

**AICRP(S)-EAST COAST ZONE
SUGARCANE RESEARCH STATION, CUDDALORE**

ANNUAL REPORT-2011-12

CROP IMPROVEMENT

Early Trials: Three trials viz., Advanced Varietal Trial (Early) I Plant, Advanced Varietal Trial (Early) II Plant and Advanced Varietal Trial (Early) Ratoon were conducted as per the technical programme and the results are furnished below.

Advanced Varietal Trial (Early) I Plant: The performance of six clones was evaluated against three check varieties. Except for cane yield and purity at 8th month, the entries exhibited significant differences among themselves for all the other characters. The clone CoC 08336 registered the highest cane yield (121.37 t/ha), CCS(13.06 %), sugar yield (15.84 t/ha) and SCW(1.31 kg). It also recorded the highest Brix (20.6%) and Sucrose (18.67%) (Tables 1.1 to 1.17).

Advanced Varietal Trial (Early) II Plant: Two clones were tested against three standards. Significant differences were observed among the entries for all the characters studied except for Brix, Sucrose, CCS and purity on 10th month and sucrose and purity on 8th month. The standard CoC 01 061 recorded the highest cane yield (115.86 t/ha), sugar yield (14.13 t/ha) and CCS of 12.17 per cent. The higher cane yield can be attributed to the highest NMC of 1.18 lakh/ha recorded by this clone. The clone CoA07321 had the highest single cane weight of 1.17kg. (Tables 2.1 to 2.17).

Advanced Varietal Trial (Early) Ratoon: Two clones were evaluated against three standards. The entries differed significantly among themselves for all the characters studied except for CCS (%) Brix (%) and purity(%) on 9th month. The standard Co 6907 recorded the highest cane yield (130.16t/ha) and sugar yield (13.28t/ha) (Tables 3.1 to 3.12).

Mid/Late Trials: Three trials viz., AVT (Mid/Late) I Plant, AVT (Mid/Late) II Plant and AVT (Mid/Late) Ratoon were conducted as per the technical programme. The AICRP(S) Monitoring Team which inspected the trials on 24.8.2011 suggested that the AVT (Mid/Late) Ratoon might be abandoned due to poor plant stand. These trials were completely damaged by the Thane

cyclone which hit the District on 30.12.2011. The wind velocity was 145 km/ha and the experimental crops which were 11 months old were completely lodged. No data (both qualitative and quantitative) could be recorded at the time of harvest. However, the data recorded up to 10 months are analyzed and the results are reported in respect of the two trials.

Advanced Varietal Trial (Mid/late) I Plant: Three test clones were evaluated against 3 check varieties. The entries differed significantly among themselves for all the characters studied. The clone CoC 08339 registered the highest germination (60.75%), tiller population (1.61 lakh/ha) and shoot population (1.89 lakh/ha). The clone CoC 09337 had the highest CCS of 11.20% on 10th month (Tables 4.1 to 4.7).

Advanced Varietal Trial (Mid/late) II Plant: Two clones were tested against three check varieties. The entries differed significantly among themselves for all the characters studied except purity. The clone CoA 07322 registered the highest germination (63.98%) while the standard CoV 92102 had the highest tiller (1.42lakh/ha) and shoot (1.70 lakh/ha) populations. This clone also had the highest Brix (19.7%), Sucrose (16.5%) and CCS (11.13%) (Tables 5.1 to 5.7).

Fluff-2012

1	Total no.of crosses received	:70
		a)Zonal crosses: 11
		b)Station crosses:18
		c)Poly crosses:13
		d)General Collections:28
2	Total weight of fluff received:	956.62 gm
3	Date of sowing	:21.2.2012-27.2.2012
4	No.of crosses/GC germinated	:65
5	Total no. of seedlings germinated	: 16788

Table 6. No.of seedlings germinated

Type of cross	No.of crosses sown	No.of crosses germinated	Total no.of seedlings
Station crosses	18	15	784
Zonal crosses	11	11	1862
Poly crosses	13	11	1926
General Collections	28	28	11980
GC(Station)	10	1	236
Total	80	66	16788

The seedlings were transplanted from 11.5.2012 to 21.05.2012

**Table7. Details of seedlings germinated, transplanted and established from fluff
obtained from SBI, Coimbatore**

S.no	Cross/PC/GC	No.of seedlings germinated	No.of seedlings transplanted	No.of seedlings established*	Establishment (%)*
	Station crosses				
1	Co 87023 x Co Pant 92227	1	1		
2	Co 0118 x ISH 69	Nil	Nil		
3	CoA 92082 x Co 94008	77	70		
4	Co 7219 x Co Se 92423	119	110		
5	Co 8313 x Co 775	58	50		
6	C 79218 x Co 93009	85	80		
7	Co 94012 x Co 94008	112	100		
8	Co 8600 2x Co Pant	Nil	Nil		

	92007				
9	Co 8339 x CoT8201	Nil	Nil		
10	C 81615 x Co 62198	9	Nil		
11	C 79218 x CoT 8201	250	220		
12	Co 8339 x Co62174	7	Nil		
13	Co 8339 x Co 86249	8	Nil		
14	Co 7219 x CoC 90063	Nil	Nil		
15	CoM 6806 x CoS8436	44	30		
16	Co8340 x Co 62198	Nil	Nil		
17	Co 94008x Co 88013	9	Nil		
18	Co 99006 x Co 86032	5	5		
	Zonal crosses				
19	CoA 92081 x Co 94008	20	20		
20	CoV 89101 x ISH 69	186	170		
21	CoV 89101 x CoA7602	150	150		
22	CoV 89101 x CoT 8201	720	670		
23	ISH 100 x C 81615	110	110		
24	Co 6304 x CoA7602	113	110		
25	CoA 92081 x CoT 8201	80	80		
26	CoC 90063 x Co94008	280	270		
27	CoA 92081 x CoV 92102	43	40		

28	Co 8371 x Co775	120	100		
29	Co 740 x Co C 671	40	40		
	Poly crosses				
30	CoM 0265	Nil	Nil		
31	ISH 100	263	250		
32	Co 94012	59	59		
33	Co 85002	150	150		
34	CoA 7602	410	400		
35	86V46	125	110		
36	CoC 671	84	69		
37	81V48	240	210		
38	CP 5268	10	10		
39	Co 2000-10	40	30		
40	CoC 90063	107	90		
41	Co 7201	202	200		
42	Co 8371	236	210		
	General collections				
43	CoV 92102	395	360		
44	Co 94012	151	150		
45	Co 7219	10	6		
46	Co 8341	132	130		
47	Co 8338	31	30		
48	Co 94008	34	30		
49	CoC 671	80	80		

