

SIMULATED DICAMBA DRIFT ON A LOW SOYBEAN PLANT POPULATION. Matthew J. Hardebeck, Andrew P. Robinson and William G. Johnson. Undergraduate Student, Graduate Research Assistant and Professor, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907.

Increasing soybean seed price and earlier planting have resulted in reduced plant populations. In addition, the introduction of dicamba-resistant soybean may increase the use and off-target movement of dicamba. The objective of this research was to quantify crop injury and yield of glyphosate-resistant soybean in a low population treated with dicamba. Becks brand 342NRR soybean was drilled at 225,000 seeds ha<sup>-1</sup> and 10 treatments of dicamba (0, 0.05675, 0.0227, 0.5675, 1.135, 2.27, 4.54, 9.08, 22.7, and 454 g ae ha<sup>-1</sup>) were applied at 3 timings (V2, V5, and R2) in Lafayette, IN. Visual ratings of injury and growth inhibition were recorded at 7, 14, 21, 28, and 42 days after treatment. Across timings, crop injury and growth inhibition were the greatest at 21 and 28 days after treatment. Comparing 21 to 28 days after treatment, crop injury decreased at the V2 timing and increased at the V5 and R2 timings. Growth inhibition was greatest at 21 days after treatment for the V2 timing, followed by R2, then V5. Yield will be reported.