

GLUE RETAINS SEEDS IN SHATTER-PRONE WEED SEEDHEADS. Gary Amundson, Ebandro Uscanga, and Frank Forcella; Engineering Technician, Graduate Research Assistant, and Research Agronomist. USDA-ARS, Morris, MN 56267 and University of Minnesota, St Paul, MN 55108.

Four non-toxic and biodegradable glues each were sprayed at four concentrations onto maturing seedheads of redroot pigweed in an effort to retard seed shattering but still allow normal seedhead maturation. There were eight plants (seedheads) in each treatment, and half of these were enclosed in mesh bags to retain shed seeds. The study was conducted in a natural pigweed infestation at the West Central Research and Outreach Center, Morris, MN, during September 2001. Relative to control plants (no glue applied), treated plants appeared equally healthy and their seedheads contained about 10% more seeds at the time of harvest. These results can be interpreted to mean that glue applications were, in fact, non-toxic and allowed seedheads to mature without shedding seeds prior to harvest. Non-toxic glues applied before seed shed may aid weed researchers to more easily study fecundity of weed species with shatter-prone seedheads.