50	CoA 92082	27	27		
51	Co 87023	17	16		
52	Co 8340	237	210		
53	Co 0118	160	150		
54	Co 86002	47	40		
55	Co 8339	92	60		
56	Co 79218	1320	900		
57	Co 8318	720	330		
58	C 81615	96	90		
59	CoM 6806	900	820		
60	Co 99006	290	260		
61	Co 0331	230	230		
62	Co 7915	485	430		
63	Co 1305	36	20		
64	Co6 17	1050	830		
65	KMS 24122	1110	690		
66	ISH 307	775	510		
67	C 84070	1635	1230		
68	Co 312	640	630		
69	Co 7224	760	760		
70	Co 86011	520	270		
	GC(Station)				
71	C260335	236	200		
	Total	16788	13703		

* Will be recorded later

Table 8.Achievement made in fluff supply programme from the year 2007-2012

S.no	Year	Crosses	GC/PC	No.of seedlings	Present stage				
					C1	C2	C3	C4	C5
1	2012	29	41	16788					
2	2011	30	20	1070	200				
3	2010	48	40	7,007	378	56			
4	2009	42	15	6,589	450	221	48		
5	2008	50	50	8,881	461	328	65	14	
6	2007	45	52	35,365	215	210	106	22	4

Table 9.Meteorological Data-2011

Month/ Year	Temperature(C)		Relative humidity (%)		Rainfall (mm)	No. of rainy days
	Max	Min	Max	Min		
Jan.2011	27.8	21.1	99.07	74.87	78.5	2
Feb.	28.3	21.6	98.53	71.64	0	0
Mar.	30.3	23.5	99.0	67.80	0	0
Apr.	31.5	26.6	97.23	76.63	107.5	4
May	34.7	28.1	85.24	62.83	3.0	1
Jun.	35.7	28.4	72.23	43.60	0	0
Jul.	33.9	27.2	82.67	51.32	49.0	4
Aug.	32.6	26.4	89.80	62.38	86.0	7
Sep.	32.4	26.2	93.76	65.30	159.5	8
Oct.	30.2	25.3	95.83	79.83	380.5	11
Nov.	27.9	23.7	99.1	80.1	514.5	11
Dec.	27.8	22.3	97.21	72.03	129.5	4
Total					1508.0	52

1.Advanced Varietal Trial (Early)-I Plant

Entries	:CoA 08323,CoA 09321, CoC 08336,CoC 09336, CoV 09356 and PI 09376
Standards	:Co 6907,CoC 01061 and CoA 92081
Design	:RBD
Replications	:3
Plot size	Gross:6.0 m x 8 r x 0.8 m Net :5.0 m x 6 r x 0.8 m
Seed rate	: 12 buds/m
Planting time	:31.1.2011
Crop duration	:10 months

AVT (Early) I Plant

S.No	Clone	CCS(t/ha)	Cane yield (t/ha)	Brix % (10 m)	Sucrose % (10 m)	Purity % (10 m)	CCS % (10 m)	NMC (000/ha) at 10 m
1	CoA 08323	9.63	86.80	18.5	16.13	87.17	11.08	75.86
2	CoA 09 321	10.75	91.23	19.2	17.03	88.70	11.80	85.23
3	CoC08 336	15.84	121.37	20.6	18.67	90.60	13.06	92.44
4	CoC 09336	10.07	85.93	19.4	17.03	87.80	11.74	104.25
5	CoV 09356	9.87	83.67	19.4	17.10	88.10	11.81	75.38
6	PI 09376	10.43	86.34	19.5	17.40	89.10	12.08	85.76
Stds								
1	Co6907	11.59	101.09	18.9	17.10	88.00	11.48	105.25
2	Co C 01061	12.45	106.32	19.3	16.97	87.90	11.70	100.49
3	CoA 92081	12.00	109.06	18.4	16.00	87.17	11.02	111.19
	CD(P=0.05)	3.10	NS	0.44	0.41	1.16	0.31	20.19
	CV(%)	15.69	16.47	1.33	1.40	0.76	1.58	12.56

Sl.No	Clone	Stalk length(cm)	Stalk diameter (cm)	SCW (kg)	Brix % (8m)	Sucrose % (8m)	Purity % (8m)	CCS % (8m)	No.of shoots (000/ha) 240 days	No.of tillers (000/ha) 120 days	Germination (%) 30 days
1	CoA 08323	171.3	2.8	1.14	16.60	14.07	84.73	9.53	83.38	96.05	50.5
2	CoA 09 321	184.7	2.6	1.07	17.20	14.50	84.30	9.80	97.00	110.20	50.4
3	CoC08 336	202.0	2.8	1.31	18.83	16.40	87.07	11.26	103.03	119.40	68.5
4	CoC 09336	180.3	2.5	0.82	17.67	14.90	84.50	10.10	114.78	133.59	50.6
5	CoV 09356	186.0	2.8	1.11	17.43	14.87	85.20	10.10	85.19	98.66	44.5
6	PI 09376	151.0	2.7	1.00	17.60	14.57	82.80	9.75	95.75	109.50	49.0
Stds											
1	Co6907	202.0	2.4	0.96	17.30	15.03	86.97	10.31	118.44	132.22	60.7
2	Co C 01061	207.7	2.5	1.04	17.40	14.77	84.70	10.00	111.51	125.59	45.5
3	CoA 92081	192.3	2.5	0.97	16.50	13.77	83.23	9.25	120.78	135.32	54.8
	CD(P=0.05)	16.35	0.17	0.13	0.61	0.61	NS	0.58	23.53	23.84	5.06
	CV(%)	5.07	3.69	7.14	2.05	2.39	2.27	3.25	13.11	11.69	5.55

AVT (EARLY) I PLANT

Table 1.1 CCS (t/ha)

Clone	RI	RII	RIII	Mean
CoA 08323	9.23	11.77	7.88	9.63
CoA 09321	11.86	10.79	9.60	10.75
CoC 08336	15.86	15.26	16.41	15.84
CoC 09336	10.26	8.49	11.46	10.07
CoV 09356	8.20	10.89	10.51	9.87
PI 09376	11.70	8.65	10.95	10.43
Stds				
Co 6907	10.15	11.76	12.86	11.59
CoC 01061	8.46	14.83	14.08	12.45
CoA 92081	10.00	13.48	12.52	12.00
General mean				11.40
SE(m)±				1.03
CD(P=0.05)				3.10
CV (%)				15.69

Table 1.2 Cane yield (t/ha)

Clone	RI	RII	RIII	Mean
CoA 08323	84.22	104.85	71.33	86.80
CoA 09321	102.10	91.41	80.17	91.23
CoC 08336	122.16	115.87	126.09	121.37
CoC 09336	88.38	70.78	98.63	85.93
CoV 09356	68.34	93.73	88.95	83.67
PI 09376	97.85	72.22	88.95	86.34
Stds				
Co 6907	88.66	99.40	115.20	101.09
CoC 01061	72.80	126.65	119.50	106.32
CoA 92081	89.92	123.20	114.07	109.06
General mean				96.87
SE(m)±				9.21
CD(P=0.05)				NS
CV (%)				16.47

