

AICRP (S) – EAST COAST ZONE
SUGARCANE RESEARCH STATION (TNAU)
CUDDALORE - 607 001 (TN)

CROP IMPROVEMENT

Trials Conducted during 2014-15:

Two early trials (IVT (Early) and AVT (Early) I Plant) and two mid-late trials (AVT (M/L) II Plant and AVT (M/L) Ratoon) were conducted as per the technical programme.

S. No.	Trial	Entries	Date of Planting
1.	IVT (Early)	5 + 3	30.01.2014
2.	AVT (E) – I Plant	4 + 3	30.01.2014
3.	AVT (Mid-late) II Plant	3 + 3	01.02.2014
4.	AVT (Mid-late) Ratoon	3 + 3	27.03.2014

1. Initial Varietal Trial (Early)

Entries	:	CoA 12 321, CoA 12322, CoA 12323, CoOr 12346 and CoV 12356
Standards	:	Co 6907, CoC 01061 and CoA 92081
Design	:	RBD
Replication	:	Three
Plot size	:	Gross: 6.0 m x 6 r x 1.2 m Net : 5.0 m x 4 r x 1.2 m
Seed rate	:	12 buds/m
Date of Planting	:	30.01.2014
Crop duration	:	10 months

Initial Varietal Trial (Early):

A total of five clones and three standards were evaluated in RBD with three replications. The clone CoA 12 322 recorded the higher cane yield (128.29 t/ha), followed by CoOr 12 346 (122.94 t/ha) and CoA12 321 (122.37 t/ha). The CCS was maximum in the clone CoV 12 356 (12.94 %) followed by the standard CoC 01061 (12.62%) and CoA 12 223 (12.56%). The sugar yield was maximum in CoA 12 322 (15.73 t/ha) followed by CoV 12 356 (15.26 t/ha) and CoA 12321 (15.21 t/ha). (Tables 1.1 to 1.19).

IVT (Early)

S. No.	Clone	CCS (t/ha)	Cane yield (t/ha)	Sucrose (%) (10m)	Brix % (10 m)	CCS % (10m)	Purity (%) (10 m)	Pol % cane (10 m)	Fibre (%) (10m)	NMC ('000/ha) (10 m)
1	CoA 12321	15.21	122.37	17.02	20.53	12.43	88.83	13.22	13.85	104.95
2	CoA 12322	15.73	128.29	16.97	20.39	12.27	89.35	13.38	13.27	98.36
3	CoA 12323	15.09	120.10	17.30	20.71	12.56	90.42	13.75	13.29	98.45
4	CoOr 12346	15.05	122.94	17.12	20.25	12.24	89.78	13.53	13.53	113.48
5	Co V 12356	15.26	117.81	17.55	21.14	12.94	90.62	14.03	13.58	95.88
Standard										
1	Co 6907	11.07	94.97	16.65	19.67	11.63	87.81	12.85	13.15	106.82
2	CoC 01061	13.03	103.21	17.46	20.90	12.62	90.44	13.85	13.47	116.52
3	CoA 92081	13.04	107.80	16.85	20.42	12.10	88.71	12.76	12.67	92.51
	CD	1.69	11.99	0.45	0.44	0.36	2.00	0.67	0.63	14.92
	CV	6.89	6.04	1.53	1.27	1.70	1.29	2.90	2.72	8.34

S. No.	Clone	Stalk length (cm)	Stalk Diametr (cm)	Single Cane Wt. (kg)	Brix % (8 m)	Sucrose (%) (8 m)	Purity (%) (8 m)	CCS (%) (8 m)	No. of shoots ('000/ha)	No. of tillers ('000/ha)	Germination (%)
1	CoA 12321	290.67	2.80	1.31	19.45	15.41	85.01	10.47	115.48	130.28	71.84
2	CoA 12322	295.67	2.77	1.51	19.19	15.06	85.07	10.45	104.45	118.07	48.57
3	CoA 12323	273.33	2.75	1.35	19.53	15.36	85.30	10.60	109.22	123.55	49.00
4	CoOr 12346	274.33	2.85	1.55	19.15	15.18	85.17	10.31	127.48	127.51	66.75
5	Co V 12356	272.33	2.71	1.37	20.26	15.57	85.95	10.70	108.21	124.64	63.16
Standard											
1	Co 6907	263.67	2.62	1.10	19.22	14.66	83.51	9.95	117.56	124.80	61.91
2	CoC 01061	275.67	2.36	1.01	19.83	15.30	85.17	10.52	128.21	145.09	75.53
3	CoA 92081	261.67	2.63	1.27	19.29	14.85	84.01	10.15	103.18	110.67	47.61
	CD	18.31	0.17	0.19	0.61	0.51	1.41	0.44	16.31	17.61	9.26
	CV	3.83	3.72	8.28	1.82	1.94	0.96	2.45	8.25	8.12	8.84

IVT (Early)

Table 1. 1. CCS Yield (t/ha.) at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	15.81	14.60	15.23	15.21
CoA 12 322	16.14	15.70	15.36	15.73
CoA 12 323	14.86	16.06	14.36	15.09
CoOr 12 346	14.51	15.75	14.87	15.05
CoV 12 356	15.13	13.98	16.67	15.26
Standard				
Co 6907	11.30	9.64	12.25	11.07
CoC 01061	12.39	13.19	13.50	13.03
CoA 92081	14.33	12.79	12.01	13.04
CD (0.05%)				1.69
CV (%)				6.89

Table 1. 2. Cane Yield (t/ha.) at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	125.31	119.45	122.34	122.37
CoA 12 322	132.86	128.35	123.67	128.29
CoA 12 323	118.34	126.35	115.62	120.10
CoOr 12 346	118.35	127.85	122.62	122.94
CoV 12 356	118.32	110.45	124.65	117.81
Standard				
Co 6907	96.45	85.21	103.24	94.97
CoC 01061	97.47	104.53	107.62	103.21
CoA 92081	117.42	108.35	97.64	107.80
CD (0.05%)				11.99
CV (%)				6.04

Table 1. 3. Sucrose % at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	16.85	16.95	17.25	17.02
CoA 12 322	16.82	16.78	17.31	16.97
CoA 12 323	17.34	17.64	16.92	17.30
CoOr 12 346	17.21	16.83	17.31	17.12
CoV 12 356	17.37	17.72	17.56	17.55
Standard				
Co 6907	16.71	16.92	16.32	16.65
CoC 01061	17.62	17.31	17.45	17.46
CoA 92081	16.82	16.76	16.97	16.85
CD (0.05%)				0.45
CV (%)				1.53

Table 1. 4. Brix % at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	20.70	20.60	20.30	20.53
CoA 12 322	20.54	20.22	20.40	20.39
CoA 12 323	20.30	21.20	20.64	20.71
CoOr 12 346	20.20	20.15	20.40	20.25
CoV 12 356	21.2	21.10	21.12	21.14
Standard				
Co 6907	19.40	19.60	20.00	19.67
CoC 01061	21.13	20.72	20.85	20.90
CoA 92081	20.42	20.63	20.22	20.42
CD (0.05%)				0.44
CV (%)				1.27

