MARESTAIL CONTROL IN NORTHEAST LOUISIANA WITH GRAMOXONE MAX TANKMIX COMBINATIONS

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Abstract

A field study was conducted at the Northeast Research Station near St. Joseph, La in 2002 to evaluate marestail (*Conyza Canadensis*) control with tankmix combinations including Gramoxone Max (paraquat). Experimental design was a randomized complete block with four replications. Treatments included Gramoxone Max at 26 oz/A applied alone or in combination with the following herbicides: Caparol (prometryn) at 16 or 32 oz/A; 2,4-D Ester at 13 oz/A alone or plus Caparol at 32 oz/A; Clarity (dicamba) at 8 oz/A alone or plus Caparol at 32 oz/A; Direx (diuron) at 16 or 32 oz/A; and Valor (flumioxazin) at 1 or 1.5 oz/A. Comparison treatments included Touchdown IQ (glyphosate) at 32 oz/A alone or in combination with 2,4-D Ester at 13 oz/A and a nontreated control. Treatments were applied at 15 GPA to each two row, 6.67' x 35' plot. Weed size at time of application ranged from three to six inches. Visual control was estimated at 14, 28, and 40 d after treatment.

At 14 DAT, Touchdown IQ alone or in combination with 2,4-D Ester resulted in equivalent marestail control of 95 and 91%, respectively. Gramoxone Max tankmixed with 2,4-D Ester or Clarity alone or with Caparol controlled marestail 79 to 80%. All other Gramoxone Max combinations resulted in no greater than 58% control, which was equal to that for Gramoxone Max alone (55%). At 28 DAT, marestail control was maximized with treatments including Touchdown IQ (98%). Control with Gramoxone Max was greatest when applied in combination with 2,4-D Ester or Clarity (66 to 78%). Other Gramoxone Max treatments provided no greater than 34% control. By 40 DAT, the most effective Gramoxone Max tankmix treatments were those including Clarity (75 and 78%). Control with all other Gramoxone Max programs ranged from 35 to 55%. Similar to earlier ratings, Gramoxone Max tankmix combinations were not equal to treatments including Touchdown IQ.

In the current research, marestail control with Gramoxone Max applied in combination with various burndown herbicides was inferior to that with Touchdown IQ. Through 28 DAT, maximum control with Gramoxone Max was achieved in combination with 2,4-D Ester or Clarity. By 40 DAT, however, only combinations including Clarity maintained this level of control.