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Table 1.3 Brix (%)- 10 months

Clone	RI	RII	RIII	Mean
CoA 08323	18.4	18.6	18.5	18.50
CoA 09321	19.0	19.4	19.2	19.20
CoC 08336	20.6	20.7	20.5	20.60
CoC 09336	19.4	19.8	19.0	19.40
CoV 09356	19.8	19.0	19.4	19.40
PI 09376	19.6	19.2	19.8	19.50
Stds				
Co 6907	18.9	19.0	18.8	18.90
CoC 01061	19.0	19.4	19.5	19.30
CoA 92081	18.6	18.2	18.4	18.40
General mean				19.24
SE(m)±				0.15
CD(P=0.05)				0.44
CV (%)				1.33

Table 1.4 Sucrose (%)-10 months

Clone	RI	RII	RIII	Mean
CoA 08323	16.0	16.3	16.1	16.13
CoA 09321	16.8	17.1	17.2	17.03
CoC 08336	18.6	18.8	18.6	18.67
CoC 09336	16.9	17.4	16.8	17.03
CoV 09356	17.4	16.8	17.1	17.10
PI 09376	17.3	17.2	17.7	17.40
Stds				
Co 6907	16.6	17.0	16.3	17.10
CoC 01061	16.8	17.0	17.1	16.97
CoA 92081	16.2	15.9	16.0	16.00
General mean				17.00
SE(m)±				0.14
CD(P=0.05)				0.41
CV (%)				1.40

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Table 1.5 CCS (%)- 10 months

Clone	RI	RII	RIII	Mean
CoA 08323	10.97	11.23	11.05	11.08
CoA 09321	11.62	11.81	11.97	11.80
CoC 08336	12.99	13.17	13.02	13.06
CoC 09336	11.61	12.00	11.62	11.74
CoV 09356	12.00	11.62	11.81	11.81
PI 09376	11.96	11.97	12.31	12.08
Stds				
Co 6907	11.45	11.83	11.17	11.48
CoC 01061	11.62	11.71	11.78	11.70
CoA 92081	11.13	10.94	10.98	11.02
General mean				11.75
SE(m)±				0.11
CD(P=0.05)				0.31
CV (%)				1.58

Table 1.6 Purity (%)-10 months

Clone	RI	RII	RIII	Mean
CoA 08323	86.9	87.6	87.0	87.17
CoA 09321	88.4	88.1	89.6	88.70
CoC 08336	90.2	90.8	90.7	90.60
CoC 09336	87.1	87.9	88.4	87.80
CoV 09356	87.9	88.4	88.1	88.10
PI 09376	88.3	89.6	89.4	89.10
Stds				
Co 6907	87.8	89.5	86.7	88.00
CoC 01061	88.4	87.6	87.7	87.90
CoA 92081	87.1	87.4	87.0	87.17
General mean				88.28
SE(m)±				0.39
CD(P=0.05)				1.16
CV (%)				0.76

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Table 1.7 NMC (000/ha)at 10months

Clone	RI	RII	RIII	Mean
CoA 08323	79.45	86.65	61.49	75.86
CoA 09321	98.17	84.64	72.88	85.23
CoC 08336	89.83	91.96	95.53	92.44
CoC 09336	103.98	88.48	120.28	104.25
CoV 09356	65.09	79.43	81.61	75.38
PI 09376	90.60	76.83	89.85	85.76
Stds				
Co 6907	94.32	101.43	120.00	105.25
CoC 01061	84.65	109.18	107.66	100.49
CoA 92081	101.03	118.46	114.07	111.19
General mean				91.87
SE(m)±				6.73
CD(P=0.05)				20.19
CV (%)				12.56

Table 1.8 Brix (%)-8 months

Clone	RI	RII	RIII	Mean
CoA 08323	16.8	16.8	16.2	16.60
CoA 09321	17.1	17.2	17.3	17.20
CoC 08336	18.8	18.9	18.8	18.83
CoC 09336	17.9	17.9	17.2	17.67
CoV 09356	17.8	17.0	17.5	17.43
PI 09376	17.6	17.3	17.9	17.60
Stds				
Co 6907	18.0	17.1	16.8	17.30
CoC 01061	17.0	17.5	17.8	17.40
CoA 92081	16.7	16.3	16.6	16.50
General mean				17.40
SE(m)±				0.21
CD(P=0.05)				0.61
CV (%)				2.05

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Table 1.9 Sucrose (%)-8 months

Clone	RI	RII	RIII	Mean
CoA 08323	14.2	14.3	13.7	14.07
CoA 09321	14.4	14.5	14.6	14.50
CoC 08336	16.3	16.5	16.4	16.40
CoC 09336	15.0	15.2	14.6	14.90
CoV 09356	15.1	14.2	15.3	14.87
PI 09376	15.2	14.5	14.0	14.57
Stds				
Co 6907	15.1	14.8	15.2	15.03
CoC 01061	14.4	14.9	15.0	14.77
CoA 92081	13.9	13.5	13.9	13.77
General mean				14.76
SE(m)±				0.21
CD(P=0.05)				0.61
CV (%)				2.39

Table 1.10 CCS (%)- 8 months

Clone	RI	RII	RIII	Mean
CoA 08323	9.61	9.71	9.27	9.53
CoA 09321	9.72	9.80	9.87	9.80
CoC 08336	11.17	11.34	11.27	11.26
CoC 09336	10.10	10.31	9.90	10.10
CoV 09356	10.23	9.55	10.53	10.10
PI 09376	10.40	9.77	9.08	9.75
Stds				
Co 6907	10.18	10.13	10.63	10.31
CoC 01061	9.75	10.12	10.13	10.00
CoA 92081	9.33	9.04	9.36	9.24
General mean				10.01
SE(m)±				0.27
CD(P=0.05)				0.58
CV (%)				3.25

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Table 1.11 Purity (%)-8 months

Clone	RI	RII	RIII	Mean
CoA 08323	84.5	85.1	84.6	84.73
CoA 09321	84.2	84.3	84.4	84.30
CoC 08336	86.7	87.3	87.2	87.07
CoC 09336	83.8	84.9	84.8	84.50
CoV 09356	84.8	83.5	87.4	85.20
PI 09376	86.4	83.8	78.2	82.80
Stds				
Co 6907	83.9	86.5	90.5	86.97
CoC 01061	84.7	85.1	84.3	84.70
CoA 92081	83.2	82.8	83.7	83.23
General mean				84.84
SE(m)±				1.12
CD(P=0.05)				NS
CV (%)				2.27