IVT (Early)

Table 1. 5. Purity % at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	88.32	89.25	88.92	88.83
CoA 12 322	90.54	88.39	89.12	89.35
CoA 12 323	88.81	91.64	90.82	90.42
CoOr 12 346	89.21	89.83	90.31	89.78
CoV 12 356	90.85	91.67	89.34	90.62
Standard				
Co 6907	89.56	86.64	87.24	87.81
CoC 01061	89.95	91.14	90.24	90.44
CoA 92081	88.52	87.65	89.97	88.71
CD (0.05%)				2.00
CV (%)				1.29

Table 1. 6. CCS % at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	12.62	12.22	12.45	12.43
CoA 12 322	12.15	12.23	12.42	12.27
CoA 12 323	12.56	12.71	12.42	12.56
CoOr 12 346	12.26	12.32	12.13	12.24
CoV 12 356	12.79	12.66	13.37	12.94
Co 6907	11.72	11.31	11.87	11.63
Standard				
CoC 01061	12.71	12.62	12.54	12.62
CoA 92081	12.2	11.8	12.3	12.10
CD (0.05%)				0.36
CV (%)				1.70

IVT (Early)**Table 1. 7. Pol. % at harvest**

Clone	R I	R II	R III	Mean
CoA 12 321	13.20	12.95	13.50	13.22
CoA 12 322	12.85	13.43	13.86	13.38
CoA 12 323	13.74	13.35	14.17	13.75
CoOr 12 346	13.12	14.15	13.32	13.53
CoV 12 356	13.74	14.41	13.93	14.03
Standard				
Co 6907	13.17	12.53	12.85	12.85
CoC 01061	14.15	13.46	13.95	13.85
CoA 92081	12.76	12.57	12.95	12.76
CD (0.05%)				0.67
CV (%)				2.90

Table 1. 8. Fibre % at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	13.74	13.88	13.93	13.85
CoA 12 322	12.74	13.32	13.75	13.27
CoA 12 323	13.52	13.14	13.22	13.29
CoOr 12 346	13.12	14.15	13.32	13.53
CoV 12 356	13.67	13.32	13.75	13.58
Standard				
Co 6907	13.52	12.78	13.15	13.15
CoC 01061	13.41	13.55	13.46	13.47
CoA 92081	12.54	13.12	12.35	12.67
CD (0.05%)				0.63
CV (%)				2.72

Table 1. 9. NMC ('000/ha) at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	91.35	108.254	115.241	104.95
CoA 12 322	104.722	92.676	97.677	98.36
CoA 12 323	96.388	95.625	103.345	98.45
CoOr 12 346	116.481	102.341	121.615	113.48
CoV 12 356	99.424	92.621	95.591	95.88
Standard				
Co 6907	99.305	115.624	105.527	106.82
CoC 01061	115.952	127.45	106.156	116.52
CoA 92081	97.64	92.45	87.451	92.51
CD (0.05%)				14.92
CV (%)				8.34

Table 1. 10. Stalk length (cm) at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	292.00	282.00	298.00	290.67
CoA 12 322	287.00	295.00	305.00	295.67
CoA 12 323	286.00	272.50	261.50	273.33
CoOr 12 346	285.00	276.00	262.00	274.33
CoV 12 356	273.00	260.00	284.00	272.33
Standard				
Co 6907	256.00	270.00	265.00	263.67
CoC 01061	275.00	287.00	265.00	275.67
CoA 92081	270.00	261.00	254.00	261.67
CD (0.05%)				18.31
CV (%)				3.83

IVT (Early)

Table 1. 11. Stalk diameter (cm) at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	2.75	2.85	2.81	2.80
CoA 12 322	2.72	2.77	2.81	2.77
CoA 12 323	2.75	2.64	2.86	2.75
CoOr 12 346	2.91	2.85	2.78	2.85
CoV 12 356	2.57	2.81	2.75	2.71
Standard				
Co 6907	2.45	2.66	2.74	2.62
CoC 01061	2.45	2.35	2.28	2.36
CoA 92081	2.71	2.62	2.55	2.63
CD (0.05%)				0.17
CV (%)				3.72

Table 1. 12. Single cane weight (kg) at harvest

Clone	R I	R II	R III	Mean
CoA 12 321	1.32	1.26	1.34	1.31
CoA 12 322	1.45	1.42	1.67	1.51
CoA 12 323	1.35	1.44	1.26	1.35
CoOr 12 346	1.54	1.45	1.67	1.55
CoV 12 356	1.38	1.41	1.32	1.37
Standard				
Co 6907	1.23	1.15	0.92	1.10
CoC 01061	1.15	0.92	0.97	1.01
CoA 92081	1.33	1.29	1.18	1.27
CD (0.05%)				0.19
CV (%)				8.28

Table 1. 13. Brix % at 8th month

Clone	R I	R II	R III	Mean
CoA 12 321	19.60	19.4	19.35	19.45
CoA 12 322	19.24	19.22	19.10	19.19
CoA 12 323	19.14	19.85	19.61	19.53
CoOr 12 346	19.12	19.10	19.24	19.15
CoV 12 356	19.85	20.63	20.31	20.26
Standard				
Co 6907	18.42	19.32	19.91	19.22
CoC 01061	20.15	19.57	19.76	19.83
CoA 92081	19.31	19.45	19.11	19.29
CD (0.05%)				0.61
CV (%)				1.82

Table 1. 14. Sucrose % at 8th month

Clone	R I	R II	R III	Mean
CoA 12 321	15.27	15.81	15.15	15.41
CoA 12 322	14.95	14.85	15.37	15.06
CoA 12 323	15.37	15.75	14.95	15.36
CoOr 12 346	15.21	14.92	15.42	15.18
CoV 12 356	15.42	15.72	15.56	15.57
Standard				
Co 6907	14.71	14.95	14.32	14.66
CoC 01061	15.62	15.31	14.98	15.30
CoA 92081	14.82	14.76	14.97	14.85
CD (0.05%)				0.51
CV (%)				1.94

IVT (Early)**Table 1. 15. Purity % at 8th month**

Clone	R I	R II	R III	Mean
CoA 12 321	86.15	83.65	85.24	85.01
CoA 12 322	84.62	85.25	85.33	85.07
CoA 12 323	85.95	85.52	84.42	85.30
CoOr 12 346	85.35	85.72	84.45	85.17
CoV 12 356	85.45	87.15	85.24	85.95
Standard				
Co 6907	83.65	83.31	83.57	83.51
CoC 01061	84.62	85.62	85.27	85.17
CoA 92081	83.43	83.75	84.61	84.01
CD (0.05%)				1.41
CV (%)				0.96

Table 1. 16. CCS % at 8th month

Clone	R I	R II	R III	Mean
CoA 12 321	10.32	10.67	10.42	10.47
CoA 12 322	10.27	10.75	10.34	10.45
CoA 12 323	10.41	10.68	10.72	10.60
CoOr 12 346	10.42	10.27	10.24	10.31
CoV 12 356	10.85	10.82	10.42	10.70
Standard				
Co 6907	10.15	9.45	10.24	9.95
CoC 01061	10.35	10.46	10.74	10.52
CoA 92081	10.15	10.35	9.95	10.15
CD (0.05%)				0.44
CV (%)				2.45

