INTEGRATED KIKUYUGRASS MANAGEMENT IN COOL 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 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 reinvasion of kikuyugrass occurs and often within two to three years the kikuyugrass is back. A method was needed to slowly reduce the competitive ability of kikuyugrass while allowing the regrowth of desirable turf species. Previous work by Vic Younger 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, and quinclorac were tested in southern California over a four year period. These treatments did not control kikuyugrass as single applications, but when applied every five weeks over a five month period, kikuyugrass was reduced from 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. The following graph illustrates the control which was obtained utilizing sequential applications. This method of control has the advantage of removing the objectionable turf species slowly by shifting the competitive edge from the weedy species to the desirable species. This is done without loss of use of the turf area. Trials are underway in 1993 to find ways to reduce kikuyugrass in warm season turf (hybrid and common bermudagrass). Additional trials are being conducted as a joint project with Clyde Elmore at U.C., Davis to test sequential applications as a means of removing bermudagrass from cool season turf.

Kikuyugrass/Perennial Ryegrass
Huntington Beach 1992

![Graph showing kikuyugrass control with herbicide treatments]

LSD 0.05 = 34