EFFICACY OF PYRASULFOTOLE&BROMOXYNIL TANK MIXTURES IN WHEAT. Patrick W. Geier and Phillip W. Stahlman, Assistant Scientist and Professor, Kansas State University Agricultural Research Center, Hays, KS 67601.

An experiment conducted near Hays, KS in 2007-08 compared the efficacy and crop tolerance of pyrasulfotole&bromoxynil alone and in tank mixtures at two application timings in winter wheat. Treatments included pyrasulfotole&bromoxynil alone at 28&224 g/ha with AMS or UAN, pyrasulfotole&bromoxynil at 23&184 g/ha plus UAN and MCPA, dicamba, or metsulfuron. Comparative treatments included chlorsulfuron&metsulfuron plus UAN, triasulfuron&dicamba plus UAN, and a nontreated control. All herbicides included NIS at 0.5% v/v. Fall-applied (FPOST) herbicides and spring-applied (SPOST) pyrasulfotole&bromoxynil controlled blue mustard 98% or more. Flixweed control was greater than 95% regardless of herbicide or application timing. All FPOST herbicides controlled henbit 100%, whereas pyrasulfotole&bromoxynil alone or with MCPA or dicamba applied SPOST provided at least 90% control. Pyrasulfotole&bromoxynil plus metsulfuron, chlorsulfuron&metsulfuron alone, and triasulfuron&dicamba alone provided 84 to 86% henbit control when applied SPOST. Wheat chlorosis was generally greater with FPOST treatments compared to SPOST when evaluated at 12 days after treatment. Pyrasulfotole&bromoxynil plus dicamba, chlorsulfuron&metsulfuron alone, and triasulfuron&dicamba alone applied FPOST caused 8 to 9% chlorosis, whereas the same treatments applied SPOST caused 0 to 4% chlorosis. Herbicide-treated wheat matured 1 day earlier than nontreated wheat. Similarly, all wheat receiving herbicide treatment yielded 3020 to 3290 kg/ha more grain than nontreated wheat. However, no differences occurred between herbicides for wheat maturity or yield.