Table 1. 17. Number of Shoots ('000/ha) - 180 days

Clone	R I	R II	R III	Mean
CoA 12 321	101.75	119.541	125.157	115.48
CoA 12 322	119.722	90.176	103.458	104.45
CoA 12 323	107.388	106.125	114.134	109.22
CoOr 12 346	128.481	121.341	132.615	127.48
CoV 12 356	112.424	104.621	107.591	108.21
Standard				
Co 6907	108.525	126.624	117.527	117.56
CoC 01061	126.952	138.145	119.526	128.21
CoA 92081	107.642	103.145	98.745	103.18
CD (0.05%)				16.31
CV (%)				8.25

Table 1. 18. No. of tillers ('000/ha) - 120 days

Clone	R I	R II	R III	Mean
CoA 12 321	120.425	131.254	139.145	130.28
CoA 12 322	131.452	101.176	121.58	118.07
CoA 12 323	128.388	117.125	125.137	123.55
CoOr 12 346	139.481	127.334	115.715	127.51
CoV 12 356	121.424	123.55	128.95	124.64
Standard				
Co 6907	114.252	132.624	127.527	124.80
CoC 01061	147.295	152.214	135.752	145.09
CoA 92081	119.642	110.251	102.135	110.68
CD (0.05%)				17.61
CV (%)				8.12

Table 1. 19. Germination per cent - 30 days

Clone	R I	R II	R III	Mean
CoA 12 321	73.61	69.35	72.55	71.84
CoA 12 322	57.25	46.25	42.21	48.57
CoA 12 323	47.38	45.37	54.24	49.00
CoOr 12 346	62.25	67.35	70.65	66.75
CoV 12 356	67.61	59.35	62.52	63.16
Standard				
Co 6907	55.25	61.95	68.52	61.91
CoC 01061	75.62	72.35	78.62	75.53
CoA 92081	43.25	54.35	45.23	47.61
CD (0.05%)				9.26
CV (%)				8.84

2. Advanced Varietal Trial (Early)

Entries	: CoA11321, CoA11323, CoC 10336 and CoC11336
Standards	: Co 6907, CoC 01061 and CoA 92081
Design	: RBD
Replications	: 3
Plot size	Gross: 6.0 m x 6 r x 1.2 m Net : 5.0 m x 4 r x 1.2 m
Seed rate	: 12 buds/m
Planting time	: 30.01.2014
Crop duration	: 10 months

2. Advanced Varietal Trial (Early)

The performance of four clones was evaluated against three standard varieties. The clone CoC 11336 registered the higher cane yield (131.56 t/ha), followed by the CoC 10336 (127.67 t/ha) and CoA11323 (119.77 t/ha). The CCS was maximum in the clone CoC 11336(12.64 %) followed by CoA 11323 (12.51%) and CoC 01061 (12.44%). The sugar yield was maximum in CoC 11336 (16.62 t/ha) followed by CoC 10336 (15.83 t/ha) and CoA 11323 (14.98 t/ha). (Tables 1.1 to 1.20).

AVT (Early)

S. No.	Clone	CCS (t/ha)	Cane yield (t/ha)	Sucrose (%) (10 m)	Brix (%) (10 m)	Purity (%) (10 m)	CCS (%) (10 m)	Pol.(%) cane (10 m)	Extraction (%) (10 m)	Fibre (%) (10 m)	NMC ('000/ha) (10 m)
1	CoA 11321	14.14	116.72	17.04	19.43	89.00	12.13	13.95	50.04	13.75	101.17
2	CoA 11323	14.98	119.77	17.42	19.97	90.04	12.51	14.22	53.10	13.14	107.05
3	CoC 10336	15.83	127.67	17.04	19.60	89.50	12.37	13.78	52.18	13.05	125.02
4	CoC 11336	16.62	131.56	17.36	19.90	89.59	12.64	13.75	54.32	13.35	128.17
Standard											
1	Co 6907	11.31	96.47	16.59	18.57	87.15	11.73	13.54	48.27	12.81	92.61
2	CoC 01061	14.15	113.83	17.34	19.87	90.49	12.44	14.21	49.01	13.37	127.11
3	CoA 92081	12.85	110.35	16.83	18.93	87.91	11.64	13.32	49.38	13.38	94.55
	CD	1.29	12.21	0.34	0.49	1.75	0.32	0.44	3.09	0.44	16.24
	CV	5.07	5.88	1.14	1.42	1.11	1.57	1.80	3.42	1.91	8.24

S. No.	Clone	Stalk length (cm)	Stalk Diameter (cm)	Single Cane Wt. (kg)	Brix % (8 m)	Sucrose (%) (8 m)	Purity (%) (8 m)	CCS (%) (8 m)	No. of shoots ('000/ha)	No. of tillers ('000/ha)	Germination (%)
1	CoA 11321	254.67	2.65	1.33	18.70	15.07	85.01	10.47	121.14	131.57	41.23
2	CoA 11323	262.33	2.73	1.34	19.47	15.40	85.07	10.69	126.30	137.30	47.66
3	CoC 10336	272.33	2.85	1.40	18.97	15.05	85.34	10.38	135.36	144.36	75.53
4	CoC 11336	295.67	3.09	1.55	19.37	15.35	85.14	10.65	139.17	147.21	71.83
Standard											
1	Co 6907	163.33	2.61	1.04	17.93	14.60	83.48	9.95	102.95	112.65	70.57
2	CoC 01061	275.67	2.40	1.01	19.30	15.14	85.14	10.45	137.78	148.11	72.81
3	CoA 92081	261.33	2.64	1.29	18.40	14.80	83.93	10.10	107.53	116.38	46.61
	CD	23.6	0.18	0.18	0.48	0.37	1.29	0.43	14.76	17.58	6.38
	CV	4.93	3.84	7.90	1.43	1.39	0.85	2.35	6.67	7.38	5.89

AVT (Early)

Table 2. 1. CCS Yield (t/ha) at harvest

Clone	R I	R II	R III	Mean
CoA 11321	14.14	14.96	13.33	14.14
CoA 11323	14.74	14.22	15.97	14.98
CoC 10 336	15.93	15.66	15.90	15.83
CoC 11336	16.85	15.80	17.22	16.62
Standard				
Co 6907	11.58	11.68	10.68	11.31
CoC 01061	14.85	13.27	14.34	14.15
CoA 92081	13.75	11.93	12.88	12.85
CD (0.05%)				1.29
CV (%)				5.07

Table 2. 2. Cane Yield (t/ha.) at harvest

Entries	R I	R II	R III	Mean
CoA 11321	115.15	125.75	109.25	116.72
CoA 11323	118.2	112.5	128.61	119.77
CoC 10 336	128.5	124.2	130.32	127.67
CoC 11336	131.62	125.32	137.75	131.56
Standard				
Co 6907	95.72	102.45	91.25	96.47
CoC 01061	120.25	106.52	114.71	113.83
CoA 92081	117.5	104.43	109.12	110.35
CD (0.05%)				12.21
CV (%)				5.88

