

BROADLEAF WEED CONTROL IN OAT. Krishona Martinson, Lisa Behnken, Fritz Breitenbach, Jochum Wiersma, and Beverly Durgan. Assistant Extension Professor, Extension Professor, IPM Specialist, Assistant Extension Professor, and Professor. University of Minnesota Extension, St. Paul, MN 55108.

Although considered a minor crop in Minnesota (300,000 acres), oat still has multiple uses. Recently, there has been an increased interest in weed free oat straw as mulch for right-of-way seedings. The objective of this research was to evaluate broadleaf weed control and crop injury using postemergence herbicides in oat. Research plots were established in 2007 at three locations in Minnesota; Rosemount, Rochester, and Crookston. 'Kame' oat was seeded at a rate of 5 bu/ha and fertilized according to soil test. The experiments were organized in a randomized complete block design with three replications. Dicamba, bromoxynil + MCPA, bromoxynil, clopyralid + MCPA ester, thifensulfuron, pyrasulfotole, MCPA amine, MPCA + dicamba, fluroxypyr + 2,4-D, and clopyralid + fluroxypyr were applied to three to five leaf weeds at label rates. Weed control, crop injury, and grain yields were taken. Visual weed control and crop injury ratings were taken at seven, 14 and 21 DAT, and prior to oat harvest. Oat injury was minimal in all treatments. Weed control varied among treatments and weed species, but was acceptable in all treatments.