sawyer and Jagschitz, 1987; Watschke and Hamilton, 1990), but for consistent control the selection of the herbicide to be applied and its rate of application are important.

![Bermudagrass](Figure taken from Roberts/Roberts, *THE LAWNSCAPE... Our Most Intimate Experience With Ecology.* Reprinted by permission of The Lawn Institute.)