

NATIVE FORB AND SHRUB TOLERANCE TO AMINOPYRALID.

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Abstract: Aminopyralid is a broadleaf herbicide that has reduced risk to the environment compared with other herbicides, making it a desirable alternative for invasive weed control on wildland sites. Effect of aminopyralid on desirable forbs and shrubs is a consideration for land managers when making management decisions. Experiments were established at 10 locations in 4 states from 2004-2007 to determine long-term response of native forbs and shrubs to aminopyralid and to develop a tolerance/susceptibility ranking for native plants. Research locations were diverse plant communities with 29 plant families represented, with the greatest number of species (35%) in the Asteraceae family. Individual rankings of tolerance to aminopyralid were established for 98 native forb species and 19 shrubs. Four ranking categories were developed: susceptible (S - 75% or more reduction), moderately susceptible (MS - 75 to 50% reduction), moderately tolerant (MT - 49 to 16% reduction) and tolerant (T - 15% or less). Of the 98 forb species categorized, 28, 17, 25, and 28 were ranked S, MS, MT, and T, respectively one year after application. Results from second year evaluations on 68 species showed most forbs had recovered with 77% of the species either MT or T. Shrubs were mostly tolerant to aminopyralid with 15 of the 19 shrubs ranked either MT or T after one year. Since most native forb species and shrubs were moderately tolerant to tolerant, or quickly returned following treatment, land managers can use aminopyralid to restore the plant community by controlling invasive plants while minimizing non-target plant injury.