Table 1.12 Stalk length(cm)

Clone	RI	RII	RIII	Mean
CoA 08323	157	188	169	171.8
CoA 09321	176	193	185	184.7
CoC 08336	200	198	208	202.0
CoC 09336	186	175	180	180.3
CoV 09356	169	206	183	186.0
PI 09376	159	143	151	151.0
Stds				
Co 6907	197	208	201	202.0
CoC 01061	196	221	206	207.7
CoA 92081	188	197	192	192.3
General mean				186.4
SE(m)±				5.5
CD(P=0.05)				16.4
CV (%)				5.1

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Table 1.13 Stalk diameter(cm)

Clone	RI	RII	RIII	Mean
CoA 08323	2.8	2.8	2.7	2.8
CoA 09321	2.6	2.5	2.6	2.6
CoC 08336	2.6	2.9	2.8	2.8
CoC 09336	2.4	2.5	2.5	2.5
CoV 09356	2.7	2.9	2.8	2.8
PI 09376	2.7	2.7	2.6	2.7
Stds				
Co 6907	2.3	2.4	2.4	2.4
CoC 01061	2.3	2.7	2.6	2.5
CoA 92081	2.6	2.5	2.5	2.5
General mean				2.60
SE(m)±				0.06
CD(P=0.05)				0.17
CV (%)				3.69

Table 1.14 SCW (kg)

Clone	RI	RII	RIII	Mean
CoA 08323	1.06	1.21	1.16	1.14
CoA 09321	1.04	1.08	1.10	1.07
CoC 08336	1.36	1.26	1.32	1.31
CoC 09336	0.85	0.80	0.82	0.82
CoV 09356	1.05	1.18	1.09	1.11
PI 09376	1.08	0.94	0.99	1.00
Stds				
Co 6907	0.94	0.98	0.96	0.96
CoC 01061	0.86	1.16	1.11	1.04
CoA 92081	0.89	1.04	1.00	0.97
General mean				1.05
SE(m)±				0.04
CD(P=0.05)				0.13
CV (%)				7.14

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Table 1.15 No.of shoots (000/ha)-240 days

Clone	RI	RII	RIII	Mean
CoA 08323	87.60	94.15	68.39	83.38
CoA 09321	112.55	96.33	82.12	97.00
CoC 08336	100.61	103.14	105.35	103.03
CoC 09336	114.48	99.40	130.46	114.78
CoV 09356	73.55	90.55	91.48	85.19
PI 09376	101.46	85.38	100.41	95.75
Stds				
Co 6907	106.38	114.82	134.11	118.44
CoC 01061	94.80	121.15	119.20	111.51
CoA 92081	111.18	128.68	122.47	120.78
General mean				103.71
SE(m)±				7.85
CD(P=0.05)				23.53
CV (%)				13.11

Table 1.16 No.of tillers (000/ha)-120 days

Clone	RI	RII	RIII	Mean
CoA 08323	100.74	108.27	79.14	96.05
CoA 09321	128.31	108.62	93.68	110.20
CoC 08336	116.76	120.24	121.48	119.49
CoC 09336	135.21	116.29	149.28	133.59
CoV 09356	85.48	104.38	106.12	98.66
PI 09376	115.29	99.06	114.15	109.50
Stds				
Co 6907	120.32	128.53	147.82	132.22
CoC 01061	107.12	135.95	133.69	125.59
CoA 92081	125.20	145.27	135.48	135.32
General mean				117.85
SE(m)±				7.95
CD(P=0.05)				23.84
CV (%)				11.69

AVT (EARLY)I PLANT

Table 1.17 Germination (%) -30 days

Clone	RI	RII	RIII	Mean
CoA 08323	51.6	47.3	52.6	50.5
CoA 09321	50.6	47.3	53.2	50.4
CoC 08336	64.3	68.7	72.5	68.5
CoC 09336	48.5	49.7	53.5	50.6
CoV 09356	43.2	41.7	48.6	44.5
PI 09376	47.3	49.1	50.7	49.0
Stds				
Co 6907	60.6	58.5	63.1	60.7
CoC 01061	49.7	45.3	41.6	45.5
CoA 92081	57.4	55.2	51.9	54.8
General mean				52.73
SE(m)±				1.69
CD(P=0.05)				5.06
CV (%)				5.55

2. Advanced Varietal Trial (Early) II Plant

Entries	:CoA 07321 and CoV 07356
Standards	: Co 6907,CoC 01061 and CoA 92081
Design	:RBD
Replications	:4
Plot size	Gross:6.0 m x 6 r x 0.8 m Net :5.0 m x 4 r x 0.8 m
Seed rate	: 12 buds/m
Planting time	: 31.1.2011
Crop duration	:10 months

Advanced Varietal Trial(Early)-II Plant

S.No	Clone	CCS(t/ha)	Cane yield (t/ha)	Brix % (10 m)	Sucrose % (10 m)	Purity % (10 m)	CCS % (10 m)	NMC (000/ha) at 10 m
1	CoA 07321	11.12	98.39	18.78	16.40	87.28	11.28	84.44
2	CoV 07356	8.46	71.40	19.28	17.10	88.70	11.85	88.74
Std								
1	Co 6907	12.27	106.48	18.90	16.63	87.90	11.47	110.65
2	CoC 01061	14.13	115.86	19.75	17.55	88.83	12.17	117.94
3	CoA 92081	11.78	106.31	18.33	16.08	87.65	11.08	108.61
	CD(P=0.05)	2.34	16.81	NS	NS	NS	NS	18.94
	CV (%)	12.83	10.95	3.92	4.64	0.93	5.02	12.04

S.No	Clone	Stalk length (cm)	Stalk diameter (cm)	SC W (kg)	Brix % (8m)	Sucrose % (8m)	Purity % (8m)	CCS % (8m)	No.of shoots (000/ha) 240 days	No.of tillers (000/ha) 120 days	Germi nation (%) 30 days
1	CoA 07321	187.3	2.60	1.17	16.75	14.80	88.35	10.24	94.31	107.00	36.22
2	CoV 07356	219.0	2.23	0.81	18.15	15.55	85.70	10.59	99.23	114.22	36.40
Stds											
1	Co 6907	197.5	2.35	0.96	17.30	14.93	86.25	10.20	124.02	138.51	48.38
2	CoC 01061	209.8	2.38	0.99	19.05	16.78	88.00	11.58	131.78	148.53	54.95
3	CoA 92081	189.3	2.55	0.98	17.65	15.48	87.60	10.66	122.15	135.17	48.03
	CD(P=0.05)	14.08	0.13	0.09	1.34	NS	1.89	NS	17.13	15.09	8.57
	CV (%)	4.56	3.42	6.01	4.88	5.69	1.41	6.18	9.73	7.62	12.43