AVT (Early)

Table 2. 3. Sucrose % at harvest

Entries	R I	R II	R III	Mean
CoA 11321	17.2	16.81	17.12	17.04
CoA 11323	17.37	17.32	17.56	17.42
CoC 10 336	16.84	17.21	17.06	17.04
CoC 11336	17.35	17.27	17.46	17.36
Standards				
Co 6907	16.61	16.92	16.25	16.59
CoC 01061	17.42	17.28	17.32	17.34
CoA 92081	16.76	16.82	16.92	16.83
CD (0.05%)				0.34
CV (%)				1.14

Table 2. 4. Brix % at harvest

Entries	R I	R II	R III	Mean
CoA 11321	19.2	19.5	19.6	19.43
CoA 11323	19.8	20	20.1	19.97
CoC 10 336	19.7	19.8	19.3	19.60
CoC 11336	19.9	20.2	19.6	19.90
Standard				
Co 6907	18.5	18.3	18.9	18.57
CoC 01061	20.1	19.7	19.8	19.87
CoA 92081	18.6	18.9	19.3	18.93
CD (0.05%)				0.49
CV (%)				1.42

AVT (Early)

Table 2. 5. CCS % at harvest

Entries	R I	R II	R III	Mean
CoA 11321	12.28	11.90	12.20	12.13
CoA 11323	12.47	12.64	12.42	12.51
CoC 10 336	12.40	12.52	12.20	12.37
CoC 11336	12.80	12.61	12.50	12.64
Standard				
Co 6907	12.10	11.40	11.70	11.73
CoC 01061	12.35	12.46	12.50	12.44
CoA 92081	11.70	11.42	11.80	11.64
CD (0.05%)				0.32
CV (%)				1.57

Table 2. 6. Purity % at harvest

Entries	R I	R II	R III	Mean
CoA 11321	90.3	88.5	88.21	89.00
CoA 11323	88.62	90.25	91.25	90.04
CoC 10 336	89.72	90.25	88.52	89.50
CoC 11336	90.67	88.65	89.45	89.59
Co 6907	87.56	86.64	87.24	87.15
CoC 01061	89.72	91.12	90.64	90.49
CoA 92081	87.52	87.65	88.55	87.91
CD (0.05%)				1.75
CV (%)				1.11

AVT (Early)

Table 2. 7. Pol. % cane at harvest

Entries	R I	R II	R III	Mean
CoA 11321	13.95	13.64	13.37	13.95
CoA 11323	14.22	13.65	13.95	14.22
CoC10336	13.78	13.95	13.36	13.78
CoC 11336	13.75	13.94	14.15	13.75
Standard				
Co 6907	13.54	13.12	13.26	13.54
CoC 01061	14.21	13.75	13.95	14.21
CoA 92081	13.32	13.47	13.68	13.32
CD (0.05%)				0.44
CV (%)				1.8

Table 2. 8. Extraction % at harvest

Entires	R I	R II	R III	Mean
CoA 11321	48.62	49.26	52.25	50.04
CoA 11323	55.52	53.52	50.25	53.10
CoC10336	52.24	53.75	50.56	52.18
CoC 11336	53.35	55.25	54.35	54.32
Standard				
Co 6907	47.35	48.21	49.25	48.27
CoC 01061	50.34	47.35	49.35	49.01
CoA 92081	48.52	50.38	49.25	49.38
CD (0.05%)				3.11
CV (%)				3.43

AVT (Early)

Table 2. 9. Fibre % at harvest

Entires	R I	R II	R III	Mean
CoA 11321	13.87	13.72	13.65	13.75
CoA 11323	13.22	12.65	13.54	13.14
CoC 10 336	13.28	12.75	13.12	13.05
CoC 11336	13.35	13.44	13.25	13.35
Standard				
Co 6907	12.54	13.12	12.76	12.81
CoC 01061	13.41	13.25	13.46	13.37
CoA 92081	13.52	13.38	13.25	13.38
CD (0.05%)				0.44
CV (%)				1.91

Table 2. 10. NMC ('000/ha) at harvest

Entires	R I	R II	R III	Mean
CoA 11321	97.35	90.65	115.52	101.17
CoA 11323	107.5	114.31	99.35	107.05
CoC10336	125.23	132.32	117.52	125.02
CoC 11336	138.52	118.35	127.65	128.17
Standard				
Co 6907	92.35	99.15	86.34	92.61
CoC 01061	119.34	126.62	135.38	127.11
CoA 92081	96.34	97.64	89.67	94.55
CD (0.05%)				16.24
CV (%)				8.24

AVT (Early)

Table 2. 11. Stalk length (cm) at harvest

Entires	R I	R II	R III	Mean
CoA 11321	272	240	252	254.67
CoA 11323	275	252	260	262.33
CoC10336	255	267	295	272.33
CoC 11336	287	295	305	295.67
Standard				
Co 6907	256	270	264	263.33
CoC 01061	275	284	268	275.67
CoA 92081	270	261	253	261.33
CD (0.05%)				23.6
CV (%)				4.93

Table 2. 12. Stalk diameter (cm) at harvest

Entires	R I	R II	R III	Mean
CoA 11321	2.55	2.65	2.75	2.65
CoA 11323	2.72	2.65	2.81	2.73
CoC10336	2.91	2.85	2.78	2.85
CoC 11336	3.20	3.12	2.95	3.09
Standard				
Co 6907	2.53	2.72	2.62	2.61
CoC 01061	2.45	2.45	2.28	2.40
CoA 92081	2.67	2.52	2.73	2.64
CD (0.05%)				0.19
CV (%)				3.86

AVT (Early)

Table 2. 13. Single cane weight (kgs)

Entires	R I	R II	R III	Mean
CoA 11321	1.38	1.26	1.34	1.33
CoA 11323	1.25	1.35	1.41	1.34
CoC10336	1.35	1.54	1.32	1.40
CoC 11336	1.54	1.45	1.67	1.55
Standard				
Co 6907	1.12	1.05	0.95	1.04
CoC 01061	1.15	0.92	0.97	1.01
CoA 92081	1.38	1.28	1.21	1.29
CD (0.05%)				0.17
CV (%)				7.9

Table 2. 14. Brix % (8th month)

Entires	R I	R II	R III	Mean
CoA 11321	18.5	18.7	18.9	18.70
CoA 11323	19.3	19.5	19.6	19.47
CoC10336	19.2	18.9	18.8	18.97
CoC 11336	19.4	19.8	18.9	19.37
Standard				
Co 6907	17.9	17.7	18.2	17.93
CoC 01061	19.3	19.2	19.4	19.30
CoA 92081	18.2	18.3	18.7	18.40
CD (0.05%)				0.48
CV (%)				1.43

AVT (Early)

Table 2. 15. Sucrose % (8th month)

Entires	R I	R II	R III	Mean
CoA 11321	15.25	14.85	15.12	15.07
CoA 11323	15.38	15.29	15.54	15.40
CoC10336	14.75	15.31	15.1	15.05
CoC 11336	15.32	15.25	15.48	15.35
Standard				
Co 6907	14.61	14.87	14.33	14.60
CoC 01061	15.15	15.35	14.92	15.14
CoA 92081	14.76	14.82	14.82	14.80
CD (0.05%)				0.37
CV (%)				1.39

