


CUTT

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New Strategies for Broadleaf Weed Management

There is an increasing array of herbicides on the market for postemergence broadleaf weed control. Enhancing the overall spectrum of broadleaf weed control, these new products feature new active ingredients and possibilities for combinations. To adequately manage weeds in commercial turf settings, the ability to selectively remove broadleaf weeds from turfgrasses is of critical importance. Although broadleaf herbicides have been available since the 1940's when 2,4-D first came on the market, and the phenoxy herbicides are still the most widely used for turfgrass weed management, new formulations and products will help provide the chemical tools for future weed control. 

Formulations

Besides the active ingredients, product efficacy also depends on formulation and the environmental conditions at the time of application. Herbicides are available in a wide variety of formulations including liquids, powders, emulsifiable concentrates, dissolvable granules, and granular forms. Most commercial applicators and turfgrass managers prefer to use liquid applications as they are considered to be most effective and faster acting. However, granular formulations are now widely available for many herbicides and with new formulations, are faster acting and more available for uptake by foliage. In addition, for some operations, they can be easier to handle and apply; for example in landscape beds or large areas for application.

Certain formulations also differ in volatility and ability to be absorbed by foliage of broadleaf weeds. Ester formulations are more volatile than salt formulations of 2,4-D or phenoxy products and tend to penetrate foliage more quickly. Due to their volatility, especially under warm conditions, these esters often put nearby ornamentals at risk; therefore many companies have developed LV or lower volatility ester formulations. Granular products can also occasionally volatilize if not watered in shortly after application. In any case, if a large rainfall is predicted, it would be better to postpone application until the chance of imminent rainfall has passed. If droughty conditions are experienced, uptake and translocation of

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