

University of GA Coop Ext Service

Horsenettle Control in Tall Fescue Pasture

Trial ID: Forage5-05
 Protocol ID: NA015L1B015
 Location: Eatonton

Study Director: Bill Nutt
 Investigator: Tim R Murphy

General Trial Information

Study Director: Bill Nutt **Title:** ARCI
Affiliation: UGA CAES **E-mail:** bnutt@griffin.uga.edu
Investigator: Tim R Murphy **Title:** Weed Scientist
Affiliation: UGA CAES **E-mail:** tmurphy@uga.edu

Trial Location

City: Eatonton **Trial Status:** ONE-YEAR/FINAL
State/Prov.: GA **Initiation Date:** 6-23-05
Completion Date: 9-23-05

Cooperator/Landowner

Cooperator: Bill Kline **Organization:** DowAgroSciences
City: Duluth **State/Prov:** GA

Crop Description

Crop 1: FESAR *Festuca arundinacea* Tall Fescue
Perennial Age, Unit: 20 YEAR

Pest Description

Pest 1 Type: W **Code:** SOLCA *Solanum carolinense* **Common Name:** Horsenettle

Site and Design

Plot Width, Unit: 10 FT **Site Type:** pasture
Plot Length, Unit: 30 FT
Replications: 4 **Study Design:** Randomized Complete Block
Trial Initiation Comments: Sprayed 10 ft. on 15 ft. centers.

Application Description

	A
Application Date:	6-23-05
Time of Day:	11:50 am
Application Method:	Broadcast
Application Timing:	Post
Application Placement:	Foliar
Applied By:	B. Nutt
Air Temperature, Unit:	92 F
% Relative Humidity:	69
Wind Velocity, Unit:	0.5 mph
Dew Presence (Y/N):	N
Soil Temperature, Unit:	80 F
% Cloud Cover:	0

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Crop Stage At Each Application

A	
Crop 1 Code:	FESAR
Stage Majority:	Active Growth
Stage Maximum, Percent:	SeedHead 10%
Height, Unit:	12 in

Pest Stage At Each Application

A	
Pest 1 Code:	SOLCA
Stage Majority, Percent:	Early Flower 80
Stage Minimum, Percent:	No Flower 15
Stage Maximum, Percent:	Early Fruit 5
Height, Unit:	12 in
Height Minimum, Maximum:	6 14
Density, Unit:	25 %

Application Equipment

A	
Appl. Equipment:	Tractor
Operating Pressure:	32
Pressure Unit:	PSI
Nozzle Type:	flat fan
Nozzle Size:	8004
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	20 IN
Ground Speed, Unit:	2.4 MPH
Carrier:	water
Spray Volume:	25
Volume Unit:	GAL/AC
Propellant:	air
Tank Mix (Y/N):	n

Trial Comments

HORSENETTLE DENSITY RATINGS FOR UNTREATED CHECK PLOTS

	<u>110</u>	<u>209</u>	<u>310</u>	<u>401</u>
SOLCA, 7-13-05	20	30	35	30
SOLCA, 7-28-05	25	35	35	35
SOLCA, 8-22-05	15	25	35	35
SOLCA, 9-14-05	15	20	30	35

9-14-05:

Test area not mowed since treatment application "A" on 6-23-05.

Fescue, FESAR, growth is very dense and is 10-15 inches in height.