Table 2. 16. Purity % (8th month)

Entires	R I	R II	R III	Mean
CoA 11321	86.15	83.65	85.24	85.01
CoA 11323	84.62	85.25	85.33	85.07
CoC10336	85.95	85.52	84.56	85.34
CoC 11336	85.35	85.62	84.45	85.14
Standard				
Co 6907	83.52	83.34	83.57	83.48
CoC 01061	84.72	85.55	85.16	85.14
CoA 92081	83.43	83.75	84.61	83.93
CD (0.05%)				1.29
CV (%)				0.85

AVT (Early)

Table 2. 17. CCS % (8th month)

Entires	R I	R II	R III	Mean
CoA 11321	10.25	10.73	10.42	10.47
CoA 11323	10.47	10.88	10.72	10.69
CoC10336	10.38	10.52	10.25	10.38
CoC 11336	10.81	10.62	10.51	10.65
Standard				
Co 6907	10.15	9.45	10.24	9.95
CoC 01061	10.35	10.46	10.54	10.45
CoA 92081	10.1	10.25	9.95	10.10
CD (0.05%)				0.43
CV (%)				2.35

Table 2. 18. Number of Shoot ('000/ha) - 240 days

Entires	R I	R II	R III	Mean
CoA 11321	122.54	110.72	130.15	121.14
CoA 11323	127.25	132.31	119.35	126.30
CoC10336	135.23	142.32	128.52	135.36
CoC 11336	148.52	129.35	139.65	139.17
Standard				
Co 6907	102.35	110.15	96.34	102.95
CoC 01061	129.34	136.62	147.38	137.78
CoA 92081	105.34	107.64	109.62	107.53
CD (0.05%)				14.76
CV (%)				6.67

AVT (Early)

Table 2. 19. Number of tillers ('000/ha) (at 120 days)

Entires	R I	R II	R III	Mean
CoA 11321	133.24	120.15	141.32	131.57
CoA 11323	138.26	146.32	127.31	137.30
CoC10336	144.23	150.32	138.52	144.36
CoC 11336	158.52	134.45	148.65	147.21
Standards				
Co 6907	112.35	121.15	104.46	112.65
CoC 01061	138.32	147.62	158.38	148.11
CoA 92081	110.34	117.64	121.15	116.38
CD (0.05%)				17.58
CV (%)				7.38

Table 2. 20. Germination Per cent (at 30th day)

Entires	R I	R II	R III	Mean
CoA 11321	45.25	41.25	37.2	41.23
CoA 11323	47.38	45.37	50.24	47.66
CoC10336	75.62	72.35	78.62	75.53
CoC 11336	73.61	69.35	72.52	71.83
Standards				
Co 6907	65.25	71.95	74.52	70.57
CoC 01061	71.25	74.54	72.65	72.81
CoA 92081	43.25	51.35	45.23	46.61
CD (0.05%)				6.38
CV (%)				5.89

3. Advanced Varietal Trial (Mid-late) - II Plant

Entries	: CoA10 321, CoC 10 337 and CoOr 10 346
Standards	: CoV 92102, Co 7219 and Co 86249
Design	: RBD
Replications	: 4
Plot size	Gross: 6.0 m x 6 r x 1.2 m Net : 5.0 m x 4 r x 1.2 m
Seed rate	: 12 buds/m
Crop duration	: 12 months

Advanced Varietal Trial (Mid/late) II Plant:

Three test clones were evaluated and three standards were evaluated in RBD with four replications. The clone CoC 10337 registered the higher cane yield (128.67 t/ha) followed by the clone CoA 10 321 (125.23 t/ha). The clone CoC 10 337 recorded higher sugar yield (16.34 t/ha) followed by the clone CoA 10 321 (15.82 t/ha). The CCS was maximum in the standard variety CoV 92102 (12.65%). (Tables 3.1 to 3.19).

Advanced Varietal Trial (Mid/late) II Plant:

S. No.	Clone	CCS (t/ha)	Cane yield (t/ha)	Sucrose (%) (12m)	Brix % (12 m)	CCS % (12 m)	Purity (%) (12 m)	Pol % cane (12 m)	Fibre (%) (12 m)	NMC ('000/ha) (12 m)
1	CoA 10 321	15.82	125.23	17.15	20.01	12.35	88.83	13.36	13.33	102.62
2	CoC 10 337	16.34	128.67	17.30	20.24	12.49	89.35	13.74	13.62	116.61
3	CoOr 10346	15.91	123.95	17.25	20.21	12.61	90.42	13.56	13.56	101.43
Standard										
1	CoV 92102	14.67	114.83	17.46	20.61	12.65	90.62	14.03	13.84	109.72
2	Co 7219	12.89	106.54	17.32	20.35	12.27	89.78	13.85	13.40	103.30
3	Co 86249	12.40	101.35	15.90	19.47	11.75	88.71	12.78	12.67	92.07
CD (0.05%)		1.21	11.51	0.43	0.70	1.39	0.32	0.47	0.46	14.44
CV (%)		5.47	6.53	1.66	2.31	1.03	1.69	2.30	2.27	9.19

S. No.	Clone	Stalk length (cm)	Stalk Diameter (cm)	Single Cane Wt. (kg)	Brix (%) (10 m)	Sucrose (%) (10 m)	Purity (%) (10 m)	CCS (%) (10 m)	No. of shoots ('000/ha)	No. of tillers ('000/ha)	Germination (%)
1	CoA 10 321	281.75	2.86	1.35	18.03	15.09	84.80	9.60	115.84	128.97	62.25
3	CoC 10 337	290.75	2.91	1.57	18.16	15.25	85.02	10.30	126.36	134.96	64.26
4	CoOr 10346	269.00	2.38	1.18	18.00	15.23	85.19	10.55	111.47	121.75	62.35
Standard											
1	CoV 92102	273.50	2.32	1.17	18.70	15.33	85.47	10.25	117.01	125.42	64.51
2	Co 7219	270.25	2.39	1.06	18.29	15.16	84.15	9.32	113.15	123.96	68.44
3	Co 86249	265.50	2.36	0.96	17.12	14.69	83.45	8.85	100.84	110.55	58.37
CD (0.05%)		15.52	0.23	0.16	0.92	0.47	1.37	1.19	14.63	14.32	8.88
CV (%)		3.74	5.95	8.87	3.39	2.08	1.07	8.09	8.51	7.65	9.30

3. Advanced Varietal Trial (Mid-late) - II Plant

Table 3. 1. CCS Yield (t/ha)

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	15.90	15.92	16.49	14.97	15.82
CoC 10 337	15.73	17.18	16.00	16.47	16.34
CoOr 10 346	15.36	16.59	15.69	15.99	15.91
Standard					
CoV 92102	14.45	15.41	14.21	14.63	14.67
Co 7219	12.54	11.88	12.78	14.37	12.89
Co 86249	12.88	12.06	13.42	11.24	12.40
CD (0.05%)					1.21
CV (%)					5.47

