V

SOUTH AFRICAN SUGAR INDUSTRY AGRONOMISTS' ASSOCIATION

Cat. No. : 2183
CODE: VAR41/01/Sw/Mhl 'Z'

TITLE: RELEASED VARIETIES ON A 'Z' SET SOIL HARVESTED LATE SEASON

1. PARTICULARS OF PROJECT

This crop	:	Plant
Trial crop	:	1st
Site	:	Mhlume Sugar Company
Field	:	428 Panel 6&11
Region	:	Northern Irrigated (Swd)
Soil Set	:	'Z'
Design	:	Randomized blocks with split plots, 5 replications
Variety	:	NCo376, N19, N36, N38
Fertilizer kg/ha	:	N 118, P 53, K 132

Soil Analysis: May 2001

pH	OM %	Clay %	Silt %	Sand %
6.8	-	-	-	-

ppm

P	K	Ca	Mg	(Ca+Mg)/K
22	213	3119	1048	19.6

Age : 11.9 months
Date : 20/9/2001 – 18/9/2002

Rainfall : 614 mm
Irrigation : 760 mm
Total : 1374 mm

2. OBJECTIVES

- To compare the performance of varieties N19, N36 and N38 with that of NCo376 in a late season cycle on a 'Z' set soil.
- To determine the ripening response of each variety to Fusilade Super at two rates of application.
- To compare the resistance/susceptibility of varieties to smut and eldana.
- To compare the third leaf nutrient contents of N19, N36 and N38 with established NCo376 thresholds.

3. TREATMENTS

- Varieties and row ripening treatments in this trial were as follows:

Ripeners (main plots)	Varieties (sub plots)
Control	NCo376
Fusilade @ 0.3 l/ha	N19
Fusilade @ 0.45 l/ha	N36
	N38

- This crop was harvested in September to allow re-establishment of replicate number two, which had failed to germinate. The replicate was excluded from analysis and the early harvest date obviated ripener application.

4. FERTILIZERS

- 118 kg N/ha, applied at planting as DAP (48 kg/ha)) and 9 weeks after planting as urea (80 kg/ha)
- 53 kg P/ha at planting as DAP (18 % N, 21 % P)
- 132 kg K/ha (as KCl, 50% K) at planting

5. RESULTS AND DISCUSSION

Leaf Analysis

- Levels of N, P, K, Ca and Mg were satisfactory and above their respective thresholds (Table 1).
- There were statistically significant differences in levels of P, K, Ca and Mg among varieties (Table 2).

Table 1: Third leaf nutrient content (% dm) at 6 months of age in April

Variety	% dm				
	N	P	K	Ca	Mg
NCo376	1.95	0.24	1.21	0.26	0.23
N19	1.94	0.24	1.29	0.25	0.21
N36	1.95	0.22	1.30	0.26	0.24
N38	1.95	0.23	1.27	0.30	0.26
Mean	1.95	0.23	1.27	0.27	0.23
LSD (0.05)	NS	0.01	0.04	0.03	0.02
LSD (0.01)	-	NS	0.06	0.04	0.03
CV %	0.9	6.2	3.9	11.8	11.3

Table 2: Variety differences in third leaf nutrient content (% NCo376)

Variety	N	P	K	Ca	Mg
N19	99	100	107**	96	91*
N36	100	92*	107**	100	104
N38	100	96*	105**	115**	113**

* = Significant (P=0.05)

** = Significant (P=0.01)

Growth Measurements

- The stalk population of N36 was lower than that of the other varieties on all five sampling occasions, with statistical significance on three of them (Table 3). At harvest, NCo376 and N38 had the highest stalk populations, while N36 had the lowest and N19 was intermediate.
- N38 produced the shortest stalks throughout, with statistical significance on four out of five sampling occasions (Table 3). At harvest, there were no significant differences in stalk height among varieties NCo376, N19 and N36.

Pests and Diseases

- All four varieties were affected by Eldana damage at harvest, especially N38 (Table 4).
- Levels of smut were generally highest in NCo376, but overall levels of infection were extremely low. There was no smut recorded in N36 (Table 4).

