

**COMPARATIVE TRIAL OF HERBICIDES AT POST-EMERGENCE OF SOY
HALOXYFOP P METHYL 25% ME**

Agricultural Engineer Ramón Gigón

"2014 - Year of Tribute to Lieutenant Guillermo Brown, in the bicentenary of the Naval Battle of Montevideo"

**COMPARATIVE TRIAL OF HERBICIDES AT POST-EMERGENCE OF SOY
CAMPAIGN 2014/15**

Receiver: Red Surcos S.A

Performer: EEAI INTA Barrow

Professional in charge: Agricultural Engineer Ramón Gigón

Products to be evaluated: Haloxypop p methyl 25% ME

Design of trials: Complete random blocks with patches of 3 m wide and 8 m long.

TREATMENTS

#	Treatments and doses
1	Control group: with no control
2	Dose 1: 150 cc/ha (Haloxypop-p-methyl 25% ME)
3	Dose 2: 200 cc/ha (Haloxypop-p-methyl 25% ME)
4	Dose 3: 250 cc/ha (Haloxypop-p-methyl 25% ME)
5	Chemical control group: 500 cc/ha (Haloxypop-p-methyl 12.5% EC) + 1 l/ha poweroil

WORK REPORT.

- a. Crop: SOY.
- b. Site: EEAI Barrow (locality of Tres Arroyos), province of Buenos Aires.
- c. Soil humidity: good soil humidity at the time of application.
- d. Application characteristics: application was carried out on December 29, 2014. A manual knapsack sprayer with constant pressure of 35 lb by means of CO₂ was used with tablets 11002 and an application volume of 140 L/ha. Wind speed was 15 km/h, relative humidity was 48% and environment temperature was 30 °C.
- e. Present weed: present weeds were *Digitaria sanguinalis* DIGSA "hairy finder grass" or "crab finger grass" at the stage of 2-3 coppice stems and *Cynodon dactylon* CYNDA "Bermuda grass" at an advanced regrowth stage.
- f. Variables measured: at 17 and 38 days since application, visual control evaluations were conducted for each present weed. The data were subjected to a variance analysis and means were compared with the Fisher test (DMS) with $p < 0.05$.

RESULTS

Chart 1 shows the control of DIGSA. Controls were excellent for treatments 4 and 5. In treatment 3, control was good but some plants were observed, mainly those that were slightly more developed which managed to regrow after 38 days. The lower dose could not control weed.

Chart 1. Evaluation in % of DIGSA control at 17 and 38 days since application.

Treat. #	17 DSA	38 DSA
1	0.00 A	0.00 A
2	63.33 B	60.00 B
3	86.00 C	80.67 C
4	97.67 D	97.67 D
5	93.33 D	96.33 D
CV%	4.52	6.80
DMS	5.79	8.57

Different letters among columns show significant differences among treatments.

Chart 2 shows the control of Bermuda grass. It is known that in order to control perennial grass, in general, graminicide doses must be considerably increased. Furthermore, treatments 4 and 5 showed an acceptable control. It is worth noting that when treatments were applied, the weed had not yet developed good volume of leaves, and that could go against a proper absorption and translocation of herbicides into the physiological action points.

Chart 2. Evaluation in % of CYNDA control at 17 and 38 days since application.

Treat. #	17 DSA		38 DSA	
1	0.00	A	0.00	A
2	33.33	B	33.33	B
3	63.33	C	63.33	C
4	78.33	D	78.33	D
5	76.67	D	80.00	D
CV%	11.40		8.77	
DMS	10.80		8.42	

Different letters among columns show significant differences among treatments.

FINAL COMMENTS

- Treatments 4 and 5 showed very good control of an annual grass such as *Digitaria sanguinalis*.
- For the control of a perennial grass such as Bermuda grass, full control was not attained in any evaluated treatment; it is recommended to evaluate it in other conditions and with higher doses.

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