

DICOT WEED CONTROL IN COOL-SEASON GRASS PASTURES. William W. Witt, Professor, Department of Agronomy, University of Kentucky, Lexington KY 40546.

There is an estimated six million acres of cool-season grass pastures in Kentucky utilized as forage for beef, dairy, and equine production. Annual, biennial, or perennial dicot weeds infest essentially all of the acreage. Weed control in beef and dairy pastures is complicated by the desire of growers to maintain existing stands of either red or white clovers. Field research was conducted in cool-season grass pastures to evaluate various herbicide combinations for control of weeds that commonly infest these pastures.

Herbicides evaluated were 2,4-D (dimethylamine salt), dicamba (Clarity), dicamba+diflufenzopyr (Overdrive), triclopyr+clopyralid (Redeem R&P), triclopyr+2,4-D (Crossbow), triclopyr+fluoxypr, picloram+2,4-D (Grazon P+D), picloram+fluoxypr (Surmount), clopyralid (Stinger), metsulfuron-methyl (Cimarron), and chlorsulfuron (Telar). All treatments were applied in water at 15 gpa utilizing flat fan nozzle tips at 40 psi. Plot sizes varied from 10 feet by 30 feet to 10 feet by 50 feet and there were at least three replications.

A study initiated in May 2002 compared the control of common dandelion and chicory in a tall fescue and orchardgrass pasture with Redeem R&P, Grazon P+D, Pasturegard, and Surmount applied either in late May, early July, and early September. Common dandelion control 8 WAT was greater than 80% for the following treatments: Redeem R&P at 2 or 3 pt/A; Grazon P+D at 2 or 3 pt/A; Pasturegard at 2 pt/A, and Surmount at 2 pt/A. Chicory control 8 WAT was greater than 90% for Redeem R&P at 2 or 3 pt/A and Grazon P+D at 2 or 3 pt/A while chicory control was between 70 and 75% for Pasturegard at 2 pt/A and Surmount at 2 pt/A. Chicory control 10 MAT was greater than 85% for Redeem R&P at 2 or 3 pt/A and Grazon P+D at 2 or 3 pt/A while control provided by Pasturegard and Surmount ranged between 63% and 73%. Redeem R&P, Grazon P+D, Pasturegard, and Surmount killed over 90% of red clover in the plots at the time of treatment. No injury to tall fescue or orchardgrass from any treatment.

Another study in 2002 evaluated curly dock control in a timothy hayfield. Treatments were made July 2 and evaluated 12 WAT. The greatest curly dock control was provided by Cimarron at 0.2 oz/A (90%), Redeem R&P at 3 pt/A (87%), and Weedmaster at 3 pt/A (83%). Curly dock control from 2,4-D amine was 50%.

Bulbous buttercup control was evaluated in a tall fescue pasture in 2003. Treatments were applied in April 2003 to bulbous buttercup plants about 12 inches in height. Bulbous buttercup control 8 WAT was 100% for the following treatments: Grazon P+D at 1.5, 2.0, and 2.5 pt/A; 2,4-D ester at 2 and 4 pt/A; Weedmaster at 2 and 3 pt/A; Cimarron at 0.2 oz/A; and Crossbow at 2 and 3 qt/A. Redeem R&P at the following rates provided the indicated control: 3 pt/A—80%; 2 pt/A—70%; 1 pt/A—50%.

In two studies in September 2003, tolerance of red clover to the above listed herbicides was evaluated. All herbicides killed greater than 60% of the red clover 4 WAT. These data indicated that excellent control of many troublesome weeds but red clover populations will be reduced severely, if not eliminated.