A key component of turfgrass management is maintaining a turfgrass monoculture or polyculture of two species. A turfgrass monoculture allows for uniform mowing, fertilization, and usability of the sward. Weed infestations can disrupt this simplicity of management and the uniformity and durability of the turfgrass. Weed management employs a combination of strategies to prevent weeds from infesting turfgrass (Bingham et al., 1995; Busey, 2003), and an integrated approach uses all available techniques to minimize the negative impact of weeds (Busey, 2003). For turfgrass managers, the goal is to encourage ground cover with the desired turfgrass species while minimizing interference from undesirable plants, such as weeds.

Why Control Weeds?

It has often been asked why it is necessary to control weeds in turfgrass. Weeds must be controlled in turfgrass to maintain both its aesthetic value and its function (McCarty and Murphy, 1994). Weeds will disrupt the color, texture, and uniformity of turfgrass swards. Annual bluegrass (Poa annua L.) is considered to be a weed when it occurs in bentgrass putting greens: it is light-green and has a clumping growth habit, whereas creeping bentgrass (Agrostis stolonifera L.) is dark green and has a prostrate growth habit (Gaussoin and Branham, 1989). Indeed, even untrained homeowners and golfers are quick to notice disruptions in uniformity caused by weed infestations. Weeds will also decrease the function of a turfgrass sward. Infestations of annual bluegrass and silvery-thread moss (Bryum argenteum L.) in putting greens cause uneven and unreliable ball roll (Gaussoin and Branham, 1989; Burnell et al., 2004). Dallisgrass (Paspalum dilatatum Poir.) grows in a clumplike fashion, producing uneven, unusable athletic field turfgrass when it infests bermudagrass [Cynodon dactylon (L.) Pers.]. Crabgrass [large crabgrass,