

WIRSTEM MUHLY CONTROL IN CORN. Chris Kramer, Josh Vyn, Christy Shropshire, Nader Soltani and Peter H. Sikkema. Undergraduate student, Research Technician, Research Technician, Research Associate, and Assistant Professor. Ridgetown College, University of Guelph, Ridgetown, ON, Canada. N0P 2C0.

Field trials were conducted at three Ontario, Canada locations to study the efficacy of five sulfonylurea herbicides for the control of wirestem muhly in field corn. Experiments were arranged in a randomized block design with four replications. Treatments consisted of a weedy check, a weed-free check, and the postemergence application of rimsulfuron (15 g ai/ha), nicosulfuron (25 g ai/ha), nicosulfuron plus rimsulfuron (25 g ai/ha), foramsulfuron (70 g ai/ha), and primisulfuron (25 g ai/ha). All treatments included 141 g ai/ha of dicamba for broadleaf weed control. Rimsulfuron provided little visual control of wirestem muhly and had no effect on density, dry weight and corn yield compared to the weedy check. Nicosulfuron provided 8% visual control of wirestem muhly and reduced density 44%, dry weight 70% and increased corn yield 18% compared to the weedy check. Nicosulfuron plus rimsulfuron resulted in 2% visual control of wirestem muhly, there was no effect on wirestem muhly density but decreased dry weight 48% and increased corn yield 14%. Foramsulfuron provided 64 and 88% control of wirestem muhly at 28 and 56 DAT, respectively. Wirestem muhly density and dry weight were decreased by 59 and 69%, respectively and corn yield was increased by 14%. Primisulfuron provided little control and had no effect on density, dry weight or corn yield compared to weedy check. Based on these results, foramsulfuron applied postemergence has potential for the control of wirestem muhly in corn. However, the postemergence application of rimsulfuron, nicosulfuron, nicosulfuron plus rimsulfuron, and primisulfuron do not provide adequate control of wirestem muhly in corn.