

WEED CONTROL AND POTATO TOLERANCE WITH RIMSULFURON, HALOSULFURON AND SULFENTRAZONE PROGRAMS. Timothy Koch, Douglas Doohan and Joel Felix, Research Assistant, Associate Professor and Research Associate, Department of Horticulture and Crop Science, The Ohio State University, Wooster, OH 44691.

Weed control and potato tolerance were evaluated with POST applications of rimsulfuron plus metribuzin and sulfentrazone plus metribuzin, and with PRE and POST applications of halosulfuron. Target weeds included yellow nutsedge, common lambsquarters, Pennsylvania smartweed and giant ragweed. Results indicate excellent control of lambsquarters and smartweed with rimsulfuron plus metribuzin, with no potato injury. Sulfentrazone plus metribuzin provided similar smartweed control, but initially showed extensive potato foliage burn. However, crop yield was not affected. Halosulfuron provided excellent control of lambsquarters with PRE treatment and yellow nutsedge with split application (PRE/POST). Split application provided fair control of smartweed. Moderate stunting of the crop occurred initially with POST treatments of halosulfuron, but yield loss was primarily due to poor weed control.