

Broadleaf Weed Control with UAP-302

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OBJECTIVE

The purpose of this trial was to evaluate an experimental herbicide postemergent broadleaf weed control.

EXPERIMENTAL METHODS

This study was conducted at two locations at the O.J. Noer Facility. The first location contained a large uniform population of ground ivy and dandelion. The second location was selected due to the high percentage of pure white clover present. Soil type at both locations was a Miami silt loam.

In order to evaluate the effectiveness of the herbicide we obtained a background level of the weeds present prior to treatment. An optical point quadrant was used to determine the percent cover of ground ivy and clover. Because of their lower number, dandelion plants in each plot was counted directly. The study was set up as a randomized complete block design with 4 replications and 4 treatments (including the control). Plot size was 5 ft X 10 ft for the dandelion/ground ivy trial and 5 ft X 5 ft for the clover trial.

Three rates of UAP-302 were sprayed in both areas on 7/11/00 using a CO₂ powered backpack sprayer equipped with Tee Jet XR 8003 nozzles. A carrier volume of 1 gal/M was used. The three rates sprayed were: 0.735 oz/M, 1.1 oz/M, and 1.47 oz/M; untreated plots were left as controls.

Ratings were collected 7/31/00 (20 days after treatment) to determine the effectiveness of the herbicide. Dandelion control was evaluated by counting the living dandelion plants and comparing that number with the background count. The ground ivy and clover were evaluated by placing the point quadrant in the exact same place as the background count was made, and again determining the percent cover of each weed. These values were then compared to the background level to determine the efficacy of the chemical against each weed.

RESULTS

UAP-302 provided significant control of all three broadleaf weeds (Table 1). All rates were equally effective at controlling white clover. On dandelions the low rate did not perform as well as the high rate. The middle rate did not differ significantly from either the high or low rate. For ground ivy control the middle and high rates were not significantly different, but the middle rate did perform significantly better than the low rate.

Table 1. UAP-302 percent control of dandelion, clover and ground ivy, Verona, WI

Treatment	% dandelion control 7/31/00	% ground ivy control 7/31/00	% clover control 7/31/00
UAP-302 0.735 oz/M	85.5	79.0	95.7
UAP-302 1.1 oz/M	88.5	94.5	93.6
UAP-302 1.47 oz/M	97.3	89.2	95.7
Control	5.6	0	1.2
LSD 0.05	10.5	13.0	6.3