

## **Using Cultural Practices to Reduce Weed Populations in Homelawn Turf**

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Cultural practices which provide an ecological advantage for turfgrass are key to an effective weed control strategy. Chemical treatments can provide temporary remedy for broadleaf weed infestation, but for long-term control, turf must be managed to be more competitive than the existing weed and weed seed population. The primary objective of this study is to determine if fertility and mowing height can be used effectively for long-term control of broadleaf weeds after a post-emergent herbicide treatment. Achieving this will lessen the need for additional post-emergent applications.

We continually make recommendations to lawn care operators and homeowners about the management of weeds in their lawns. The most effective way to eliminate weeds is with a well-timed fall-applied herbicide application. However, when weeds infest a lawn it is typically an indication of some other problem (fertility, irrigation, mowing height, etc.). Unless these issues are corrected, the weeds will quickly return. Providing adequate fertility and raising the mowing height will help to maintain a healthy green, weed-free lawn. To help demonstrate the importance of the basic lawn needs we have established plots at the HTRC that include various combinations of mowing heights and nitrogen fertility. The primary objective of this study is to determine if fertility and mowing height can be used effectively for long-term control of broadleaf weeds after a post-emergent herbicide treatment. Initial weed counts were taken before the plots were treated with either Trimec Classic or Confront in the fall of 1998. As expected, we have seen a reduction of weeds in the herbicide-treated plots this spring. This season, herbicide-applied plots maintained at 4" have contained less weeds than those mowed at 2". Weed populations will be monitored through the fall of 2001.