

Alfalfa Weed Control.

Trial ID: 08-31

Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 03-14-08

Crop 1: MEDSA alfalfa Variety: Pioneer 54V54
 Planting Method: Established Planting Date: 08-23-08
 Rate, Unit: 18 LB/A Depth, Unit: 0.19 IN

Pest 1 Type: W Code: LAMAM Lamium amplexicaule L. henbit
 Pest 2 Type: W Code: STEME Stellaria media (L.) Vill. chickweed, common

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 30 FT Tillage Type: NO-TILL
 Replications: 3 Study Design: Randomized Complete Block

Prior Crops, Year
 1. TRAZW 2003

% OM: 2.1 Texture: SILT LOAM
 pH: 6.5 Soil Name: WINFIELD
 CEC: 11 Fert. Level: P1: 74 LB/A, K: 341 LB/A

Application Description

A

Application Date: 03-14-08
 Time of Day: 11:00
 Application Method: Spray
 Application Timing: March
 Application Placement: BROFOL
 Applied By: RFK
 Air Temperature, Unit: 55 F
 % Relative Humidity: 50
 Wind Velocity, Unit: 5 MPH
 Dew Presence (Y/N): N
 Soil Temperature, Unit: 46 F
 Soil Moisture: NORMAL

Crop stage at application: 03-14-08
 6-10 T
 Height Min, Max (inch): 1 2

Pest Stage At Each Application

Application Date: 03-14-08
 Weed Code: LAMAM
 Stage Majority (leaves): 10
 Stage Min, Max: 8 10
 Height Majority: 1 IN
 Height Min, Max: 0 1
 Weed Code: STEME
 Stage Majority (leaves): 10
 Stage Min, Max: 8 10
 Height Majority: 1 IN
 Height Min, Max: 0 1

Application Equipment

Appl. Equipment: CO2 sprayer
 Operating Pressure: 30 PSI
 Nozzle Type: Flat fan
 Nozzle Size: XR 8002
 Boom Length, Unit: 10 FT
 Spray Volume, Unit: 20 GPA

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| Pest Code | MEDSA | MEDSA | MEDSA | MEDSA | MEDSA |
|-------------------|----------|----------|----------|----------|----------|
| Crop Code | 03-21-08 | 03-28-08 | 04-04-08 | 04-11-08 | 04-25-08 |
| Rating Date | Injury | Injury | Injury | Injury | Injury |
| Rating Data Type | Percent | Percent | Percent | Percent | Percent |
| Rating Unit | | | | | |
| Rating Timing | | | | | |
| Trt-Eval Interval | 7 DA-A | 14 DA-A | 21 DA-A | 28 DA-A | 42 DA-A |

| Trt No. | Treatment Name | Form Conc | Form Type | Rate | Rate Unit | Other Rate | Other Rate Unit | Growth Stage | Appl Code | | | | | |
|---------|------------------|-----------|-----------|-------|-----------|------------|-----------------|--------------|-----------|------|-----|-----|-----|-----|
| 1 | NONTREATED | | | | | | | | | 0 d | 0 b | 0 a | 0 a | 0 a |
| 2 | SPARTAN | 4 | F | 0.25 | lb ai/a | 8 | fl oz/a | March | A | 10 b | 0 b | 0 a | 0 a | 0 a |
| 3 | PURSUIT | 2 | SL | 0.063 | lb ai/a | 4.03 | fl oz/a | March | A | 0 d | 0 b | 0 a | 0 a | 0 a |
| 4 | SENCOR | 75 | WG | 0.375 | lb ai/a | 8 | oz/a | March | A | 0 d | 0 b | 0 a | 0 a | 0 a |
| 5 | SPARTAN | 4 | F | 0.25 | lb ai/a | 8 | fl oz/a | March | A | 5 c | 0 b | 0 a | 0 a | 0 a |
| 5 | SENCOR | 75 | WG | 0.375 | lb ai/a | 8 | oz/a | March | A | | | | | |
| 6 | SPARTAN | 4 | F | 0.25 | lb ai/a | 8 | fl oz/a | March | A | 10 b | 0 b | 0 a | 0 a | 0 a |
| 6 | PURSUIT | 2 | SL | 0.063 | lb ai/a | 4.03 | fl oz/a | March | A | | | | | |
| 7 | PURSUIT | 2 | SL | 0.063 | lb ai/a | 4.03 | fl oz/a | March | A | 0 d | 0 b | 0 a | 0 a | 0 a |
| 7 | SENCOR | 75 | WG | 0.375 | lb ai/a | 8 | oz/a | March | A | | | | | |
| 8 | GRAMOXONE INTEON | 2 | SL | 0.625 | lb ai/a | 2.5 | pt/a | March | A | 50 a | 5 a | 0 a | 0 a | 0 a |
| 8 | SPARTAN | 4 | F | 0.25 | lb ai/a | 8 | fl oz/a | March | A | | | | | |
| 8 | ACTIVATOR 90 | 100 | LIQ | 0.25 | % v/v | 0.25 | % v/v | March | A | | | | | |

LSD (P=.05) 0.0 0.0 0.0 0.0 0.0

| | | | | | |
|-------------------|--------|--------|--------|--------|--------|
| Replicate F | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Replicate Prob(F) | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Treatment F | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Treatment Prob(F) | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Means followed by same letter do not significantly differ (P=.05, LSD)

Alfalfa Weed Control.

