SUGARCANE RIPENER

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Early Season Variety Response to Glyphosate Ripener

On September 12, 2017, 5.3 oz/a of Roundup PowerMax II® was applied to experimental plots in St. Gabriel. The experimental design was a randomized complete block with 3 replications, and the plot size was 6 ft X 50 ft. Varieties included in the experiment were L 01-299, Ho 07-613, HoCP 09-804, and L 11-183. The experiment was hand harvested on October 10th, 28 days after glyphosate treatment. A 10-stalk sample from each plot was processed using Spectra Cane NIR to determine variety TRS. TRS was increased by 13.8, 7.2, 22.0, and 10.7% for L 01-299, Ho 07-613, HoCP 09-804, and L11-183, respectively as compared to the non-treated check (Table 1).

Sugarcane Response to Gro Ripe Sugarcane Ripener

On September 7, 2017, a ripener experiment was initiated at the Sugar Research Station in St. Gabriel, Louisiana to investigate the ability of Gro Ripe to ripen sugarcane. The experimental design was a randomized complete block with 3 replications, and plot size was 6 ft X 50 ft. Treatments included Gro Ripe® at 41 oz/a, Roundup PowerMax II® at 5.3 oz/a, and a non-treated check. Treatments were applied to first stubble L 01-299, and were hand sampled at 28, 42, and 99 days after treatment (DAT). A 10-stalk sample from each plot was processed using Spectra Cane NIR to determine variety TRS. 99 DAT, plots were harvested by combine and weighed. Gro Ripe provided no increase in TRS for all sampling dates and cane yield was equivalent to the non-treated check (Table 2).

Table 1. Effect of Roundup PowerMax II® on improving TRS for 3 commercial varieties and 1 experimental variety at the Sugar Research Station in St. Gabriel, LA in 2017.

Variety	TRS (lb/ton) Check	5.3 oz/a PowerMax II®[1]	% Increase
L 01-299	207	234	13.8
Ho 07-613	257	275	7.2
HoCP 09-804	223	274	22.9
L 11-183	208	230	10.7

[1] Treatments applied 9/12/17 and hand harvested 10/10/17.

Table 2. Effect of Gro Ripe® on TRS, cane yield, and sugar yield on first stubble L 01-299 at the Sugar Research Station in St. Gabriel in 2017.

Treatment[1]	Rate/a	TRS (lb/ton)			Cane Yield (tons/a)	Sugar Yield (lb/a)
		28 DAT[2]	42 DAT	99 DAT	99 DAT	99 DAT
Gro Ripe®	41.0 oz	215 b[3]	230 b	252 b	57.8 a	14588
Roundup PowerMaxII®	5.3 oz	252 a	272 a	266 a	48.3 b	12863
Check		210 b	218 b	250 b	58.0 a	14494

[1] Treatments applied 9/9/17.
[2] DAT = Days After Treatment.
[3] Means within a column followed by the same lowercase letter are not significantly different at P=0.05.