AVT (EARLY)-II Plant

Table 2.1 CCS (t/ha)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	8.89	12.02	10.15	13.31	11.12
CoV 07356	9.33	9.13	7.93	7.46	8.46
Std					
Co 6907	11.78	15.22	10.21	11.86	12.27
CoC 01061	11.90	14.50	13.89	16.26	14.13
CoA 92081	8.49	12.97	12.70	12.95	11.78
General mean					11.85
SE(m)±					0.76
CD(P=0.05)					2.34
CV (%)					12.83

Table 2.2 Cane yield (t/ha)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	82.40	96.95	101.53	112.67	98.39
CoV 07356	75.52	77.84	69.99	62.26	71.40
Std					
Co 6907	104.47	121.77	99.38	99.79	106.48
CoC 01061	104.67	119.11	115.91	123.74	115.86
CoA 92081	81.68	113.91	124.82	104.86	106.31
General mean					99.66
SE(m)±					5.45
CD(P=0.05)					16.81
CV (%)					10.95

Table 2.3 Brix (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	18.3	20.2	17.2	19.4	18.78
CoV 07356	20.0	19.0	18.6	19.5	19.28
Std					
Co 6907	18.6	20.2	17.3	19.5	18.90
CoC 01061	18.8	19.9	19.5	20.8	19.75
CoA 92081	17.6	18.4	17.3	20.0	18.33
General mean					19.01
SE(m)±					0.37
CD(P=0.05)					NS
CV (%)					3.92

AVT (EARLY) II PLANT

Table 2.4 Sucrose (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	15.9	17.9	14.7	17.1	16.40
CoV 07356	17.8	16.9	16.4	17.3	17.10
Std					
Co 6907	16.3	18.0	15.0	17.2	16.63
CoC 01061	16.5	17.6	17.3	18.8	17.55
CoA 92081	15.2	16.4	14.9	17.8	16.08
General mean					16.75
SE(m)±					0.39
CD(P=0.05)					NS
CV (%)					4.64

Table 2.5 CCS (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	10.91	12.40	10.00	11.81	11.28
CoV 07356	12.35	11.72	11.33	11.99	11.85
Std					
Co 6907	11.23	12.50	10.28	11.88	11.47
CoC 01061	11.37	12.18	11.99	13.14	12.17
CoA 92081	10.40	11.39	10.18	12.35	11.08
General mean					11.57
SE(m)±					0.30
CD(P=0.05)					NS
CV (%)					5.02

Table 2.6 Purity (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	86.9	88.6	85.5	88.1	87.28
CoV 07356	89.0	88.9	88.2	88.7	88.70
Std					
Co 6907	87.6	89.1	86.7	88.2	87.90
CoC 01061	11.37	12.18	11.99	13.14	12.17
CoA 92081	86.4	89.1	86.1	89.0	87.65
General mean					88.07
SE(m)±					0.41
CD(P=0.05)					NS
CV (%)					0.93

AVT (EARLY) II PLANT

Table 2.7 NMC (000/ha) at 10 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	71.65	80.79	89.85	95.48	84.44
CoV 07356	100.69	93.78	89.73	70.75	88.74
Std					
Co 6907	110.49	124.25	99.38	108.47	110.65
CoC 01061	123.14	125.38	105.37	117.85	117.94
CoA 92081	90.75	108.49	124.82	110.38	108.61
General mean					102.08
SE(m)±					6.14
CD(P=0.05)					18.94
CV (%)					12.04

Table 2.8 Stalk length (cm)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	190	196	180	183	187.3
CoV 07356	220	210	216	230	219.0
Std					
Co 6907	195	206	201	188	197.5
CoC 01061	220	208	196	215	209.8
CoA 92081	185	194	198	180	189.3
General mean					200.6
SE(m)±					4.6
CD(P=0.05)					14.1
CV (%)					4.6

Table 2.9 Stalk diameter (cm)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	2.60	2.45	2.70	2.65	2.60
CoV 07356	2.20	2.30	2.15	2.25	2.23
Std					
Co 6907	2.30	2.40	2.40	2.30	2.35
CoC 01061	2.30	2.50	2.40	2.30	2.38
CoA 92081	2.50	2.60	2.50	2.60	2.55
General mean					2.42
SE(m)±					0.04
CD(P=0.05)					0.13
CV (%)					3.42

AVT (EARLY) II PLANT

Table 2.10 SCW (kg)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	1.15	1.20	1.13	1.18	1.17
CoV 07356	0.75	0.83	0.78	0.88	0.81
Std					
Co 6907	0.95	0.98	1.00	0.92	0.96
CoC 01061	0.85	0.95	1.10	1.05	0.99
CoA 92081	0.90	1.05	1.00	0.95	0.98
General mean					0.98
SE(m)±					0.03
CD(P=0.05)					0.09
CV (%)					6.01

Table 2.11 Brix (%) 8 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	16.8	16.8	16.6	16.8	16.75
CoV 07356	18.2	18.0	18.8	17.6	18.15
Std					
Co 6907	17.8	17.0	16.6	17.8	17.30
CoC 01061	18.2	18.8	21.0	18.2	19.05
CoA 92081	16.6	17.0	18.0	19.0	17.65
General mean					17.78
SE(m)±					0.43
CD(P=0.05)					1.34
CV (%)					4.88

Table 2.12 Sucrose (%) 8 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	14.7	14.8	14.7	15.0	14.80
CoV 07356	15.8	15.5	15.6	15.3	15.55
Std					
Co 6907	15.4	14.6	14.3	15.4	14.93
CoC 01061	16.0	16.5	18.8	15.8	16.78
CoA 92081	14.3	14.9	15.8	16.9	15.48
General mean					15.51
SE(m)±					0.44
CD(P=0.05)					NS
CV (%)					5.69

AVT(EARLY) II PLANT

Table 2.13 CCS (%) 8 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	10.12	10.22	10.18	10.42	10.24
CoV 07356	10.83	10.59	10.45	10.50	10.59
Std					
Co 6907	10.54	9.96	9.77	10.54	10.20
CoC 01061	11.04	11.37	13.08	10.83	11.58
CoA 92081	9.77	10.26	10.89	11.72	10.66
General mean					10.65
SE(m)±					0.33
CD(P=0.05)					NS
CV (%)					6.18

Table 2.14 Purity (%) 8 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	87.5	88.1	88.6	89.2	88.35
CoV 07356	86.8	86.1	83.0	86.9	85.70
Std					
Co 6907	86.5	85.9	86.1	86.5	86.25
CoC 01061	87.9	87.8	89.5	86.8	88.00
CoA 92081	86.1	87.6	87.8	88.9	87.60
General mean					87.18
SE(m)±					0.62
CD(P=0.05)					1.89
CV (%)					1.41