Table 3. 2. Cane Yield (t/ha) at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	131.4	128.2	122.7	118.60	125.23
CoC 10 337	127.26	135.62	119.2	132.60	128.67
CoOr 10 346	124.4	130.42	112.34	128.62	123.95
Standard					
CoV 92102	112.34	121.18	107.46	118.34	114.83
Co 7219	103.5	98.65	109.45	114.54	106.54
Co 86249	112.5	92.15	106.47	94.27	101.35
CD (0.05%)					11.51
CV (%)					6.53

Table 3. 3. Sucrose Per cent at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	16.82	17.24	17.12	17.42	17.15
CoC 10 337	17.62	17.05	17.52	17.02	17.30
CoOr 10 346	17.23	17.38	16.92	17.45	17.25
Standard					
CoV 92102	17.6	17.1	17.32	17.80	17.46
Co 7219	17.26	17.35	17.56	17.12	17.32
Co 86249	15.6	16	16.21	15.80	15.90
CD (0.05%)					0.43
CV (%)					1.66

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Table 3. 4. CCS Per cent at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	12.1	12.42	12.55	12.62	12.42
CoC 10 337	12.36	12.67	12.57	12.42	12.51
CoOr 10 346	12.35	12.72	12.61	12.43	12.53
CoV 92102	12.86	12.72	12.65	12.36	12.65
Co 7219	12.12	12.04	12.35	12.55	12.27
Co 86249	11.45	11.68	11.93	11.92	11.75
CD (0.05%)					0.29
CV (%)					1.57

Table 3. 5. Brix Per cent at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	20.15	20.1	19.85	19.92	20.01
CoC 10 337	20.47	20.22	20.32	19.95	20.24
CoOr 10 346	20.15	19.8	20.45	20.42	20.21
CoV 92102	20.51	20.72	20.64	20.57	20.61
Standard					
Co 7219	20.42	20.47	20.36	20.15	20.35
Co 86249	19.51	19.62	19.25	19.50	19.47
CD (0.05%)					0.70
CV (%)					2.31

Table 3. 6. Purity per cent at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	88.32	89.25	88.92	88.83	88.83
CoC 10 337	90.54	88.39	89.12	89.35	89.35
CoOr 10 346	88.81	91.64	90.82	90.42	90.42
Standard					
CoV 92102	90.85	91.67	89.34	90.62	90.62
Co 7219	89.21	89.83	90.31	89.78	89.78
Co 86249	88.52	87.65	89.97	88.71	88.71
CD (0.05%)					1.39
CV (%)					1.03

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Table 3. 7. Pol. per cent at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	12.87	13.43	13.76	13.38	13.36
CoC 10 337	13.68	13.35	14.17	13.75	13.74
CoOr 10 346	13.25	14.15	13.32	13.53	13.56
Standard					
CoV 92102	13.84	14.32	13.93	14.03	14.03
Co 7219	14.15	13.46	13.95	13.85	13.85
Co 86249	12.66	12.72	12.95	12.78	12.78
CD (0.05%)					0.47
CV (%)					2.30

Table 3. 8. Fibre per cent at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	12.87	13.43	13.76	13.27	13.33
CoC 10 337	13.68	13.35	14.17	13.29	13.62
CoOr 10 346	13.25	14.15	13.32	13.53	13.56
Standard					
CoV 92102	13.84	14.12	13.83	13.58	13.84
Co 7219	13.45	13.55	13.46	13.15	13.40
Co 86249	12.55	13.12	12.35	12.67	12.67
CD (0.05%)					0.46
CV (%)					2.27

Table 3. 9. NMC ('000/ha) at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	91.35	108.254	115.241	95.645	102.62
CoC 10 337	104.722	127.676	111.677	122.350	116.61
CoOr 10 346	96.388	94.625	116.345	98.358	101.43
Standard					
CoV 92102	116.481	102.341	121.615	98.453	109.72
Co 7219	99.305	115.624	105.527	92.751	103.30
Co 86249	95.254	83.45	91.95	97.640	92.07
CD (0.05%)					14.44
CV (%)					9.19

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Table 3. 10. Stalk length (cm) at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	285	278	288	276	281.75
CoC 10 337	279	295	284	305	290.75
CoOr 10 346	286	272.5	261.5	256	269.00
Standard					
CoV 92102	273	260	277	284	273.50
Co 7219	275	276	268	262	270.25
Co 86249	256	270	265	271.000	265.50
CD (0.05%)					15.52
CV (%)					3.74

Table 3. 11. Stalk diameter (cm) at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	3.15	2.55	2.85	2.90	2.86
CoC 10 337	2.75	3.10	2.80	3.00	2.91
CoOr 10 346	2.45	2.30	2.35	2.40	2.38
Standard					
CoV 92102	2.40	2.42	2.22	2.25	2.32
Co 7219	2.52	2.41	2.31	2.32	2.39
Co 86249	2.35	2.30	2.52	2.25	2.36
CD (0.05%)					0.23
CV (%)					5.95

Table 3. 12. Single cane Weight (kg) at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	1.32	1.45	1.25	1.36	1.35
CoC 10 337	1.58	1.52	1.65	1.52	1.57
CoOr 10 346	1.21	1.15	1.32	1.05	1.18
Standard					
CoV 92102	1.22	1.32	1.05	1.1	1.17
Co 7219	0.97	1.05	1.27	0.95	1.06
Co 86249	0.93	0.88	0.97	1.05	0.96
CD (0.05%)					0.16
CV (%)					8.87

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Table 3. 13. Brix per cent at 10th month

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	18.25	18.1	17.85	17.90	18.03
CoC 10 337	18.35	18.22	18.15	17.92	18.16
CoOr 10 346	17.85	17.77	18.15	18.22	18.00
Standard					
CoV 92102	18.75	18.62	18.66	18.76	18.70
Co 7219	18.22	18.47	18.21	18.25	18.29
Co 86249	16.85	17.21	17.25	17.15	17.12
CD (0.05%)					0.92
CV (%)					3.39

Table 3. 14. Sucrose % at 10th month

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	14.75	15.31	15.1	15.20	15.09
CoC 10 337	15.32	15.25	15.18	15.25	15.25
CoOr 10 346	15.32	15.25	15.18	15.15	15.23
Standard					
CoV 92102	15.15	15.35	15.72	15.10	15.33
Co 7219	15.15	15.35	14.92	15.20	15.16
Co 86249	14.56	14.65	14.72	14.81	14.69
CD (0.05%)					0.47
CV (%)					2.08

Table 3. 15. Purity % at 10th month

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	84.62	85.25	84.33	85.01	84.80
CoC 10 337	84.95	85.52	84.56	85.07	85.02
CoOr 10 346	85.35	85.62	84.45	85.34	85.19
Standard					
CoV 92102	85.95	85.52	85.15	85.26	85.47
Co 7219	84.15	83.65	84.24	84.56	84.15
Co 86249	83.43	83.75	83.35	83.25	83.45
CD (0.05%)					1.37
CV (%)					1.07

