

Combinations for Controlling Texasweed in Drill-Seeded Rice

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In 2005, two studies were conducted to evaluate programs for controlling Texasweed at the Northeast Research Station near St. Joseph, LA on a Sharkey Clay soil. Rice was seeded at 100 kg/ha to plots measuring 2 by 4.5 m. Permanent floods were established 4 to 5 weeks after planting. Nitrogen, in the form of prilled Urea, was applied at 126 kg/ha just before permanent flood. At panicle initiation an additional 42 kg/ha of nitrogen was applied. Herbicide treatments were applied in 140 L/ha of water using a CO₂ pressurized backpack sprayer. The experimental design in both studies was a randomized complete block. A factorial treatment arrangement was used in the first study.

In the first study penoxsulam at 0.15 L/ha (2.0 oz/A) and 0.17 L/ha (2.3 oz/A) alone and tank mixed with 0.11 L/ha (1.5 oz/A) carfentrazone, 0.58 L/ha (8 oz/A) triclopyr or 25kg/ha (0.35 oz/A) halosulfuron was applied at the 1-3 and 3-6 inch weed stages. Texasweed control from penoxsulam alone was best when applied to 1-3 inch weeds, but 80% was the best control observed. Early season control was improved some when penoxsulam was mixed with carfentrazone, but late season control was not improved compared to 2.3 oz/A penoxsulam. Tank mixing penoxsulam with triclopyr did not improve Texasweed control. Tank mixing 2.0 oz/A penoxsulam with 0.35 oz/A halosulfuron at the 1-3 inch timing improved Texasweed control from 70% with penoxsulam alone to 90%. The same treatment at the 3-6 inch timing improved control from 50 to 83%.

In the second study penoxsulam, bispyribac, triclopyr, halosulfuron, and bensulfuron applied alone and in various combinations were evaluated. Triclopyr at 0.80 L/ha (11 oz/A) controlled Texasweed 92% and was the only herbicide that controlled Texasweed when applied alone. As in the first study combinations of penoxsulam with 8 oz/A triclopyr did not control Texasweed. Penoxsulam at 2.0 oz/A mixed with 35 kg/ha (0.5 oz/A) halosulfuron or 52 kg/ha (0.75 oz/A) bensulfuron controlled Texasweed 67 and 92%, respectively. Penoxsulam at 2.0 oz/A or 0.5 oz/A bispyribac mixed with 0.75 oz/A bensulfuron plus 17 kg/ha (0.25 oz/A) halosulfuron controlled Texasweed 93%.

Though preliminary, these results suggest that penoxsulam combinations with bensulfuron and/or halosulfuron can be used to control Texasweed. Additional research is needed to confirm these results and to refine rates and timings.