

V-10233 PERFORMANCE IN MIDWEST SOYBEAN FIELDS. Dawn E. Refsell, Eric J. Ott, Trevor M. Dale and John A. Pawlak, Field Market Development Specialists, Product Development Manager, Valent USA Corporation, Walnut Creek, CA 94596.

V-10233 is a new preemergence herbicide that will be registered in soybeans for the control of many broadleaf and grass weeds. Twenty-five trials were established throughout the soybean growing regions of the US, with 18 trials specifically located in the Midwest. Objectives of the trials were to determine weed control efficacy and crop tolerance of V-10233 at 0.143 and 0.178 lb ai/A in a Roundup Ready system compared to regional standards.

Preemergence (PRE) herbicides were applied at soybean planting. Evaluations were taken at 21 and 56 days after treatment (DAT). Treatments included; 1) POST glyphosate alone (0.77 lb ae/A) while the following PRE herbicide treatments included a POST glyphosate treatment (0.77 lb ae/A) 2) V-10233 (0.143 lb ai/A), 3) V-10233 (0.178 lb ai/A), 4) s-metolachlor + fomesafen (1.1 lb ai/A), 5) flumioxazin (0.064 lb ai/A) + cloransulam methyl (0.021 lb ai/A), 6) chlorimuron + tribenuron (0.0308 lb ai/A), 7) chlorimuron + flumioxazin + thifensulfuron (0.0774 lb ai/A), 8) sulfentrazone + cloransulam methyl (0.14 lb ai/A), and 9) imazethapyr + pendimethalin (0.091 lb ai/A).

Soybean injury was observed with all PRE treatments and ranged from 2 to 8% 21 DAT. No differences in injury were observed between the treated and untreated soybeans at 56 DAT. The PRE application of V-10233 at either rate provided equal to, or significantly better, control of redroot pigweed, waterhemp, Palmer amaranth, ivyleaf morningglory, common lambsquarters, velvetleaf, common ragweed, barnyardgrass and giant foxtail when compared to standards 28 and 56 DAT. Giant ragweed control with V-10233 was 50 and 70% at the 0.143 and 0.178 lb ai/A rates respectively, 28 DAT. This was less than the competitive products containing cloransulam methyl, but similar to other treatments included in the trial without cloransulam methyl. Differences in giant ragweed efficacy were not observed 56 DAT, all treatments provided greater than 90% control.

V10233 provides excellent residual control of broadleaf and grass weeds that are prominent throughout the Midwest soybean production region and will also be a beneficial tool for resistance management in the Roundup Ready system.