Oregon State University
Columbia Basin Ag Research Center
Control of rattail fescue with glyphosate and undercutter

Trial ID: 06-370
Location: CBARC

GENERAL TRIAL INFORMATION

Study Director: Larry Bennett  Title: Research Assistant
Affiliation: OSU-CBARC
Postal Code: 97801
Investigator: Daniel A Ball  Title: Professor
Affiliation: OSU-CBARC
Postal Code: 97801

TRIAL LOCATION

City: CBARC

SITE AND DESIGN

Plot Width, Unit: 12 FT  Plot Length, Unit: 130 FT  Reps: 3
Study Design: SPLIT-PLOT

SOIL DESCRIPTION

% Sand: 28.9  % OM: 2.3  Texture: silt loam
% Silt: 62.7  pH: 6.1
% Clay: 8.4  CEC: 18.6

APPLICATION DESCRIPTION

A  B

Application Date: May-25-06 May-30-06
Time of Day: 11:00 am  2:00 pm
Application Method: Broadcast undercut
Application Timing: Post
Applic. Placement: Surface
Air Temp., Unit: ---
Wind Velocity, Unit: 4 mph
Dew Presence (Y/N): N
Soil Temp., Unit: ---
Soil Moisture: ---

APPLICATION EQUIPMENT

A  B

Appl. Equipment: T.sprayer  Undercut
Operating Pressure: 50 psi
Nozzle Type: air induc
Nozzle Size: AI 110015
Boom Length, Unit: 24 ft
Ground Speed, Unit: 5 mph
Incorp. Depth, Unit: 3 in
Carrier: Water
Spray Volume, Unit: 10 gpa
Propellant: Roller pu
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Part Rated: Weed
Rating Data Type: Control
Rating Unit: %
Rating Date: Jun-22-06

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LSD (P=.05) = 8

Replicate F = 0.776
Replicate Prob(F) = 0.5014
Treatment F = 533.552
Treatment Prob(F) = 0.0001

Trial Comments

This trial was conducted to evaluate the effectiveness of an undercutter with and without Roundup RT Master for control of rattail fescue in chemical fallow. Plots were 12 feet wide and 120 ft long, and replicated three times. Roundup RT Master was applied on 5/25/06. The undercutter was used on 5/30/06 and was pulled with a Cat crawler @ 4.5 mph and 2 to 3 inches deep. Plots were rated on 6/22/06. The Roundup treated plots averaged 99% control with the undercutter and 96% control without the undercutter. These differences were not significantly different. The undercutter by itself gave 12% control compared to no treatment at all. From this data it appears that an undercutter alone was not effective as a control measure for rattail fescue, and did not significantly enhance control of rattail fescue in conjunction with a glyphosate application.