

CHALLENGES ASSOCIATED WITH CLEAN TURNROWS AND DITCHBANKS

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Abstract

Most growers in areas severely affected by glyphosate-resistant (GR) weeds have realized the severity of this problem and that GR weeds will be present for the foreseeable future. Control measures, such as hand-weeding, which seemed extreme a few years ago are now routinely utilized to manage GR Palmer amaranth. Growers are also becoming more educated on the importance of soil seedbanks and how these impact their weed management programs.

One area of concern in GR weed management is controlling these species on turnrows, field borders, and ditchbanks. Clean crop fields surrounded on turnrows and/or ditchbanks by GR weeds is a common sight in areas where these species are prevalent. Glyphosate-resistant weeds have also colonized fallow areas, road sides, and construction sites. When GR weeds in these areas are left uncontrolled, they produce seed which is often disseminated into crop fields.

Managing GR weeds on turnrows and ditchbanks can be problematic, but three methods of weed control can be utilized to manage GR weeds in these areas. (1) Turnrows and ditchbanks may be mowed or tilled to control GR weeds. While these tactics are relatively effective, they must be performed repeatedly because all weeds are generally not completely controlled and those remaining will produce seed which can reinfest crop fields. (2) Cultural tactics for managing GR weeds on turnrows and ditchbanks include planting turnrows in the same crop or establishing perennial grasses. Once the crop plant or perennial grass becomes established, these will compete with GR weeds and reduce growth and seed production. (3) Many growers prefer to chemically control GR weeds on turnrows and ditchbanks, but the legality of these herbicide applications is often unclear. Most herbicide labels restrict application to water, but they do not specify whether application to a ditch with no water is allowed. Some labels, such as dicamba, diuron, and triclopyr, specifically address applications to “non-crop” areas. However, “non-crop” area is not clearly defined on most labels, and many crop species are sensitive to dicamba and triclopyr.

Glyphosate-resistant weeds should be controlled by mowing or tillage if the designation of the infested area is not apparent. When deciding to spray a turnrow, the herbicide label and manufacturer should be consulted to determine if the application is legal. Local drainage districts or state plant boards should be contacted before utilizing a herbicide to control GR weeds on ditchbanks.