Table 3: Growth measurements at various ages

Variety	Stalk population ('000/ha)					Stalk height (cm to TVD)				
	Feb. (4.4m)	Mar. (6.1m)	May (8.0m)	Jul. (10.1m)	Sep. (11.9m)	Feb. (4.4m)	Mar. (6.1m)	May (8.0m)	Jul. (10.1m)	Sep. (11.9m)
NCo376	118	128	95	101	100	78	139	174	181	188
N19	118	114	78	88	86	81	145	178	189	196
N36	103	100	71	71	77	72	144	180	186	192
N38	116	119	91	98	99	66	125	155	156	162
Mean	114	115	84	89	90	74	138	172	178	184
LSD (0.05)	NS	7	12	9	8	9	9	9	10	10
LSD (0.01)	-	9	16	12	11	NS	12	12	14	14
CV %	20.6	7.1	16.5	12.3	11.2	14.6	7.8	6.1	6.7	6.7

Table 4: Eldana damage at harvest and smut levels in February and March

Variety	Eldana	Smut (% smut whips)	
	% internodes damaged	Feb. (4.4m)	Mar. (6.1m)
NCo376	0.19	0.21	0.07
N19	0.19	0.00	0.03
N36	0.08	0.00	0.00
N38	0.78	0.00	0.06
Mean	0.31	0.05	0.04

Harvest Results

- Cane yields were very low overall and did not differ significantly among varieties (Table 5).
- Cane quality (sucrose % cane and erc % cane) was lowest in NCo376 and N38 and highest in N19 and N36.
- There were significant differences in sucrose and erc yield among varieties, resulting from the varietal differences in cane quality. NCo376 produced the lowest yields of sucrose and erc, while N19 produced the highest. There were no significant differences in yield between N19 and N36, or between NCo376 and N38.

Table 5: Harvest data

Variety	tc/ha	s%c	erc%c	ts/ha	t erc/ha
NCo376	76	16.07	14.69	12.2	11.1
N19	86	17.79	16.48	15.3	14.1
N36	80	17.72	16.34	14.3	13.2
N38	84	15.86	14.50	13.4	12.3
Mean	81	16.86	15.50	13.8	12.7
LSD (0.05)	NS	0.60	0.62	1.6	1.5
LSD (0.01)	-	0.81	0.84	2.1	2.0
CV%	11.8	4.2	4.8	13.7	14.0

Sucrose measured as pol

6. CONCLUSIONS

- Both N36 and N38 compared favourably with NCo376, but N36 was the better of the two new varieties.
- N36 produced a low population of high quality stalks, whereas N38 produced a high population of low quality stalks.
- All four varieties were affected by Eldana damage at harvest, especially N38. Levels of smut were generally highest in NCo376, but overall levels of infection were extremely low. There was no smut recorded in N36.
- Large varietal differences in levels of leaf P, K, Ca and Mg suggest that thresholds established for NCo376 may not be appropriate for the newer N varieties.
- This trial has been continued and is now in its 1st ratoon.

DMZ/DB
12/04/03

7. APPENDIX

Appendix 1: Sample data at harvest

Variety	Fresh wt. (g/stalk)	Moisture (% cane)	Dry wt. (g/stalk)	Purity (% cane)	Sucrose wt. (g/stalk)	Erc wt. (g/stalk)	Sucrose %dm
NCo376	624	69.3	192.0	91.1	100.2	91.6	52.3
N19	770	68.6	241.4	92.5	136.7	126.5	56.8
N36	911	68.4	288.2	91.8	161.6	149.0	56.0
N38	750	71.9	210.7	90.5	119.1	108.9	56.5
Mean	764	69.5	233.1	91.5	129.4	119.0	55.4
LSD (0.05)	68	0.57	20.91	0.76	13.01	12.19	1.76
LSD (0.01)	92	0.77	28.26	1.03	17.58	16.47	2.38
CV%	10.6	1.0	10.7	1.0	12.0	12.2	3.8

NB: Sucrose measured as pol

SOUTH AFRICAN SUGAR INDUSTRY AGRONOMISTS ASSOCIATION

CODE: VAR 41/01/Sw/Mhl 'Z'
CAT: 2183

RELEASED VARIETIES ON AN 'Z' SET SOIL HARVESTED LATE SEASON

1. PARTICULARS OF PROJECT

This crop	:	1st Ratoon
Trial crop	:	2nd
Site	:	Mhlume Sugar Company
Field	:	Field 428, Panel 6&11
Region	:	Northern Irrigated (Swd)
Soil Set	:	'Z'
Design	:	Split plot, 5 replication
Variety	:	NCo376, N19, N36, N38
Fertilizer kg/ha	:	N 160, P 0, K 150

Soil Analysis: August, 2001

pH	OM %	Clay %	Silt %	Sand %
6.8	-	-	-	-

ppm

P	K	Ca	Mg	(Ca+Mg)/K
22	213	3119	1048	20

Age : 12.7 months
Date : 18/09/2002 – 9/10/2003

Rainfall : 530 mm
Irrigation : 840 mm
Total : 1370 mm

2. OBJECTIVES

- To compare the performance of varieties N19, N36 and N38 with that of NCo376 for a late season cycle on a 'Z' set soil.
- To determine the ripening response of each variety to Fusilade Super at two rates of application.
- To compare the resistance/susceptibility of varieties to smut and eldana.
- To compare the third leaf nutrient contents of N19, N36 and N38 with established NCo376 thresholds.

