

WEED MANAGEMENT PRACTICES DURING ESTABLISHMENT AND EARLY GROWTH OF CONSERVATION BUFFER SPECIES. Janyce L. Woodard, Stevan Z. Knezevic, and David P. Shelton, Haskell Ag. Lab, University of Nebraska, Concord, Nebraska.

The successful establishment of a conservation buffer can be severely compromised by weeds and their ability to colonize newly opened sites. A field study was initiated in 2003 in northeastern Nebraska to evaluate 13 chemical and non-chemical weed control methods in a newly seeded conservation buffer grass mixture of big bluestem (*Andropogon gerardii*), indiagrass (*Sorghastrum nutans*), and switchgrass (*Panicum virgatum*). The pure live seed rates were 18.48 kg/ha for big bluestem and indiagrass and 2.24 kg/ha for switchgrass. In general, weed control with non-chemical methods was not satisfactory compared to herbicide treatments. For example, mowing and planting an oat (*Avena sativa*) cover crop provided less than 50% weed control compared to 60%-95 % control with various herbicides. Excellent weed control (>90%) at 60 days after PRE application was achieved with: imazapic at 0.053 kg ae/ha and 0.105 kg ae/ha; imazethapyr at 0.053 kg ae/ha; and a POST application of 2,4-D LVE at 0.538 kg ae/ha. Most herbicides did not cause injury to the buffer grass species. (woodarj@witcc.com)