

### **Postemergence Crabgrass Control**

Traditional postemergence controls for crabgrass such as the arsenicals are no longer recommended due to turf safety issues and environmental baggage. Dithiopyr (Dimension) can be applied postemergence to crabgrass and offers excellent turf safety. Dimension will control young crabgrass plants (1-3 leaf) and provide a preemergence barrier to prevent any further infestation. Fenoxaprop (Acclaim Extra) is a single isomer formulation of Acclaim. Acclaim Extra offers improved turf safety over Acclaim and will effectively control 2-3 tillered crabgrass. Quinclorac (Drive) has received registration and will be introduced in 1999. Drive is safe on cool-season species and has excellent activity on crabgrass, even at mature stages. Drive will be an excellent addition to our postemergence crabgrass arsenal.

### **Plant Growth Regulators for Lawn Care**

Trinexapac-ethyl (Primo) was introduced in 1993 and has gained wide acceptance in the golf industry. Lawn care use of PGRs has been limited. It has been difficult to quantify the benefit of a PGR application in a home lawn or commercial setting. After several years of research, we believe that a well-timed application of Primo in early May could greatly reduce the amount of clippings produced during the spring growth flush. This could eliminate the need for double cutting, bagging, or raking in the early part of the season. The growth regulation from a single Primo application should last from 4-6 weeks. Avoid applications when the turf is under stress conditions.

### **Chipco Proxy: A New Growth Regulator for Turf**

Rhone-Poulenc will be launching a new PGR for the 1999 season. Ethephon (Chipco Proxy) has a different mode of action than either Scott's TGR or Primo. Ethephon affects the ethylene (a plant hormone) synthesis pathway in the plant. Our research in 1998 focused on Proxy used alone and in sequential combinations with Primo on annual bluegrass maintained at greens height. Clippings were collected, dried, and weighed twice per week. On a seasonal basis only the Primo treatment resulted in significantly fewer clippings than the control. Turfgrass color ratings were taken throughout the evaluation period. The Primo treated plots were initially rated lower than the control plots, however, by 28 DAT the plots were significantly darker green than the untreated controls. Just the opposite was true for the Proxy treated plots where overall turfgrass color was somewhat lighter green than the control plots after 21 DAT. Applications of Proxy increased turf density and visual uniformity, but did not significantly reduce clipping production.

### **Non-Selective Vegetation Control**

Several non-selective herbicides are now available for use in turf and landscape situations. Pelargonic acid (Scythe), diquat (Reward), and glufosinate (Finale) are contact-type herbicides; in other words, they are not translocated in the plant. These herbicides provide rapid foliar burn usually within hours up to a couple of days. Their best use is on annual vegetation, for edging, or when rapid foliar burn is desired. Glyphosate (Roundup Pro) is the only systemic or translocated non-selective herbicide available. The hot topic this year is tank-mixing the various contact non-selective herbicides with glyphosate for faster and more effective vegetation control. Our research suggests the contrary. Think about it. If you tank mix, let's say Scythe with Roundup Pro, how can a lethal dose of glyphosate be absorbed and translocated to underground plant parts when the Scythe acts so quickly to disrupt the integrity of the shoot tissue? So remember, you can't have your perennial vegetation control and speed of activity too.

### **Best Management Practices for Home Lawns**

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. Initial weed counts were taken before the plots were treated with either Trimec Classic or Confront in the fall of 1998. We will continue to monitor the weed populations in these plots in 1999.