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Table 3. 16. CCS % at 10th month

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	9.55	9.86	9.37	9.63	9.60
CoC 10 337	10.35	10.17	10.14	10.55	10.30
CoOr 10 346	9.85	10.78	10.89	10.69	10.55
Standard					
CoV 92102	10.35	10.25	10.42	9.96	10.25
Co 7219	9.45	9.26	9.23	9.33	9.32
Co 86249	8.72	8.71	9.28	8.67	8.85
CD (0.05%)					1.19
CV (%)					8.09

Table 3. 17. Number of shoots ('000/ha) – 240 days

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	115.24	120.52	122.25	105.35	115.84
CoC 10 337	114.72	136.68	120.68	133.35	126.36
CoOr 10 346	106.35	104.65	126.34	108.54	111.47
Standard					
CoV 92102	126.31	112.64	130.65	98.45	117.01
Co 7219	109.38	125.34	115.24	102.62	113.15
Co 86249	103.62	95.45	99.65	104.64	100.84
CD (0.05%)					14.63
CV[(%)					8.51

AVT Mid-late – II plant

Table 3. 18. Number of Tillers ('000/ha) – 180 days

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	135.42	131.52	133.45	115.47	128.97
CoC 10 337	123.17	143.76	131.77	141.15	134.96
CoOr 10 346	120.35	115.16	135.13	116.35	121.75
Standard					
CoV 92102	135.73	118.64	138.65	108.67	125.42
Co 7219	118.68	134.17	120.24	122.76	123.96
Co 86249	113.62	105.34	109.47	113.75	110.55
CD (0.05%)					14.32
CV (%)					7.65

Table 3. 19. Germination per cent ('000/ha) – 30 days

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	68.52	63.5	55.60	61.37	62.25
CoC 10 337	69.75	64.82	57.32	65.15	64.26
CoOr 10 346	54.62	68.34	62.70	63.75	62.35
CoV 92102	64.35	55.64	66.72	71.34	64.51
Co 7219	73.64	68.45	67.28	64.39	68.44
Co 86249	55.37	60.14	65.34	52.64	58.37
CD (0.05%)					8.88
CV (%)					9.30

4. Advanced Varietal Trial (Mid-late) – Ratoon

Entries	: CoA10321, CoC 10 337 and CoOr 10 346
Standards	: CoV 92102, Co 7219 and Co 86249
Design	: RBD
Replications	: 4
Plot size	Gross: 6.0 m x 6 r x 1.2 m Net : 5.0 m x 4 r x 1.2 m
Seed rate	: 12 buds/m
Crop duration	: 12 months

Advanced Varietal Trial (Mid/late) – Ratoon:

Three test clones and three standards were evaluated in RBD with four replications. The clone CoC 10337 registered the higher cane yield (124.42 t/ha) followed by the clone CoA 10 321 (118.89 t/ha). The clone CoC 10 337 recorded higher sugar yield (15.40 t/ha) followed by the clone CoA 10 321 (15.25 t/ha), while the CCS was maximum in CoV 92102 (12.89%). (Tables 4.1 to 3.14).

Advanced Varietal Trial (Mid/late) – Ratoon:

S. No.	Clone	CCS (t/ha)	Cane yield (t/ha)	Sucrose (%) (12m)	Brix (%) (12 m)	CCS (%) (12m)	Purity (%) (12 m)	Pol. % Cane (12 m)	Fibre (%) (12m)
1	CoA 10 321	15.25	118.89	17.23	19.28	12.51	88.91	13.34	13.34
2	CoC 10 337	15.40	124.42	17.30	19.51	12.57	90.23	14.01	13.73
3	CoOr 10346	15.20	116.56	17.25	19.25	12.66	90.03	13.63	13.83
Standard									
1	CoV 92102	12.87	106.08	17.51	19.77	12.89	90.62	14.14	13.77
2	Co 7219	12.62	102.36	17.24	19.23	12.46	89.77	13.78	13.50
3	Co 86249	11.81	98.40	16.04	18.08	11.81	88.14	12.78	12.74
CD (0.05%)		1.17	11.93	0.54	0.59	0.25	1.13	0.46	0.61
CV (%)		5.62	7.13	2.11	2.05	1.35	0.84	2.25	3.02

S. No.	Clone	NMC ('000/ha) (12 m)	Stalk length (cm)	Stalk Diameter (cm)	Single Cane Wt. (kg)	No. of shoots ('000/ha)	No. of tillers ('000/ha)
1	CoA 10 321	103.78	275.38	2.68	1.27	114.01	129.12
3	CoC 10 337	118.55	283.50	2.77	1.45	125.58	133.57
4	CoOr 10346	103.80	266.88	2.40	1.12	109.86	120.91
Standard							
1	CoV 92102	109.60	271.13	2.42	1.15	116.60	125.03
2	Co 7219	103.30	268.13	2.44	1.05	111.74	122.77
3	Co 86249	93.90	260.00	2.39	0.98	100.92	109.20
CD (0.05%)		14.01	13.31	0.20	0.15	13.48	13.58
CV (%)		8.82	3.26	5.21	8.63	7.91	7.30

AVT (M/L)- Ratoon

Table 4. 1. CCS Yield (t/ha) – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	15.68	15.12	15.45	14.74	15.25
CoC 10 337	14.88	16.41	14.56	15.75	15.40
CoOr 10 346	15.22	15.99	13.44	16.17	15.20
Standard					
CoV 92102	13.41	13.12	12.07	12.89	12.87
Co 7219	14.22	12.20	12.05	11.99	12.62
Co 86249	12.39	11.32	12.07	11.46	11.81
CD (0.05%)					1.17
CV (%)					5.62

Table 4. 2. Cane yield (t/ha) – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	127.4	119.35	121.44	107.35	118.89
CoC 10 337	120.26	127.64	114.65	135.12	124.42
CoOr 10 346	121.35	126.62	105.75	112.50	116.56
Standard					
CoV 92102	108.65	104.65	95.68	115.35	106.08
Co 7219	115.23	97.32	95.52	101.37	102.36
Co 86249	106.36	96.34	101.25	89.65	98.40
CD (0.05%)					11.93
CV (%)					7.13

AVT (M/L)- Ratoon

Table 4. 3. Sucrose % – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	17.12	17.32	16.95	17.51	17.23
CoC 10 337	17.55	17.25	17.45	16.95	17.30
CoOr 10 346	17.47	17.35	16.93	17.25	17.25
Standard					
CoV 92102	17.53	17.32	17.45	17.72	17.51
Co 7219	17.15	17.22	17.27	17.33	17.24
Co 86249	15.75	16.85	16.31	15.24	16.04
CD (0.05%)					0.54
CV (%)					2.11

Table 4. 4 CCS % – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	12.31	12.67	12.72	12.35	12.51
CoC 10 337	12.37	12.86	12.7	12.34	12.57
CoOr 10 346	12.54	12.63	12.71	12.77	12.66
Standard					
CoV 92102	12.56	12.74	13.45	12.82	12.89
Co 7219	12.34	12.54	12.62	12.32	12.46
Co 86249	11.65	11.75	11.92	11.90	11.81
CD (0.05%)					0.25
CV (%)					1.35

