

CONTROL OF PROBLEM WEEDS IN ROUNDUP-READY SOYBEANS WITH SOIL APPLIED HERBICIDES AND GLYPHOSATE TANK-MIXES. Stevan Z. Knezevic and Robert N. Klein, Haskell Ag. Lab., University of Nebraska, Concord, NE, 68728-2828.

Despite the fact that glyphosate controls many plant species, there are many broadleaf species found in Nebraska's cropping systems that are tolerant to the label rates of this herbicide, including: ivyleaf morningglory, wild buckwheat, Venice mallow, yellow sweetclover, field bindweed, waterhemp, kochia, Russian thistle and volunteer Roundup-Ready corn. Two studies are being conducted in 2004 (and 2005) at Concord and North Platte to evaluate performance of: six PRE herbicides (study 1); and glyphosate applied POST at the label rate tank-mixed with half label rate of major POST herbicides (study 2) for control of problem weeds in soybean. At 45 DAT, sulfentrazone+chlorimuron, metribuzin, imazethapyr+pendimethalin, and imazaquin applied to the soil at the label rate provided > 85% control of most weed species. Sulfentrazone+chlorimuron, and imazethapyr+pendimethalin were the only herbicides that provide > 80% PRE control of ivyleaf morningglory. At 21 DAT most POST treatments of glyphosate tank-mixes provided > 80% control of most studied species that were up to 10cm tall except ivyleaf morningglory. As the height of weeds increased the level of control decreased. Tank mixes of glyphosate with half rate of lactofen, imazethapyr, fomesafen, imazaquin or acifluorfen provided >70% control of all species that were 10-20 cm tall except sweet clover and ivyleaf morningglory. Most weeds that were 30-40 cm tall had >70% control by glyphosate tank-mix with lactofen, fomesafen or acifluorfen ([sknezevic2@unl.edu](mailto:sknezevic2@unl.edu)).