Trial ID: 08-31

Location: Belleville Res. Center

| Pest Code | LAMAM | LAMAM | LAMAM | LAMAM | STEME | STEME | STEME | STEME |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Crop Code | 03-28-08 | 04-04-08 | 04-11-08 | 04-25-08 | 03-28-08 | 04-04-08 | 04-11-08 | 04-25-08 |
| Rating Date | Control | Control | Control | Control | Control | Control | Control | Control |
| Rating Data Type | Percent | Percent | Percent | Percent | Percent | Percent | Percent | Percent |
| Rating Unit | | | | | | | | |
| Rating Timing | | | | | | | | |
| Trt-Eval Interval | 14 DA-A | 21 DA-A | 28 DA-A | 42 DA-A | 14 DA-A | 21 DA-A | 28 DA-A | 42 DA-A |

| Trt No. | Treatment Name | Form Conc | Form Type | Rate | Other Rate | Other Rate Unit | Growth Stage | Appl Code | 14 DA-A | 21 DA-A | 28 DA-A | 42 DA-A | 14 DA-A | 21 DA-A | 28 DA-A | 42 DA-A |
|-------------------|------------------|-----------|-----------|---------------|--------------|-----------------|--------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | NONTREATED | | | | | | | | 0 d | 0 e | 0 e | 0 e | 0 d | 0 d | 0 c | 0 c |
| 2 | SPARTAN | 4 F | | 0.25 lb ai/a | 8 fl oz/a | | March | A | 50 b | 50 c | 80 c | 77 c | 50 b | 50 b | 25 bc | 25 c |
| 3 | PURSUIT | 2 SL | | 0.063 lb ai/a | 4.03 fl oz/a | | March | A | 25 c | 25 d | 50 d | 50 d | 25 c | 25 c | 50 b | 58 b |
| 4 | SENCOR | 75 WG | | 0.375 lb ai/a | 8 oz/a | | March | A | 77 a | 96 a | 93 ab | 95 ab | 0 d | 50 b | 93 a | 95 a |
| 5 | SPARTAN | 4 F | | 0.25 lb ai/a | 8 fl oz/a | | March | A | 80 a | 90 b | 87 bc | 92 b | 50 b | 50 b | 91 a | 92 a |
| 5 | SENCOR | 75 WG | | 0.375 lb ai/a | 8 oz/a | | March | A | | | | | | | | |
| 6 | SPARTAN | 4 F | | 0.25 lb ai/a | 8 fl oz/a | | March | A | 50 b | 50 c | 82 c | 82 c | 50 b | 50 b | 80 a | 78 ab |
| 6 | PURSUIT | 2 SL | | 0.063 lb ai/a | 4.03 fl oz/a | | March | A | | | | | | | | |
| 7 | PURSUIT | 2 SL | | 0.063 lb ai/a | 4.03 fl oz/a | | March | A | 82 a | 96 a | 90 b | 95 ab | 50 b | 50 b | 89 a | 95 a |
| 7 | SENCOR | 75 WG | | 0.375 lb ai/a | 8 oz/a | | March | A | | | | | | | | |
| 8 | GRAMOXONE INTEON | 2 SL | | 0.625 lb ai/a | 2.5 pt/a | | March | A | 90 a | 99 a | 99 a | 99 a | 90 a | 99 a | 99 a | 99 a |
| 8 | SPARTAN | 4 F | | 0.25 lb ai/a | 8 fl oz/a | | March | A | | | | | | | | |
| 8 | ACTIVATOR 90 | 100 LIQ | | 0.25 % v/v | 0.25 % v/v | | March | A | | | | | | | | |
| LSD (P=.05) | | | | | | | | | 14.9 | 4.2 | 7.0 | 5.4 | 0.0 | 0.0 | 27.9 | 27.5 |
| Replicate F | | | | | | | | | 1.131 | 2.333 | 0.392 | 1.000 | 0.000 | 0.000 | 1.114 | 1.746 |
| Replicate Prob(F) | | | | | | | | | 0.3505 | 0.1335 | 0.6829 | 0.3927 | 1.0000 | 1.0000 | 0.3558 | 0.2104 |
| Treatment F | | | | | | | | | 41.129 | 737.296 | 201.082 | 362.783 | 0.000 | 0.000 | 16.035 | 16.827 |
| Treatment Prob(F) | | | | | | | | | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 1.0000 | 1.0000 | 0.0001 | 0.0001 |

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: SIU - RFK.
2. Ratings: CI 7 dat; CI+WC 14, 21 and 28 dat; WC 28 da first cutting; WC 28 da second cutting; WC 28 da third cutting.
3. DA-A = Days after March application.
4. Harvest data not reported.