GLYTOL®/LIBERTY LINK® COTTON: MANAGEMENT CONSIDERATIONS G.D. Morgan P.A. Baumann D.A. Mott M. E. Matocha Texas AgriLife Extension Service, Texas A&M University College Station, TX

Abstract

GlyTol®/LibertyLink® is the latest herbicide technology developed by Bayer CropScience and will be commercially available in FiberMax® cotton varieties in 2011. This is the first double stack herbicide traits available in the cotton industry. The GlyTol® portion provides season-long tolerance to glyphosate herbicides, while the LibertyLink® provides season-long tolerance to glufosinate, specifically Ignite 280. The primary launch of GlyTol® and GlyTol®/LibertyLink® will be in the High Plains of Texas where the technology has been integrated into high yielding varieties. This double stacked herbicide technology will provide producers with some complimentary weed management options and should assist in preventing and/or managing herbicide resistant weeds. Two studies were initiated to evaluate the crop tolerance and efficacy of sequential applications of Ignite 280 and Roundup PowerMax and tankmixtures of these products. The Williamson county weed spectrum included Texas panicum and tumble pigweed. The Burleson county weed spectrum included common waterhemp, Palmer amaranth, red sprangletop, and sharppod morningglory. On common waterhemp, the sequential application of 29 oz/a and Roundup at 22 oz/a provided greater than 95% control. Ignite at 22 oz/a provided less control but was 90%. The best treatments included Prowl H2O PRE followed by either sequential of Ignite or Roundup, and Prowl H2O PRE was essential to obtain over 85% control. For sharppod moringglory, sequential applications of Ignite at 22oz/a or 29 oz/a provided the best control (92%), while sequentials of Roundup provided about 85% control. For the Texas panicum and tumble pigweed, all treatments provided over 95% control. Regardless of the weed species, antagonism was observed when Ignite and Roundup were tankmixed together. No crop injury was observed with any of the treatments.