Oregon State University
Columbia Basin Ag Research Center
Russian thistle control in winter wheat

Trial ID: 06-130
Location: Lexington, OR

GENERAL TRIAL INFORMATION
Title: Research Assistant
Affiliation: OSU-CBARC
Postal Code: 97801
Investigator: Daniel A Ball
Title: Professor
Affiliation: OSU-CBARC
Postal Code: 97801

TRIAL LOCATION
City: North of Lexington
State/Prov.: OR

COOPERATOR/LANDOWNER
Cooperator: John Luciana

CROP AND WEED DESCRIPTION
Weed Code: Rthist
Common Name: Russian thistle
Scientific Name: 

Crop 1: Wheat
Winter wheat

SITE AND DESIGN
Plot Width, Unit: 8 FT
Plot Length, Unit: 25 FT
Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION
% Sand: 25.9  % OM: 1.5
% Silt: 65.7  pH: 7.1
% Clay: 8.4   CEC: 13.9
Texture: silt loam

APPLICATION DESCRIPTION
Application Date: May-2-06
Time of Day: 8:10 am
Application Method: Broadcast
Application Timing: EPOST
Applc. Placement: Surface
Air Temp., Unit: 48 F
% Relative Humidity: 48
Wind Velocity, Unit: 2 mph
Dew Presence (Y/N): N
Soil Temp., Unit: 56 F
Soil Moisture: Dry-surf
% Cloud Cover: 0

CROP STAGE AT EACH APPLICATION
Crop 1 Code, Stage: Wheat 5-7 leaf
Stage Scale: 1-2tiller
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WEED STAGE AT EACH APPLICATION

A
Weed 1 Code, Stage: Rthis 1-2 in.
Stage Scale: 4-8 leaf

APPLICATION EQUIPMENT

A
Appl. Equipment: Handboom
Operating Pressure: 30 psi
Nozzle Type: Flat fan
Nozzle Size: XR-8001
Nozzle Spacing, Unit: 16 in
Boom Length, Unit: 8 ft
Ground Speed, Unit: 3.5 mph
Carrier: Water
Spray Volume, Unit: 10 gpa
Propellant: CO2
Oregon State University  
Columbia Basin Ag Research Center  
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<table>
<thead>
<tr>
<th>Crop Code</th>
<th>Part Rated</th>
<th>Rating Data Type</th>
<th>Rating Unit</th>
<th>Rating Date</th>
<th>Trt Treatment</th>
<th>Form</th>
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<td>1 Untreated control</td>
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LSD (P=.05)  
NS 10 11 30

Replicate F  
0.000 1.262 4.518 0.624

Replicate Prob(F)  
1.0000 0.3035 0.0092 0.6043

Treatment F  
0.000 32.096 36.061 2.965

Treatment Prob(F)  
1.0000 0.0001 0.0001 0.0077
This trial was initiated to evaluate several different herbicides for Russian thistle control in re-crop winter wheat. Treatments were applied 5/2/06 when the wheat was in the 1 to 2 tiller stage and the Russian thistle was 1 to 2 inches high. Treatments with In-place were premixed together prior to adding to water. Other treatments were added directly to water without premixing of the different spray materials. When plots were first rated 20 days after treatment, no crop injury was observed. Russian thistle control ranged from 59 to 74%. Russian thistle control was rated at 49 and 64 days after application. At the last rating, the thistle control ranged from 59 to 85%. None of the treated plots, however, were statistically different from one another. The highest numerical control was obtained with the high rate of clopyralid and bromoxynil. Plots were not taken to yield due to a light stand of re-crop winter wheat.