Table 2.15 No.of shoot (000/ha) -240 days

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	80.24	90.58	100.85	105.56	94.31
CoV 07356	107.92	106.98	95.78	86.25	99.23
Stds					
Co 6907	124.85	138.10	112.59	120.57	124.02
CoC 01061	136.61	140.17	120.08	130.27	131.78
CoA 92081	107.87	121.33	135.94	123.46	122.15
General mean					114.30
SE(m)±					5.55
CD(P=0.05)					17.13
CV (%)					9.73

AVT (EARLY) II PLANT

Table 2.16 No.of tillers (000/ha)-120 days

Clone	RI	R115.38II	RIII	RIV	Mean
CoA 07321	94.35	108.35	109.93	115.38	107.00
CoV 07356	120.87	124.76	110.47	100.80	114.22
Std					
Co 6907	138.08	149.29	130.23	136.42	138.51
CoC 01061	157.28	155.35	134.08	147.39	148.53
CoA 92081	120.65	136.63	145.33	138.06	135.17
General mean					128.63
SE(m)±					4.90
CD(P=0.05)					15.09
CV (%)					7.62

Table 2.17 Germination (%)-30 days

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	30.9	33.8	41.7	38.5	36.22
CoV 07356	31.6	38.5	32.9	42.6	36.40
Std					
Co 6907	51.7	48.3	40.8	52.7	48.38
CoC 01061	58.6	52.1	59.4	49.7	54.95
CoA 92081	53.2	47.8	49.6	41.5	48.03
General mean					44.80
SE(m)±					2.79
CD(P=0.05)					8.57
CV (%)					12.43

3.Advanced Varietal Trial (Early)-Ratoon

Entries	:CoA 07321 and CoV 07356
Standards	:Co 6907,CoC 01061,CoA 92081
Design	:RBD
Replications	:4
Plot size	Gross:6.0 m x 8 r x 0.8 m Net :5.0 m x 6 r x 0.8 m
Seed rate	: 12 buds/m
Date of ratooning	: 10.3.2011
Crop duration	:9 months

AVT (Early) Ratoon

S.No	Clone	CCS(t/ha)	Cane yield (t/ha)	Brix % (9 m)	Sucrose % (9 m)	Purity % (9 m)	CCS % (9 m)	NMC (000/ha) (at 9m)
1	CoA 07321	10.45	104.34	18.65	15.13	81.1	10.01	77.81
2	CoV07356	12.07	121.94	18.25	14.90	81.7	9.89	90.59
Stds								
1	Co 6907	13.28	130.16	19.05	15.43	81.0	10.20	102.97
2	CoC01061	11.35	109.07	19.60	15.80	80.6	10.42	113.96
3	CoA92081	12.34	121.11	19.00	15.40	81.1	10.19	95.29
	CD(P=0.05)	1.65	15.19	0.65	NS	NS	NS	10.18
	CV(%)	8.99	8.40	2.22	2.62	0.96	2.91	6.88
S.No	Clone	Stalk length (cm)	Stalk diameter (cm)	SCW (kg)	No.of Shoots (000/ha) -180 days	No.of tillers (000/ha) -90 days		
1	CoA 07321	238.4	2.45	1.35	115.41	97.14		
2	CoV07356	214.9	2.39	1.35	128.63	108.47		
Stds								
1	Co 6907	273.2	2.24	1.23	148.66	123.36		
2	CoC 01061	220.5	2.10	0.96	158.37	134.59		
3	CoA92081	251.4	2.51	1.27	132.20	111.82		
	CD(P=0.05)	11.25	0.16	0.09	15.81	13.12		
	CV(%)	3.05	4.57	5.82	7.51	7.40		

AVT (EARLY)-RATOON

Table 3.1 CCS (t/ha)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	10.48	9.60	10.29	11.45	10.45
CoV 07356	13.22	13.06	10.26	11.74	12.07
Std					
Co 6907	12.58	12.48	14.88	13.18	13.28
CoC 01061	11.34	11.07	11.19	11.81	11.35
CoA 92081	10.98	12.03	12.62	13.72	12.34
General mean					11.89
SE(m)±					0.54
CD(P=0.05)					1.65
CV (%)					8.99

Table 3.2 Cane yield (t/ha)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	107.05	95.66	106.51	108.62	104.34
CoV 07356	131.71	131.19	104.05	120.79	121.94
Std					
Co 6907	122.44	127.43	143.21	127.56	130.16
CoC 01061	106.46	105.64	105.88	118.30	109.07
CoA 92081	109.38	116.47	123.91	134.67	121.11
General mean					117.34
SE(m)±					4.93
CD(P=0.05)					15.19
CV (%)					8.40

Table 3.3 Brix (%) 9 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	18.6	18.8 Table 3.	18.0	19.2	18.65
CoV 07356	18.8	18.4	18.0	17.8	18.25
Std					
Co 6907	19.4	18.6	19.0	19.2	19.05
CoC 01061	20.2	19.4	19.8	19.0	19.60
CoA 92081	18.8	19.2	19.0	19.0	19.00
General mean					18.91
SE(m)±					0.21
CD(P=0.05)					0.65
CV (%)					2.22

AVT(EARLY) RATOON

Table 3.4 Sucrose (%) 9 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	14.9	15.2	14.6	15.8	15.13
CoV 07356	15.2	15.0	14.8	14.6	14.90
Std					
Co 6907	15.6	14.9	15.6	15.6	15.43
CoC 01061	16.2	15.8	16.0	15.2	15.80
CoA 92081	15.2	15.6	15.4	15.4	15.40
General mean					15.33
SE(m)±					0.20
CD(P=0.05)					NS
CV (%)					2.62

Table 3.5 CCS (%) 9 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	9.79	10.04	9.66	10.54	10.01
CoV 07356	10.04	9.95	9.86	9.72	9.89
Std					
Co 6907	10.27	9.79	10.39	10.33	10.20
CoC 01061	10.65	10.48	10.57	9.98	10.42
CoA 92081	10.04	10.33	10.19	10.19	10.19
General mean					10.14
SE(m)±					0.15
CD(P=0.05)					NS
CV (%)					2.91

Table 3.6 Purity (%) 9 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	80.1	80.9	81.1	82.3	81.10
CoV 07356	80.9	81.5	82.2	82.1	81.68
Std					
Co 6907	80.4	80.1	82.2	81.3	81.00
CoC 01061	80.2	81.4	80.8	80.0	80.60
CoA 92081	80.9	81.3	81.1	81.1	81.10
General mean					81.09
SE(m)±					0.31
CD(P=0.05)					NS
CV (%)					0.96