3. TREATMENTS

- Varieties and ripening treatments in this trial were as follows:

Ripeners (main plots)	Varieties (sub plots)
Control	NCo376
Fusilade @ 0.3 l/ha	N19
Fusilade @ 0.45 l/ha	N36
	N38

- Fusilade was not applied in this crop because of high juice purity one week before intended application date.

4. FERTILIZERS

- 160kg N/ha (as Urea 46 % N), applied 1 week after harvest (80kg/ha) and 12 weeks after harvest (80kg/ha).
- No P was applied.
- 150kg K/ha (as KCl, 50% K) at 7 weeks after harvest.

5. RESULTS AND DISCUSSION

Leaf Analysis

- Levels of N, P, K. Ca and Mg were satisfactory and above their respective thresholds (Table 1).
- There were statistically significant differences in levels of P, K, Ca and Mg among varieties.

Table 1: Third leaf nutrient content (% dm) at 4.8 months of age in February

Variety	% dm				
	N	P	K	Ca	Mg
NCo376	1.99	0.23	1.24	0.19	0.19
N19	1.98	0.23	1.37	0.22	0.18
N36	1.98	0.22	1.26	0.21	0.21
N38	1.97	0.22	1.20	0.29	0.26
Mean	1.98	0.23	1.27	0.23	0.21
LSD (0.05)	NS	0.01	0.05	0.01	0.01
LSD (0.01)	-	NS	0.07	0.02	0.02
CV %	1.5	4.9	5.8	8.4	8.4

Table 2: Variety differences in third leaf nutrient content (% NCo376)

Variety					
N19	99	100	110**	116**	95*
N36	99	96*	102	111**	111**
N38	99	96*	97	153**	137**

* = Significant (P=0.05)
** = Significant (P=0.01)

Growth Measurements

- At harvest, the stalk population of NCo376 and N38 was statistically similar and significantly higher than that of N19 and N36, which were similar. Previous

sampling, however, indicate that N36 had significantly lower population than all varieties for all sampling occasions (Table 3).

- N38 produced significantly shorter stalks than all other varieties at all sampling occasions. At harvest, N19 and N36 were statistically similar, while NCo376 was intermediate (Table 3).

Table 3: Growth measurements at various ages

Variety	Stalk population ('000/ha)					Stalk height (cm to TVD)				
	Feb. (4.9m)	Feb. (5.3m)	Apr. (6.9m)	Jul. (9.5m)	Aug. (11.3m)	Feb. (4.9m)	Feb. (5.3m)	Apr. (6.9m)	Jul. (9.5m)	Aug. (11.3m)
NCo376	114	114	108	112	102	142	165	216	238	239
N19	94	93	95	97	89	158	179	235	261	260
N36	86	85	83	86	89	156	182	237	259	255
N38	112	115	106	108	100	126	146	188	209	210
Mean	102	102	98	101	95	146	168	219	242	241
LSD (0.05)	7	6	5	5	5	6	7	9	11	11
LSD (0.01)	10	8	7	7	7	7	9	12	14	15
CV %	9.7	8.0	7.0	7.4	7.6	5.2	5.6	5.8	5.9	6.1

Pests and Diseases

- All varieties were affected by Eldana at harvest, with N38 having significantly a higher incidence than all the other varieties (Table 4).

- There was generally no smut infection except in NCo376 where the incidence was also extremely low (Table 4).

