KIKUYUGRASS MANAGEMENT IN COOL AND WARM-SEASON TURF
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Kikuyugrass is an invasive, perennial weed of turf in the coastal and inter coastal valleys of southern and central California. No single herbicide treatment will control kikuyugrass. Complete renovation of infested turf with fumigants or glyphosate (Roundup) followed by replanting has been the only means of control. Renovation is expensive and results in loss of the turf for extended periods of time. In addition, reinvansion of kikuyugrass occurs and often within two to three years the kikuyugrass reinvades. A method was needed to slowly reduce the competitive ability of kikuyugrass while allowing the regrowth of desirable turf species. Previous work by Dr. Victor Youngner in the 1960's had shown that MSMA applied in a series of sequential applications was partially effective in reducing kikuyugrass.

Treatments of MSMA, triclopyr (Turfon), fenoxaprop (Acclaim), and quinclorac (Drive) were tested in southern California over a five-year period at Riverside, Ventura, Huntington Beach, and Costa Mesa. These treatments did not control kikuyugrass as single applications, but when applied every five to six weeks over a five-month period, kikuyugrass was reduced from as high as 80% to less than 5% of the sward. Sequential applications of two-way combinations of these herbicides resulted in reductions of kikuyugrass to less than 1% of the sward. This method of control has the advantage of reestablishing the desirable species slowly, without loss of use of the site during the process. The competitive edge is shifted from the weedy kikuyugrass to the desirable species allowing it to reestablish. If the desirable species is not present at a sufficient density, some reseeding may be necessary in the process.

Cool-season turf swards were best reclaimed from kikuyugrass invasion by sequential treatment with quinclorac, triclopyr, or triclopyr plus MSMA. Quinclorac has yet to be registered for use in turf, however, the manufacturer has expressed interest in gaining registration. Triclopyr or triclopyr plus MSMA is labeled for kikuyugrass control in cool-season turf.

Warm-season turf swards were best reclaimed by sequential applications of quinclorac or the triclopyr plus MSMA combination. As with the cool-season species, quinclorac has yet to be registered. Triclopyr ordinarily injures both hybrid and common bermudagrass, however, MSMA has had the effect of reducing the phytotoxic effects of triclopyr on the bermudagrasses in our trials. Triclopyr plus MSMA has yet to be labeled for use in warm-season turf; bermudagrass injury with this combination, although reduced, is still significant, therefore, this combination is not yet recommended. Repeat treatments of MSMA alone are currently the only method of reducing kikuyugrass vigor in warm-season turf swards.