

AMINOCYCLOPYRACHLOR FOR INVASIVE WEED MANAGEMENT AND RESTORATION GRASS SAFETY IN THE CENTRAL GREAT PLAINS. Philip Westra, Scott Nissen, Todd Gaines, Bekir Bekun, Brad Lindenmayer, and Dale Shaner, Professor, Professor, Graduate Student, Visiting Scientist, Graduate Student, and Professor. Colorado State University and USDA/ARS, Fort Collins, CO 80523

Aminocyclopyrachlor is a new non-ALS herbicide under development by Dupont for initial use in non-cropland settings for invasive weed and tree control. Use rates to date in field research projects have ranged from 35 to 280 grams active ingredient per hectare. Most sensitive perennial weeds are well controlled at 70 – 100 grams per hectare. This new herbicide has both foliar and soil activity on susceptible species. Central great plains research shows that leafy spurge, Canada thistle, Scotch thistle, Russian knapweed, field bindweed, common milkweed, salt cedar, and Russian olive all exhibit excellent (> 90%) 1 year after treatment (YAT) control with aminocyclopyrachlor. Weeds in the mustard family are not well controlled by this herbicide. Soil binding is soil dependent; this herbicide shows good residual soil activity in different soils, but by 2 YAT most agronomic crops show no injury effects. Use of a good adjuvant enhances foliar activity of aminocyclopyrachlor. 2008 field research evaluated the pre and post response of 18 cool and warm season grasses to aminocyclopyrachlor.