

Weeds, Weed Control and PGRs
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Almost 30 weed related projects were started or continued in 2004. The following report highlights and summarizes many of the research projects conducted by the turfgrass management program at MSU in 2004. In addition to the conventional product evaluation trials that are conducted for industry, many of our research projects have been developed in response to the specific needs of the Michigan turfgrass industry and directly supported by the MTF. As with any enterprise, the success of the turfgrass weed management research program is due to the efforts of the people doing the work.

Best Management Practices for Weed Control in Lawn Cut Turf

Common recommendations to LCO's and homeowners include mowing high and providing adequate fertility. Without proper management weed control will be at best, temporary. This study is examining mowing height, fertility, and postemergence herbicide treatment. Plots were maintained at two or four inches, and received either no fertility or 3 lb of nitrogen per 1000 ft² per year (holiday program – 1# Memorial Day, ½# July 4, ½# Labor Day and 1# Thanksgiving). In October of 1998 plots were treated with Trimec, Confront or no herbicide. Broadleaf weed populations have been monitored since the beginning of the experiment. The re-infestation of white clover and dandelion has been slowest in the fertilized plots and those treated with Confront. Non-fertilized plots have proven to be an excellent environment for clover. The taller height of cut in conjunction with the 'holiday' fertility program has not eliminated existing weeds. However, these management practices have proven to create a more competitive turfgrass stand that better resists re-infestation after a postemergence broadleaf herbicide application. Broadleaf herbicides (same treatments as 1998) were reapplied in October, 2001. Herbicide treatments were very effective in 2001. Both herbicides provided excellent control of clover and dandelion.

This research indicates that cultural practices can decrease white clover and dandelion pressure by maximizing turfgrass competitiveness. Herbicide treatments provide profound but temporary remedy for weed infestation. Cultural practices were much more effective over time than herbicide treatment alone. Herbicides can be used to reduce weed infestations at a point in time but must be used in combination with improved cultural practices to maintain maximum turfgrass cover long-term.