

Drive 75 DF—A New Herbicide for 1999

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For the first time in several years, a new herbicide will be available for turfgrass managers in 1999. **Quinclorac (trade name Drive 75 DF)** was recently granted an EPA registration for use in residential and non-residential turf. Turfgrass weed scientists have been working with the product on an experimental basis for several years. Drive 75 DF, manufactured by the BASF Corporation, will be an additional tool to manage several weedy pests in turf. In addition, this product will be welcome news to turf managers in Florida and California because **Drive has activity on torpedograss (*Panicum repens*) and kikuyugrass (*Pennisetum clandestinum*).**

Drive should be applied postemergence to weeds. The herbicide is absorbed by foliage and roots and is translocated throughout the plant. Injury symptoms on susceptible plants include stem twisting, stunting, chlorosis, and gradual reddening, followed by necrosis and death. The following is a list of weeds that Drive will control:

large and smooth crabgrasses	barnyardgrass
field bindweed	black medic
hop, red, and white clovers	common dandelion
dollarweed	giant, green, and yellow foxtails
kikuyugrass	broadleaf signalgrass
common, slender, and thymeleaf speedwells	torpedograss

The application rate for Drive is one pound of product per acre (1.1 kg/ha) or 0.75 lb active ingredient/acre. Methylated seed oil or a crop oil concentrate must be added to the spray solution at 1.5 pints/acre or 2 pints/acre (28.5 or 38 mL/ha), respectively. Perhaps the most common use of Drive will be for postemergence control of crabgrass. In my research, I have obtained excellent post-emergence control of crabgrass if applied when the crabgrass is small (prior to tillering) and when the weeds are actively growing. When applied to drought-stressed weeds, the result was poor control. Two applications of Drive will be needed to control kikuyugrass or torpedograss.

As with any herbicide, Drive has limitations. Drive has no activity on goosegrass. Also, as with all postemergence herbicides, **the smaller the weeds, the better the control.** Certain ornamental and other desirable plants are very sensitive to Drive. Plants in the Solanaceae family are very sensitive. These include tomatoes, eggplant, peppers, and tobacco, to name a few. As with any herbicide, consult the label for additional restrictions and precautions.

Drive will be a welcome addition in the management of weedy pests in turfgrasses. Postemergence herbicides are well suited for IPM programs in turf because you only treat where the weeds are a problem. This allows turfgrass managers to reduce herbicide inputs by treating only those areas that need treating. As with any herbicide, Drive should be tested on a limited basis until you get a good feel for weed control and turfgrass tolerance at your site.

Shown below is a list of turfgrass species and their tolerance to Drive: 

Highly Tolerant	Moderately Tolerant	Susceptible
common bermudagrass Kentucky bluegrass annual bluegrass American buffalograss tall fescue annual ryegrass perennial ryegrass zoysiagrasses	creeping bentgrass* hybrid bermudagrass fine-leaf fescues (red, hard, Chewings)**	bahiagrass centipedegrass dichondra St. Augustinegrass
*Cannot be used on bentgrass collars and greens. **Can only be applied to fine-leaf fescues when they are part of a blend.		