Table 4: Eldana damage at harvest and smut levels from December to February

Variety	Eldana	Smut (% smut whips)		
	% internodes damaged	Oct. (1.0m)	Dec. (2.9m)	Feb. (5.3m)
NCo376	1.54	0.00	0.23	0.29
N19	1.11	0.00	0.01	0.00
N36	0.76	0.00	0.00	0.00
N38	5.89	0.00	0.01	0.00
Mean	2.33	0.00	0.06	0.07
LSD (P=0.05)	1.24	-	NS	0.12
LSD (P=0.01)	1.66	-	-	0.16
CV %	72.4	-	517.4	221.4

Harvest Results

- There was no significant difference in cane yield among varieties (Table 5).
- Mean sucrose and erc% cane was significantly higher in N36 than in all other varieties and lower in N38. N19 and NCo376 were intermediate and significantly different from each other, with N19 having higher sucrose and erc% cane than NCo376.
- Mean sucrose and erc yield was significantly higher in N19 and N36, which were statistically similar than in NCo376 and N38 which were also statistically similar.

Table 5: Harvest Data

Variety	tc/ha	s%c	erc%c	ts/ha	t erc/ha
NCo376	102	16.83	15.31	17.2	15.6
N19	107	18.38	16.84	19.6	18.0
N36	105	19.04	17.51	20.0	18.4
N38	105	15.93	14.37	16.9	15.2
Mean	105	17.55	16.01	18.4	16.8
LSD (0.05)	NS	0.44	0.49	1.57	1.48
LSD (0.01)	-	0.59	0.66	2.10	1.98
CV%	11.1	3.4	4.2	11.6	11.9

NB: Sucrose measured as pol

6. CONCLUSIONS

- There was no significant difference in cane yield among varieties, while the cane quality of N36 was significantly higher than that of the other varieties.
- Although all varieties were affected by Eldana at harvest, N38 had significantly a higher incidence. Smut infection was generally absent in all varieties except in NCo376 where it was also extremely low.
- Varietal differences in third leaf nutrient concentrations indicate that thresholds established for NCo376 may not be appropriate for the new N varieties.
- This trial has been continued and is now in its 2nd ratoon..

BMS/DB
10/9/2004

7. APPENDIX

Appendix 1: Sample data, August – October

25 Aug. 2003 (6.4wks before harvest)									
Variety	Fresh wt. (g/stalk)	Moisture (% cane)	Dry wt. (g/stalk)	Purity (% cane)	Sucrose (%cane)	Erc (%cane)	Sucrose wt. (g/stalk)	Erc wt. (g/stalk)	Sucrose %dm
NCo376	825	69.6	250.6	91.9	17.2	15.9	142.0	131.0	56.6
N19	1060	69.0	327.6	93.1	18.1	16.8	191.2	177.8	58.4
N36	1201	67.6	388.1	93.1	18.7	17.4	224.8	209.1	57.9
N38	920	71.9	258.2	90.2	15.8	14.4	145.5	132.7	56.3
Mean	1002	69.5	306.1	92.1	17.5	16.1	175.9	162.7	57.3
LSD (0.05)	89	0.56	27.10	1.02	0.47	0.5	17.22	16.03	1.65
LSD (0.01)	120	0.74	36.22	1.36	0.63	0.67	23.01	21.43	NS
CV%	12.1	1.1	12.0	1.5	3.6	4.2	13.3	13.4	3.9
9 Oct. 2003 (at harvest - commercial topping height)									
Variety	Fresh wt. (g/stalk)	Moisture (% cane)	Dry wt. (g/stalk)	Purity (% cane)	Sucrose (%cane)	Erc (%cane)	Sucrose wt. (g/stalk)	Erc wt. (g/stalk)	Sucrose %dm
NCo376	814	68.6	255.8	90.1	16.8	15.3	137.0	124.6	53.6
N19	1050	68.3	332.8	90.7	18.4	16.8	192.5	176.3	58.0
N36	1008	67.6	326.2	91.2	19.0	17.5	192.1	176.7	58.8
N38	860	70.9	250.8	88.8	15.9	14.4	137.8	124.5	54.8
Mean	933	68.9	291.4	90.2	17.5	16.0	164.9	150.5	56.3
LSD (0.05)	74	0.53	23.56	1.19	0.44	0.49	13.47	12.48	1.48
LSD (0.01)	99	0.72	31.50	1.60	0.59	0.66	18.01	16.69	1.98
CV%	10.7	1.1	11.0	1.8	3.4	4.2	11.1	11.2	3.6

SOUTH AFRICAN SUGAR INDUSTRY AGRONOMISTS' ASSOCIATION

CODE: VAR 41/01/Sw/Mhl 'Z'
CAT : 2183

RELEASED VARIETIES ON A 'Z' SET SOIL HARVESTED LATE SEASON

1. PARTICULARS OF PROJECT

This crop	:	2nd Ratoon
Trial crop	:	3rd
Site	:	RSSC (Mhlume)
Field	:	Field 428, Panel 6&11
Region	:	Northern Irrigated (Swd)
Soil Set	:	'Z'
Design	:	Split plot, 5 replication
Variety	:	NCo376, N19, N36, N38
Fertilizer kg/ha	:	N 160, P 0, K 150

