

DOES ANYTHING KILL SCOURINGRUSH? CONTROL STRATEGIES TESTED IN NEBRASKA. Eric E. Frasure and Mark L. Bernards Graduate Research Assistant and Assistant Professor, Department of Agronomy and Horticulture, University of Nebraska, Lincoln, NE 68583.

Scouringrush (*Equestium hyemale* L.) patches are becoming more common in corn and soybean fields in southeastern Nebraska. Scouringrush grows naturally in moist areas along waterways and field edges and in the absence of tillage will spread into the drier soils of fields. Dense patches impede planting and reduce crop yield. Scouringrush is often misidentified as field horsetail. Although the two species look similar during early spring growth, they respond very differently to herbicide treatments. In addition, scouringrush is a larger plant, and is able to tolerate drier conditions than field horsetail. There is little information published on controlling scouringrush. The objective of this research was to identify effective strategies for controlling scouringrush. We conducted field studies that screened numerous herbicides and evaluated tillage and mowing treatments. Herbicides were applied using a backpack sprayer with a carrier volume of 187 L/ha and Turbo TeeJet 110015 nozzles. A roto-tiller was used for the tillage treatments and mower set at 10 cm used for the mowing treatments. Intense tillage repeated 3 times a year reduced biomass and stem counts over 80% compared to untreated controls. Three repeated mowing treatments reduced biomass but did not reduce stem counts. Of the herbicides evaluated, chlorsulfuron (158 g ai/ha) killed scouringrush and prevented the growth of new shoots for more than one year. MCPA (3100 g ae/ha) applied in the spring killed the shoots, but new shoots began to grow four months later. Sulfometuron (69 g ai/ha), imazapyr (2630 g ae/ha), triclopyr (1680 g ai/ha) and metsulfuron (84 g ai/ha) reduced stem counts and biomass but did not provide complete control. Dichlobenil (6700 g/ha), which must be incorporated by tillage, reduced biomass and stem counts over 90%. None of the herbicides that were effective at controlling scouringrush are labeled for use in corn and soybeans. Each may cause carryover issues for subsequent crops. Most of the herbicide that have been reported as being effective for controlling field horsetail had no visible effect on scouringrush. Correctly identifying the species (either scouringrush or field horsetail) is critical for planning appropriate control strategies. The most effective strategies for controlling or containing scouringrush are intensive tillage and/or chlorsulfuron application.