AVT (M/L)- Ratoon

Table 4. 5. Brix % – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	19.22	19.33	19.00	19.55	19.28
CoC 10 337	19.62	19.27	19.55	19.60	19.51
CoOr 10 346	19.45	19.38	18.90	19.25	19.25
Standard					
CoV 92102	20.15	19.33	19.51	20.10	19.77
Co 7219	19.22	19.15	19.45	19.10	19.23
Co 86249	17.75	18.90	18.31	17.35	18.08
CD (0.05%)					0.59
CV (%)					2.05

Table 4. 6. Purity % – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	88.45	89.32	88.95	88.91	88.91
CoC 10 337	91.15	89.22	90.25	90.31	90.23
CoOr 10 346	88.67	90.66	90.62	90.15	90.03
Standard					
CoV 92102	90.77	91.62	89.54	90.55	90.62
Co 7219	89.15	89.74	90.45	89.75	89.77
Co 86249	88.65	87.75	88.51	87.65	88.14
CD (0.05%)					1.13
CV (%)					0.84

AVT (M/L)- Ratoon

Table 4. 7. Pol. % – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	13.43	13.81	13.38	12.75	13.34
CoC 10 337	14.21	14.17	13.75	13.92	14.01
CoOr 10 346	14.15	13.32	13.53	13.52	13.63
Standard					
CoV 92102	14.32	14.15	14.25	13.84	14.14
Co 7219	13.35	13.95	13.65	14.15	13.78
Co 86249	12.72	12.95	12.84	12.61	12.78
CD (0.05%)					0.46
CV (%)					2.25

Table 4. 8. Fibre % – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	13.42	12.57	13.62	13.74	13.34
CoC 10 337	13.29	14.10	13.35	14.17	13.73
CoOr 10 346	14.28	13.25	14.15	13.65	13.83
Standard					
CoV 92102	13.58	13.84	14.12	13.55	13.77
Co 7219	13.32	13.45	13.72	13.52	13.50
Co 86249	12.55	12.95	13.12	12.35	12.74
CD (0.05%)					0.61
CV (%)					3.02

AVT (M/L)- Ratoon

Table 4. 9. NMC ('000/ha) – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	105.55	117.57	93.35	98.65	103.78
CoC 10 337	130.25	115.95	105.64	122.35	118.55
CoOr 10 346	97.62	120.65	94.39	102.54	103.80
Standard					
CoV 92102	103.34	119.22	116.48	99.35	109.60
Co 7219	115.62	105.53	99.31	92.75	103.30
Co 86249	90.34	89.65	95.25	100.37	93.90
CD (0.05%)					14.01
CV (%)					8.82

Table 4. 10. Stalk length (cm) – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	281.00	275.00	280.50	265.00	275.38
CoC 10 337	284.00	274.00	295.00	281.00	283.50
CoOr 10 346	257.00	275.00	270.00	265.50	266.88
Standard					
CoV 92102	272.00	273.00	260.00	279.50	271.13
Co 7219	262.00	275.00	264.50	271.00	268.13
Co 86249	270.00	258.00	267.00	245.00	260.00
CD (0.05%)					13.31
CV (%)					3.26

AVT (M/L)- Ratoon

Table 4. 11. Stalk Diameter (cm) – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	2.80	2.67	2.75	2.51	2.68
CoC 10 337	2.75	2.80	2.62	2.91	2.77
CoOr 10 346	2.35	2.44	2.57	2.25	2.40
Standard					
CoV 92102	2.35	2.31	2.4	2.61	2.42
Co 7219	2.37	2.32	2.61	2.45	2.44
Co 86249	2.52	2.31	2.41	2.30	2.39
CD (0.05%)					0.20
CV (%)					5.21

Table 4. 12. Single cane weight (kg) – at harvest

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	1.22	1.25	1.32	1.30	1.27
CoC 10 337	1.45	1.35	1.47	1.52	1.45
CoOr 10 346	1.25	1.05	1.21	0.95	1.12
Standard					
CoV 92102	1.05	1.10	1.22	1.24	1.15
Co 7219	1.21	0.95	1.00	1.05	1.05
Co 86249	0.97	1.10	0.93	0.90	0.98
CD (0.05%)					0.15
CV (%)					8.63

AVT (M/L)- Ratoon

Table 4. 13. Number of Shoots ('000/ha) – 240 days

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	112.67	120.75	115.24	107.37	114.01
CoC 10 337	134.76	121.45	113.67	132.45	125.58
CoOr 10 346	102.68	123.41	105.71	107.62	109.86
Standard					
CoV 92102	111.65	129.64	125.43	99.67	116.60
Co 7219	123.24	113.75	108.75	101.21	111.74
Co 86249	96.37	100.34	104.58	102.38	100.92
CD (0.05%)					13.48
CV (%)					7.91

Table 4. 14. Number of Tillers ('000/ha) – 120 days

Entries	R I	R II	R III	R IV	Mean
CoA 10 321	132.26	130.94	137.82	115.47	129.12
CoC 10 337	126.34	141.64	130.64	135.67	133.57
CoOr 10 346	118.65	117.28	133.95	113.76	120.91
Standard					
CoV 92102	139.64	120.64	132.58	107.27	125.03
Co 7219	117.39	132.72	119.78	121.19	122.77
Co 86249	110.59	104.23	106.34	115.64	109.20
CD (0.05%)					13.58
CV (%)					7.30

5. Fluff - 2015

1.	Total no. of Crosses received	: 79
		a) Zonal crosses: 13
		b) Station crosses: 23
		c) Poly crosses: 13
		d) General Collections: 20
2.	Total weight of fluff received:	1.754 Kgs
3.	Date of sowing	02.03.2015 to 09.03.2015
4.	No. of crosses / GC germinated	70
5.	Total no. of seedlings germinated	4625

Table 5.1. Number of Seedlings Germinated

Type of cross	No. of Cross Sown	No. crosses germinated	Total no. of Seedlings obtained
Station Crosses	23	15	1514
Zonal crosses	11	09	863
Poly Crosses	13	09	1413
General Collections	20	13	835
Total	79	46	4625

Table 6. Meteorological Data - 2014

Month/ Year	Temperature (°C)		Relative Humidity (%)	Rainfall (mm)	No. of rainy days
	Max	Min			
Jan.2014	30.28	19.58	83.48	0.00	0
Feb. 2014	31.90	20.03	79.61	14.40	2
Mar. 2014	34.44	21.63	76.71	0.00	0
Apr. 2014	37.34	24.25	74.45	0.00	0
May 2014	36.69	26.52	76.98	157.60	5
Jun. 2014	37.58	27.23	74.57	61.00	3
Jul. 2014	36.33	26.55	76.84	54.60	4
Aug. 2014	35.14	25.65	81.35	164.20	9
Sep. 2014	35.66	25.24	79.15	134.80	6
Oct. 2014	32.61	24.63	86.00	162.80	11
Nov. 2014	29.86	23.49	88.65	148.70	10
Dec. 2014	29.78	23.20	86.89	83.20	11
Total				981.30	61