AVT (EARLY) RATOON

Table 3.7 NMC (000/ha) at 9 months

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	81.10	69.32	83.21	77.59	77.81
CoV 07356	98.29	89.86	81.29	92.92	90.59
Std					
Co 6907	93.47	101.95	110.16	106.30	102.97
CoC 01061	118.29	111.20	108.05	118.30	113.96
CoA 92081	87.51	97.06	94.59	102.02	95.29
General mean					96.12
SE(m)±					3.31
CD(P=0.05)					10.18
CV (%)					6.88

Table 3.8 Stalk length (cm)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	229	246	239	241	238.8
CoV 07356	207	219	223	211	215.0
Std					
Co 6907	266	275	271	281	273.3
CoC 01061	216	225	231	210	220.5
CoA 92081	258	260	247	240	251.3
General mean					239.75
SE(m)±					3.66
CD(P=0.05)					11.25
CV (%)					3.05

Table 3.9 Stalk diameter (cm)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	2.48	2.52	2.38	2.42	2.45
CoV 07356	2.45	2.25	2.30	2.55	2.39
Std					
Co 6907	2.25	2.20	2.15	2.35	2.24
CoC 01061	1.95	2.05	2.15	2.25	2.10
CoA 92081	2.62	2.55	2.48	2.40	2.51
General mean					2.33
SE(m)±					0.06
CD(P=0.05)					0.16
CV (%)					4.57

AVT (EARLY)RATOON

Table 3.10 SCW (kg)

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	1.32	1.38	1.28	1.40	1.35
CoV 07356	1.34	1.46	1.28	1.30	1.35
Std					
Co 6907	1.16	1.25	1.30	1.20	1.23
CoC 01061	0.90	0.95	0.98	1.00	0.96
CoA 92081	1.25	1.20	1.31	1.32	1.27
General mean					1.23
SE(m)±					0.03
CD(P=0.05)					0.09
CV (%)					5.82

Table 3.11 No.of shoots (000/ha) -180 days

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	120.43	106.23	121.71	113.28	115.41
CoV 07356	140.11	125.28	115.38	133.76	128.63
Std					
Co 6907	138.70	141.30	167.36	147.28	148.66
CoC 01061	161.25	155.25	148.60	168.38	158.37
CoA 92081	121.50	135.20	130.50	141.63	132.20
General mean					136.65
SE(m)±					5.13
CD(P=0.05)					15.81
CV (%)					7.51

Table 3.12 No.of tillers (000/ha)-90 days

Clone	RI	RII	RIII	RIV	Mean
CoA 07321	101.38	85.79	104.53	96.86	97.14
CoV 07356	118.65	106.73	98.45	110.06	108.47
Std					
Co 6907	110.49	120.65	135.20	127.18	123.38
CoC 01061	140.35	131.76	128.53	137.70	134.59
CoA 92081	102.85	114.71	110.65	119.07	111.82
General mean					115.08
SE(m)±					4.26
CD(P=0.05)					13.12
CV (%)					7.40

4. Advanced Varietal Trial (Mid/Late)-I Plant

Entries	:Co 06031, CoC 08339 and CoC 09337
Standards	: CoV 92102,Co 7219 andCo86249
Design	:RBD
Replications	:4
Plot size	Gross:6.0 m x 8 r x 0.8 m Net :5.0 m x 6 r x 0.8 m
Seed rate	: 12 buds/m
Planting time	: 4.2.2011
Crop duration	:12 months

AVT (M/L) I Plant

S.No	Clone	Germi nation(%)	No.of tillers (000 /ha)	No.of shoots (000/ ha)	Brix (%) 10 m	Sucrose (%) 10 m	Purity (%) 10 m	CCS (%) 10 m
1	Co 06031	57.55	111.06	126.08	20.72	16.55	79.82	10.86
2	Co 08339	60.75	161.08	188.70	19.63	16.08	81.87	10.69
3	CoC 09337	41.38	125.88	147.06	19.38	16.50	85.10	11.20
Stds								
1	CoV 92102	47.88	121.61	144.39	20.13	16.65	82.68	11.13
2	Co 7219	41.18	145.27	173.78	19.83	16.08	81.05	10.63
3	Co 86249	48.80	108.71	125.49	17.85	14.63	81.88	9.73
CD (P=0.05)		7.68	13.89	15.84	3.13	0.77	0.65	0.51
CV (%)		10.28	7.15	6.97	10.87	3.17	0.52	3.18

AVT (MID/LATE) I PLANT

Table 4.1 Germination (%)-30 days

Clone	RI	RII	RIII	RIV	Mean
Co 06031	59.8	53.5	55.2	61.7	57.55
CoC 08339	63.6	58.9	67.8	52.7	60.75
CoC 09337	46.4	36.9	42.7	39.5	41.38
Std					
CoV 92102	41.0	50.8	56.2	43.5	47.88
Co 7219	40.9	41.5	38.7	43.6	41.18
Co 86249	51.6	53.5	47.3	42.8	48.80
General mean	.				49.58
SE(m)±					2.55
CD(P=0.05)					7.68
CV(%)					10.28

Table 4.2 No.of tillers (000/ha)-120 days

Clone	RI	RII	RIII	RIV	Mean
Co 06031	100.51	115.26	121.70	106.75	111.06
CoC 08339	149.60	160.27	163.10	171.35	161.08
CoC 09337	137.65	120.17	127.52	118.21	125.88
Std					
CoV 92102	127.35	110.51	118.46	130.15	121.61
Co 7219	139.29	145.39	140.10	156.28	145.27
Co 86249	113.17	115.28	106.50	99.89	108.71
General mean					128.93
SE(m)±					4.60
CD(P=0.05)					13.89
CV(%)					7.15

AVT (MID/LATE) I PLANT

Table 4.3 No.of shoots (000/ha)-240 days

Clone	RI	RII	RIII	RIV	Mean
Co 06031	115.26	130.38	136.47	122.21	126.08
CoC 08339	175.82	186.46	192.15	200.37	188.70
CoC 09337	160.73	140.52	148.70	138.29	147.06
Std					
CoV 92102	151.47	130.29	141.07	154.73	144.39
Co 7219	165.49	173.21	169.07	187.38	173.78
Co 86249	131.09	132.46	123.17	115.27	125.49
General mean					150.91
SE(m)±					5.39
CD(P=0.05)					15.84
CV(%)					6.97

Table 4. 4 Brix (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06031	20.7	20.8	21.8	19.6	20.72
CoC 08339	19.2	19.9	19.4	20.0	19.63
CoC 09337	19.0	19.4	19.0	20.1	19.38
Std					
CoV 92102	20.1	20.6	19.4	20.4	20.13
Co 7219	19.9	19.6	20.7	19.1	19.83
Co 86249	17.9	17.4	17.9	18.2	17.85
General mean					19.17
SE(m)±					1.04
CD(P=0.05)					3.13
CV(%)					10.87