Soil Analysis: October, 2003

pH	OM %	Clay %	Silt %	Sand %
7.5	-	-	-	-

ppm

P	K	Ca	Mg	(Ca+Mg)/K
37	208	3316	915	20

Age : 12.2 months
Date : 9/10/2003 –13/10/2004

Rainfall : 680 mm
Irrigation : 640 mm
Total : 1320 mm

2. OBJECTIVES

- To compare the performance of varieties N19, N36 and N38 with that of NCo376 for a late season cycle on a 'Z' set soil.
- To determine the ripening response of each variety to Fusilade Super at two rates of application.
- To compare the resistance/susceptibility of varieties to smut and Eldana.
- To compare the third leaf nutrient contents of N19, N36 and N38 with established NCo376 thresholds.

3. TREATMENTS

- Varieties and ripening treatments in this trial were as follows:

Ripeners (main plots)	Varieties (sub plots)
Control	NCo376
Fusilade @ 0.3 l/ha	N19
Fusilade @ 0.45 l/ha	N36
	N38

- Fusilade was not applied in this crop because of high juice purity one week before intended application date.

4. FERTILIZERS

- 160kg N/ha (as Urea 46 % N), applied 1 week after harvest (100kg/ha) and 9 weeks after harvest (60kg/ha).
- No P was applied.
- 150kg K/ha (as KCl, 50% K) at 3 weeks after harvest.

5. RESULTS AND DISCUSSION

Leaf Analysis

- Levels of N, P, K. Ca and Mg were satisfactory and above their respective thresholds (Table 1).
- There were statistically significant differences in levels of P, K, Ca and Mg among varieties.

Table 1: Third leaf nutrient content (% dm) at 3.9 months of age in February

Variety	% dm				
	N	P	K	Ca	Mg
NCo376	2.09	0.22	1.22	0.25	0.20
N19	2.09	0.22	1.33	0.28	0.18
N36	2.11	0.21	1.30	0.27	0.23
N38	2.10	0.22	1.22	0.36	0.28
Mean	2.10	0.22	1.27	0.29	0.22
LSD (0.05)	NS	0.007	0.05	0.03	0.017
LSD (0.01)	-	0.010	0.07	0.04	0.023
CV %	1.3	4.7	5.8	12.5	10.6

Table 2: Variety differences in third leaf nutrient content (% NCo376)

Variety					
N19	100	100	109**	112*	90*
N36	101	95**	107**	108	115**
N38	100	100	100	144**	140**

* = Significant (P=0.05)

** = Significant (P=0.01)

Growth Measurements

- At harvest, the stalk populations of NCo376 and N38 were similar and significantly higher than those of N19 and N36 (Table 3). N19 was statistically higher than N36.

- N38 produced significantly shorter stalks than all other varieties at all sampling occasions. At harvest, N19 and N36 were statistically similar and produced significantly taller stalks than the other varieties. NCo376 was significantly taller than N38 (Table 3).

Table 3: Growth measurements at various ages

Variety	Stalk population ('000/ha)						Stalk height (cm to TVD)					
	Jan. (3.3m)	Feb. (4.0m)	Apr. (6.6m)	Jun. (8.1m)	Aug. (10.1m)	Oct. (11.9m)	Jan. (3.3m)	Feb. (4.0m)	Apr. (6.6m)	Jun. (8.1m)	Aug. (10.1m)	Oct. (11.9m)
NCo376	159	137	104	102	103	99	62	104	197	234	224	227
N19	130	117	92	89	91	90	70	114	209	225	232	239
N36	130	108	83	81	81	81	78	122	216	235	237	235
N38	157	139	102	100	102	99	58	95	165	172	178	184
Mean	144	125	95	93	94	92	67	109	197	217	218	221
LSD (0.05)	12	6	6	6	6	5	5	7	10	12	12	11
LSD (0.01)	16	8	8	8	8	7	6	9	14	17	16	15
CV %	11.1	6.6	8.3	8.4	8.3	7.6	9.8	8.3	7.1	7.8	7.4	6.8

Pests and Diseases

- All varieties were affected by Eldana at harvest. N38 as in the previous year, had significantly a higher incidence than all the other varieties (Table 4).

