

DETERMINATION OF THE SOIL PERSISTENCE OF KIH-485, ACETOCHLOR, DIMETHENAMID, AND *S*-METOLACHLOR USING THREE GRASS SPECIES. Chad D. Dyer*, Thomas T. Bauman, and Michael D. White, Graduate Student, Professor of Weed Science, Administrative Professional, Purdue University, West Lafayette, IN 47906.

Field research was conducted at the Agronomy Center for Research and Education in West Lafayette, IN on a Chalmers silt loam soil in 2004 and 2005 to determine the soil persistence of KIH-485, acetochlor, dimethenamid, and *S*-metolachlor using barnyardgrass, green foxtail, and wild oat. 10wks after application it was determined that KIH-485 applied at 2.98oz ai/ac was providing 69%, 80%, and 95% control of green foxtail, wild oat, and barnyardgrass, respectively. Acetochlor applied at 1.75lb ai/ac was providing 0%, 3%, and 46% control of green foxtail, wild oat, and barnyardgrass, respectively, 10 wks after application. Dimethenamid applied at 0.94lb ai/ac provided 10%, 8%, and 24% control of green foxtail, wild oat, and barnyardgrass, respectively, 10wks after application. *S*-metolachlor applied at 1.52lb ai/ac provided 10%, 0%, and 55% control of green foxtail, wild oat, and barnyardgrass, respectively, 10wks after application.