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EFFECTIVENESS OF VALOR BURNDOWN PROGRAMS IN LOUISIANA

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Abstract

Four experiments were conducted in 2002 to evaluate the effectiveness of burndown treatments containing Valor. All treatments were applied to grower fields with plots being 8 rows wide, and were the entire length of the field. Experimental design was a randomized complete block and each treatment was replicated three times. Application equipment was a tractor-mounted sprayer delivering 10 gallons per acre. Treatments in Experiment one and two were identical and included: Roundup UltraMax (20 oz/A) + Valor (one or two oz/A), Boa + Direx (1.5 pt/A + 1 pt/A), Glyphomax Plus + Direx (24 oz/A + 1 pt), three-way mixes of Glyphomax Plus (24 oz) + Delta Goal (6.4, 10 or 16 oz/A) + 2,4-D (10 or 13 oz/A), and a two-way mix of Glyphomax Plus + Delta Goal (24 oz + 32 oz). Comparison treatments included Roundup UltaMax (20 oz) + Clarity (8 oz) or 2, 4-D (13 oz). Experiment one was conducted in Madison Parish, LA and treatments were applied on February 18, 2002. Weeds present included cutleaf eveningprimrose (*Oenothera laciniata*) at 3 inch rosette, henbit (*Lamium amplexicaule*) at 7 to 10 inches, swinecress (*Coronopus didymus*) at 3 inch rosette, and annual bluegrass (*Poa annua*) at 4 inches. Those treatments controlling henbit at 28 days after treatment (DAT), included Roundup UltraMax + Valor, and any treatment containing Delta Goal. Boa or Glyphomax Plus + Direx controlled henbit less than 65%. All treatments except Boa + Direx controlled swinecress 90 to 100%. Annual bluegrass and cutleaf eveningprimrose was controlled at least 89 or 86%, respectively, by any treatment. Experiment two was conducted in Morehouse Parish, LA. Treatments were applied on February 28, and weeds present included cutleaf eveningprimrose (4 to 5 inch rosette), and annual bluegrass (4 inches). Those treatments controlling cutleaf eveningprimrose at least 80% included Roundup UltraMax + Clarity, Valor, and those treatments containing Delta Goal. Annual bluegrass was controlled at least 80% with any treatment except Roundup UltraMax + 2,4-D, and Glyphomax Plus + Direx.

Experiment three was conducted in Ouachita Parish, LA. Treatments were applied on March 25, 2002 and included Liberty (28 or 34 oz/A), Liberty (28 oz) + Clarity (8 oz) or 2,4-D (16 oz), and Roundup UltraMax (20 oz) + Clarity (8 oz), 2,4-D (16 oz) or Valor (one or two oz). Weeds present included cutleaf eveningprimrose (5 inch rosette to trailing), Carolina geranium (*Geranium carolinianum*) at 7 to 10 inches,and horseweed (*Conyza canadensis*), at 4 inches. At 32 DAT, all treatments except Roundup UltraMax + Valor controlled cutleaf evening primrose at least 85%. At least 90% horseweed control was observed with all treatments except Liberty + 2,4-D (77%). Carolina geranium was controlled 95% or greater with Liberty alone, or in combination with 2,4-D, and Roundup UltraMax + 2,4-D. Roundup UltraMax + Valor controlled Carolina geranium less than 40%.

Experiment four was conducted in Concordia Parish, LA. Treatments were applied on April 5, 2002. Treatments were identical to those in experiment one and two except that 10 oz 2,4-D was added to treatments containing Valor. Weed present included Carolina geranium and annual bluegrass. All treatments controlled annual bluegrass 100%. Carolina geranium was controlled at least 90% with all treatments.

Generally, those treatments containing Valor controlled small weeds comparable to Roundup UltraMax + Clarity or 2,4-D, or treatments containing Delta Goal + 2,4-D. However, Carolina geranium appeared to be tolerant to Valor and the addition of 2,4-D was required to control this weed.