

FIELD SANDBUR CONTROL IN IRRIGATED CORN WITH HERBICIDES. Stevan Z. Knezevic and Jon E. Scott*, Haskell Agricultural Laboratory, University of Nebraska, Concord, NE, 68728.

Field sandbur is the most troublesome annual grassy weed in corn production in Nebraska, especially on sandy soils. A field study was initiated in 2005 at Brunswick, in the northeastern part of the state, to evaluate the performance of 10 herbicide combinations for sandbur control. Sandbur densities prior to the POST application (V-4 corn stage) ranged from 20 to 40 seedlings per meter square. Evaluation at 26 days after application of PRE treatments implied that several treatments provided fair to good (>80%) sandbur control. These included KIH-485 at 125 g ai/ha, 166 g ai/ha and 209 g ai/ha, respectively; isoxaflutole (35 g ai/ha) + flufenacet (504 g ai/ha) + atrazine (1120 g ai/ha); and S-metolachlor (1880 g ai/ha) + mesotrione (190 g ai/ha) + atrazine (700 g ai/ha). Evaluation of all treatments 27 days after application of POST treatments suggested excellent control (>90%) with only one treatment, which was: isoxaflutole (35 g ai/ha) + flufenacet (504 g ai/ha) + atrazine (1120 g ai/ha) PRE followed by foramsulfuron (38 g ai/ha) + sodium salt of diflufenzopyr (42 g ae/ha) + sodium salt of dicamba (110 g ae/ha) POST. Good control (87%) was also achieved with isoxaflutole (35 g ai/ha) + flufenacet (504 g ai/ha) PRE followed by foramsulfuron (38 g ai/ha) + sodium salt of diflufenzopyr (42 g ae/ha) + sodium salt of dicamba (110 g ae/ha) POST. Our results suggest that the PRE herbicides did not provide satisfactory sandbur control (>80%) for more than 30 days after application, compared to the excellent control (95%) with the PRE followed by POST application. KIH-485 alone performed better than the other graminicides tested, and it was similar to other tank mix and premix herbicide treatments when applied PRE. This indicates that there is a need for a combination of PRE and POST herbicides to control sandbur on sandy soils with high infestation levels. (13)