MULTI-YEAR EVALUATIONS OF KIH-485 FOR WEED CONTROL AND CROP TOLERANCE.

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KIH-485 is an experimental herbicide being developed for weed control in corn. Over a three-year period, field experiments have been conducted at three locations in Illinois to evaluate phytotoxicity, weed control, and corn yield resulting from treatments containing KIH-485. Weed species common to all experiments included giant foxtail, velvetleaf, and common lambsquarters; a treatment of *S*-metolachlor also has been common to each experiment. Weed control and crop phytotoxicity evaluations were made approximately 30 days following preemergence applications. Results obtained from six environments indicate treatments containing KIH-485 performed equal to or better than *S*-metolachlor-containing treatments on the aforementioned weed species. Crop phytotoxicity, as measured by visual assessments and crop yield, indicated KIH-485 and *S*-metolachlor both provide excellent crop safety. KIH-485 provided longer soil residual weed control and overall better control of velvetleaf than *S*-metolachlor. Soil moisture required for optimal herbicide activity appears similar for KIH-485 and *S*-metolachlor.

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