AVT (MID/LATE) I PLANT

Table 4.5 Sucrose (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06031	16.7	16.5	17.3	15.7	16.55
CoC 08339	15.7	16.4	15.8	16.4	16.08
CoC 09337	16.2	16.5	16.2	17.1	16.50
Std					
CoV 92102	16.7	16.9	16.0	17.0	16.65
Co 7219	16.1	15.9	16.8	15.5	16.08
Co 86249	14.6	14.3	14.7	14.9	14.63
General mean					16.07
SE(m)±					0.25
CD(P=0.05)					0.77
CV(%)					3.17

Table 4.6 Purity (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06031	80.6	79.3	79.3	80.1	79.82
CoC 08339	81.7	82.4	81.4	82.0	81.87
CoC 09337	85.2	85.0	85.2	85.0	85.10
Std					
CoV 92102	83.0	82.0	82.4	83.3	82.68
Co 7219	80.9	81.1	81.1	81.1	81.05
Co 86249	81.5	82.1	82.1	81.8	81.88
General mean					82.06
SE(m)±					0.21
CD(P=0.05)					0.65
CV(%)					0.52

Table 4.7 CCS (%) 10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06031	11.02	10.78	11.31	10.32	10.86
CoC 08339	10.44	10.95	10.48	10.92	10.69
CoC 09337	11.01	11.19	11.00	11.61	11.20
Std					
CoV 92102	11.19	11.25	10.68	11.41	11.13
Co 7219	10.64	10.52	11.12	10.26	10.63
Co 86249	9.69	9.53	9.79	9.91	9.73
General mean					10.71
SE(m)±					0.17
CD(P=0.05)					0.51
CV(%)					3.18

5. Advanced Varietal Trial (Mid/Late)-II Plant

Entries	:Co 06330 and CoA 07322
Standards	: CoV 92102, Co 7219 and Co86249
Design	:RBD
Replications	:4
Plot size	Gross:6.0 m x 8 r x 0.8 m Net :5.0 m x 6 r x 0.8 m
Seed rate	: 12 buds/m
Planting time	: 18.2.2011
Crop duration	:12 months

AVT (M/L) II Plant

	Clone	Germi nation(%)	No.of tillers (000 /ha)	No.of shoots (000/ ha)	Brix (%) 10 m	Sucrose (%) 10 m	Purity (%) 10 m	CCS (%) 10 m
1	Co 06330	60.04	130.70	154.56	18.45	15.23	82.56	10.18
2	CoA 07322	63.98	127.77	161.58	16.90	14.09	83.36	9.46
Stds								
1	CoV 92102	55.78	142.28	169.94	19.70	16.50	83.89	11.13
2	Co 7219	55.05	114.03	134.99	17.60	14.59	82.89	9.77
3	Co 86249	41.55	102.22	121.30	16.15	13.48	83.49	9.06
CD (P=0.05)		4.39	7.96	13.77	0.58	0.47	NS	0.31
CV (%)		5.15	4.21	6.02	2.11	2.05	0.83	2.01

AVT (MID/LATE) II PLANT

Table 5.1 Germination (%)-30 days

Clone	RI	RII	RIII	RIV	Mean
Co 06330	61.34	64.80	54.31	59.70	60.04
CoA 07322	66.50	71.34	59.50	58.60	63.98
Std					
CoV 92102	51.70	63.14	55.75	52.53	55.78
Co 7219	53.41	59.41	50.69	56.70	55.05
Co 86249	39.27	46.17	37.14	43.60	41.55
General mean					55.27
SE(m)±					1.42
CD(P=0.05)					4.39
CV(%)					5.15

Table 5.2 No.of tillers (000/ha)-120 days

Clone	RI	RII	RIII	RIV	Mean
Co 06330	128.71	135.43	131.06	127.60	130.70
CoA 07322	120.60	125.18	136.81	128.50	127.77
Std					
CoV 92102	130.45	146.80	153.60	138.28	142.28
Co 7219	117.38	110.71	121.40	106.63	114.03
Co 86249	96.53	100.48	107.38	104.50	102.22
General mean					122.63
SE(m)±					2.58
CD(P=0.05)					7.96
CV(%)					4.21

Table 5.3 No.of shoots (000/ha)-240 days

Clone	RI	RII	RIII	RIV	Mean
Co 06330	153.61	160.85	155.21	148.60	154.56
CoA 07322	145.11	150.45	180.38	170.37	161.58
Std					
CoV 92102	157.31	176.28	185.80	160.38	169.94
Co 7219	139.27	130.90	144.50	125.30	134.99
Co 86249	114.20	118.30	130.21	122.50	121.30
General mean					148.48
SE(m)±					4.47
CD(P=0.05)					13.77
CV(%)					6.02

AVT (MID/LATE) II PLANT

Table 5.4 Brix (%)-10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06330	18.8	18.6	18.4	18.0	18.45
CoA 07322	17.2	16.6	17.0	16.8	16.90
Std					
CoV 92102	19.8	19.8	19.0	20.2	19.70
Co 7219	17.6	18.0	17.8	17.0	17.60
Co 86249	16.2	16.6	16.0	15.8	16.15
General mean					17.76
SE(m)±					0.19
CD(P=0.05)					0.58
CV(%)					2.11

Table 5.5 Sucrose (%)-10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06330	15.05	15.60	15.50	14.78	15.23
CoA 07322	13.95	13.85	14.35	14.20	14.09
Std					
CoV 92102	16.20	16.75	16.25	16.80	16.50
Co 7219	14.21	15.00	15.00	14.15	14.59
Co 86249	13.00	13.90	13.78	13.25	13.48
General mean					14.78
SE(m)±					0.15
CD(P=0.05)					0.47
CV(%)					2.05

Table 5.6 Purity (%)-10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06330	80.05	83.87	84.23	82.11	82.56
CoA 07322	81.10	83.43	84.41	84.52	83.36
Std					
CoV 92102	81.81	84.59	86.05	83.13	83.89
Co 7219	80.74	83.33	84.27	83.23	82.89
Co 86249	80.25	83.73	86.12	83.86	83.49
General mean					83.24
SE(m)±					0.35
CD(P=0.05)					NS
CV(%)					0.83

AVT (MID/LATE) II PLANT

Table 5.7 CCS (%)-10 months

Clone	RI	RII	RIII	RIV	Mean
Co 06330	9.89	10.51	10.47	9.85	10.18
CoA 07322	9.23	9.31	9.70	9.61	9.46
Std					
CoV 92102	10.77	11.34	11.16	11.27	11.13
Co 7219	9.37	10.07	10.13	9.50	9.77
Co 86249	8.55	9.35	9.41	8.93	9.06
General mean					9.92
SE(m)±					0.09
CD(P=0.05)					0.31
CV(%)					2.01