

FIELD PANSY CONTROL IN NO-TILL FIELDS WITH FALL AND SPRING HERBICIDE APPLICATIONS. Jason N. Miller and David L. Regehr, Graduate Research Assistant and Professor, Department of Agronomy, Kansas State University, Manhattan, KS 66506.

Field pansy (*Viola rafinesquii*) is becoming a problematic weed in northeast Kansas no-till fields. It is a winter annual native to North America, that can germinate both in the fall and spring. Previous work has shown poor or erratic weed control from many spring burndown treatments. Field studies were conducted over the past two years in northeast Kansas no-till fields, to evaluate various herbicide tank-mix combinations at two application timings (fall and spring), on field pansy control ahead of either corn or soybeans. Ahead of corn, year was significant, so data is presented separately. Additionally, we were unable to get the 2003 fall-applied treatments out ahead of corn due to trouble finding a satisfactory site, so only fall applied data from 2002 is represented. Ahead of corn in 2002, fall-applied treatments ranged from 85% to 100% control. Treatments containing atrazine averaged 98% control vs. 90% without atrazine. Spring-applied treatments provided control similar to the fall applications ranging from 83% to 100%. In 2003, an overall decrease in control was observed from the spring-applied treatments compared to 2002, with control ranging from 60% to 100%. Ahead of soybeans there was no year interaction so data was combined. Most of the fall-applied treatments provided good control ranging from 80% to 100%, with similar results obtained from the burndown-only treatments and residual treatments. In the spring-applied treatments, control ranged from 50% to 90%, and most of the treatments provided far less control than when applied in the fall. One reason less control may have been obtained from the spring-applied treatments ahead of soybeans could be due to the fact that there was more crop residue, and spray coverage could have been affected. Pending further information on how much spring germination does occur, and control from spring applied herbicides, it is best to use fall-applied herbicides that provide foliar burndown with adequate residual to control spring germinators.