- There was generally no smut infection except in NCo376 where the incidence was high (Table 4).

Table 4: Eldana damage at harvest and smut levels from December to February

Variety	Eldana	Smut (% smut whips)	
	% internodes damaged	Dec. (1.8m)	Feb. (4.0m)
NCo376	2.12	2.32	0.52
N19	1.57	0.00	0.09
N36	1.38	0.01	0.03
N38	5.14	0.00	0.01
Mean	2.55	0.58	0.16
LSD (P=0.05)	1.24	0.85	0.26
LSD (P=0.01)	1.65	1.14	0.34
CV %	65.6	198.2	219.9

Harvest Results

- There was no significant difference in cane yield among varieties (Table 5).
- Cane quality (mean sucrose and erc% cane) was statistically similar for N19 and N36 and significantly higher than that of N38 and NCo376. NCo376 was statistically higher than N38.
- Mean sucrose and erc yield was significantly higher in N19 than N38 and NCo376. N19 and N36 were not significantly different.

Table 5: Harvest Data

Variety	tc/ha	s%c	erc%c	ts/ha	t erc/ha
NCo376	85	16.40	14.87	14.0	12.7
N19	94	17.75	16.27	16.7	15.3
N36	85	17.54	16.11	15.0	13.8
N38	93	15.44	13.96	14.4	13.0
Mean	89	16.78	15.30	15.0	13.7
LSD (0.05)	NS	0.62	0.63	1.75	1.63
LSD (0.01)	-	0.82	0.84	NS	NS
CV%	13.8	5.0	5.6	15.8	16.2

NB: Sucrose measured as pol

6. CONCLUSIONS

- There was no significant difference in cane yield among varieties. The cane quality of N19 and N36 was statistically similar and significantly higher than that of the other varieties.
- Although all varieties were affected by Eldana at harvest, N38 had significantly a higher incidence. Smut infection was generally absent in all varieties except in NCo376 where it was high.
- Varietal differences in third leaf nutrient concentrations indicate that thresholds established for NCo376 may not be appropriate for the new N varieties.
- This trial has been continued and is now in its 3rd ratoon.

BMS
20/9/2005

7. APPENDIX

Appendix 1: Sample data, August – October

23 Aug. 2004 (7.3 wks before harvest)									
Variety	Fresh wt. (g/stalk)	Moisture (% cane)	Dry wt. (g/stalk)	Purity (% cane)	Sucrose (%cane)	Erc (%cane)	Sucrose wt. (g/stalk)	Erc wt. (g/stalk)	Sucrose %dm
NCo376	694	69.6	211.4	92.1	16.8	15.5	116.9	107.8	55.4
N19	872	69.2	268.4	92.6	17.4	16.1	151.6	140.3	56.4
N36	963	67.7	311.1	93.1	18.4	17.1	177.3	164.8	57.0
N38	715	71.7	202.4	90.2	15.3	14.0	109.8	100.0	54.3
Mean	811	69.6	248.3	92.0	17.0	15.7	138.9	128.2	55.8
LSD (0.05)	67	0.91	21.38	1.42	0.53	0.58	12.40	11.58	NS
LSD (0.01)	90	1.22	28.58	1.89	0.71	0.77	16.58	15.48	-
CV%	11.3	1.8	11.7	2.1	4.2	5.0	12.1	12.3	6.2
13 Oct. 2004 (at harvest)									
Variety	Fresh wt. (g/stalk)	Moisture (% cane)	Dry wt. (g/stalk)	Purity (% cane)	Sucrose (%cane)	Erc (%cane)	Sucrose wt. (g/stalk)	Erc wt. (g/stalk)	Sucrose %dm
NCo376	755	68.5	237.9	89.9	16.4	14.9	124.1	112.6	52.1
N19	885	67.0	291.9	91.3	17.8	16.3	157.2	144.1	53.9
N36	972	67.4	316.9	91.5	17.5	16.1	170.3	156.4	53.8
N38	776	70.1	232.1	89.4	15.4	14.0	120.1	108.7	51.7
Mean	847	68.3	269.7	90.5	16.8	15.3	142.9	130.5	52.9
LSD (0.05)	54	1.02	19.17	1.15	0.62	0.63	10.51	9.98	NS
LSD (0.01)	72	1.36	25.62	1.53	0.82	0.84	14.05	13.34	-
CV%	8.7	2.0	9.6	1.7	5.0	5.6	10.0	10.4	5.4