Horsenettle Control in Tall Fescue Pasture

Pest Code								SOLCA	SOLCA	SOLCA	SOLCA
Pest Name								Horsenettle	Horsenettle	Horsenettle	Horsenettle
Rating Date								7-13-05	7-28-05	8-22-05	9-14-05
Rating Data Type								Control	Control	Control	Control
Rating Unit								0-100	0-100	0-100	0-100
Days After First/Last Applic.								20 20	35 35	60 60	83 83
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Appl Unit Code				
1	GF-1004 + Activator 90	2.99 100	SL SL	1.0 0.25	pt/a % v/v	0.374 lb ai/a	A A	55 b	59 bc	96 a	94 a
2	GF-1004 + Activator 90	2.99 100	SL SL	1.5 0.25	pt/a % v/v	0.56 lb ai/a	A A	74 a	90 a	91 a	91 ab
3	GF-1004 + Activator 90	2.99 100	SL SL	2.0 0.25	pt/a % v/v	0.75 lb ai/a	A A	73 a	90 a	100 a	100 a
4	GF-1004 + Activator 90	2.99 100	SL SL	2.5 0.25	pt/a % v/v	0.93 lb ai/a	A A	75 a	93 a	99 a	96 a
5	Weedmaster + Activator 90	3.87 100	SL SL	2.0 0.25	pt/a % v/v	0.97 lb ai/a	A A	58 b	65 b	74 b	76 c
6	2, 4-D Ester + Activator 90	3.8 100	EC SL	2.0 0.25	pt/a % v/v	0.95 lb ai/a	A A	40 c	46 c	81 b	83 bc
7	Grazon P+D + Activator 90	2.54 100	SL SL	2.0 0.25	pt/a % v/v	0.635 lb ai/a	A A	71 a	92 a	97 a	96 a
8	GF-1004 + UAN 32% + Activator 90	0.3312 32 100	SL SL SL	2.0 11.4 0.25	pt/a gal/a % v/v	0.083 lb ai/a 11.4 gal/a	A A A	80 a	97 a	93 a	94 ab
9	Cimarron + WeedMaster + Activator 90	60 3.87 100	WG SL SL	0.3 2.0 0.25	oz/a pt/a % v/v	0.0113 lb ai/a 0.97 lb ai/a	A A A	58 b	65 b	79 b	74 c
10	Untreated Check							0 d	0 d	0 c	0 d
LSD (P=.05)								11.0	14.2	8.8	11.3
Standard Deviation								7.6	9.8	6.1	7.8
CV								12.97	14.05	7.48	9.71

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

Horsenettle Control in Tall Fescue Pasture

Crop Code									FESAR	FESAR	FESAR	FESAR
Crop Name									Fescue	Fescue	Fescue	Fescue
Crop Variety									Tall	Tall	Tall	Tall
Rating Date									7-13-05	7-28-05	8-22-05	9-14-05
Rating Data Type									Injury	Injury	Injury	Injury
Rating Unit									0-100	0-100	0-100	0-100
Days After First/Last Applic.									20 20	35 35	60 60	83 83
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Form Rate Unit	Other Rate	Other Rate Unit	Appl Code				
1	GF-1004 + Activator 90	2.99 100	SL SL	1.0 0.25	pt/a % v/v	0.374	lb ai/a	A A	0 c	0 a	0 a	0 a
2	GF-1004 + Activator 90	2.99 100	SL SL	1.5 0.25	pt/a % v/v	0.56	lb ai/a	A A	1 bc	0 a	0 a	0 a
3	GF-1004 + Activator 90	2.99 100	SL SL	2.0 0.25	pt/a % v/v	0.75	lb ai/a	A A	1 bc	0 a	0 a	0 a
4	GF-1004 + Activator 90	2.99 100	SL SL	2.5 0.25	pt/a % v/v	0.93	lb ai/a	A A	0 c	0 a	0 a	0 a
5	Weedmaster + Activator 90	3.87 100	SL SL	2.0 0.25	pt/a % v/v	0.97	lb ai/a	A A	1 bc	0 a	0 a	0 a
6	2, 4-D Ester + Activator 90	3.8 100	EC SL	2.0 0.25	pt/a % v/v	0.95	lb ai/a	A A	1 bc	0 a	0 a	0 a
7	Grazon P+D + Activator 90	2.54 100	SL SL	2.0 0.25	pt/a % v/v	0.635	lb ai/a	A A	5 b	0 a	0 a	0 a
8	GF-1004 + UAN 32% + Activator 90	0.3312 32 100	SL SL SL	2.0 11.4 0.25	pt/a gal/a % v/v	0.083	lb ai/a gal/a	A A A	0 c	0 a	0 a	0 a
9	Cimarron + WeedMaster + Activator 90	60 3.87 100	WG SL SL	0.3 2.0 0.25	oz/a pt/a % v/v	0.0113	lb ai/a lb ai/a	A A A	10 a	0 a	0 a	0 a
10	Untreated Check								0 c	0 a	0 a	0 a
LSD (P=.05)									3.9	0.0	0.0	0.0
Standard Deviation									2.7	0.0	0.0	0.0
CV									136.08	0.0	0.0	0.0

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