

TECHNICAL REPORT - RED SURCOS S.A. -INTA EEAI BARROW

COMPARATIVE TEST OF HERBICIDES IN SOYBEAN AFTER EMERGENCE HALOXYFOP-P-METHYL 25% ME

Agricultural Engineer MSc. Ramón Gigón

"2014 - Year of Tribute to Admiral Guillermo Brown, in the Bicentennial of the Naval Combat of Montevideo "

COMPARATIVE TEST OF HERBICIDES IN SOYBEAN AFTER EMERGENCE 2014/15 CAMPAIGN 2014/15

Recipient: Red Surcos S.A Executor: EEAI INTA Barrow Professional responsible for the trial: Agricultural Engineer MSc. Ramón Gigón Products to assess: Haloxyfop-P-methyl 25% ME Trial design: Randomized complete blocks with plots of 3 m wide and 8 m long.

PROPOSED TREATMENTS

No Treatments and dose

1 Control plot: not controlled

2 Dose 1: 150 cc/ha (Haloxyfop-P-methyl 25% ME)

3 Dose 2: 200 cc/ha (Haloxyfop-P-methyl 25% ME)

4 Dose 3: 250 cc/ha (Haloxyfop-P-methyl 25% ME)

5 Control chemical: 500 cc/ha (Haloxyfop-P-methyl 12.5% EC)+ 1 L/ha Power Oil

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WORK REPORT.

a. Crop: Soy.

b. Location: EEAI Barrow, Tres Arroyos, Buenos Aires province.

c. Soil moisture: Good soil moisture at the moment of application.

d. Characteristics of the application: Application was conducted on December 29, 2014. A manually operated backpack sprayer was used with constant CO2 pressure of 35 lb, with tip 11002 and a volume of application of 140 L/ha. Wind speed was 15 km/h, relative humidity was 48% and ambient temperature of 30 °C.

e. Weed present: The weed present was Digitaria sanguinalis (DIGSA), hairy crabgrass, hairy finger-grass or crab finger grass with a size of 2-3 tillers and Cynodon dactylon (CYNDA) or couch grass in advanced regrowth.

f. Measured variables: 17 and 38 days after application, visual control assessments were conducted for each weed. Data was submitted to analysis of variance and average values were compared with Fisher test (DMS) with p<0.05.

RESULTS

Table 1 shows the DIGSA control. Controls were excellent in treatments 4 and 5. Control in treatment 3 was good, but some plants were observed, especially, the ones that were bigger because they regrew after 38 days. The lower dose was not able to control the weed.

Treat.	17 DAA		38 DAA		-	
1	0.00 A			0.00 A		
2	63.33	В		60 <mark>.0</mark> 0	В	
3	86.00			80.67		
4	97.67		D	97.67		D
5	93.33			96.33		D
CV%	4.52			6.80		0
DMS	5.79			8.57		

Table 1 Evaluation in % of DIGSA control 17 and 38 days after application.

The different letters in the columns show significant differences between treatments.

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Table 2 shows the CYNDA control. It is well known that, in order to control perennial grass, the dose of graminicides in general must be considerable increased. Also, treatments 4 and 5 showed an acceptable control. It is worthwhile highlighting that, when treatments to control this weed were applied, it has not developed a good leaf volume, and this could prevent the correct absorption and translocation of herbicides towards physiological points of action.

Treat.	17 DAA		38 DAA		
1	0.00 A	Í	0.00 A		
2	33.33	В	<mark>33.33</mark>	В	
3	63.33	С	63.33	С	
4	78.33	D	78.33	D	
5	76.67	D	80.00	D	
CV%	11.40	5	8. <mark>7</mark> 7		
DMS	10.80		8.42		

Table 2 Evaluation in % of CYNDA control 17 and 38 days after application.

The different letters in the columns show significant differences between treatments.

FINAL COMMENTS

- Treatments 4 and 5 showed a very good control of annual grass such as Digitaria sanguinalis.

- As regards the control of annual grass such as Cynodon dactylon, controls were not total in none of the treatments assessed. It is suggested to evaluate it under different conditions and with a higher dose.

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