

**UNIVERSITY OF AGRICULTURAL SCIENCES
DHARWAD**



**AGRICULTURAL RESEARCH STATION
SANKESHWAR**

**ALL INDIA CO-ORDINATED RESEARCH
PROJECT ON SUGARCANE**

**PLANT BREEDING EXPERIMENTAL
DATA 2013-14**

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Meteorological data for the year 2013 at ARS, Sankeshwar

Month	Rainy days	Rainfall (mm)	Occurrence of pest and diseases
January	0	0	Thrips 3%
February	01	3.2	Thrips 5% Root grub 6% ESB 10%
March	0	0	Thrips 4% Root grub 9% ESB 20% Smut 5%
April	01	12.8	ESB-20%, Smut 5-6% Root grub 15%
May	04	24.0	ESB 20-25%, Smut 6-7% Root grub 20%
June	15	90.2	SWA 1 grade Rust 15-20 % Root grub 20-25%
July	29	193.6	SWA 1 grade, Rust 20-25 %, Root grub 25-30%
August	14	72.0	SWA 1-2 grade, Rust 30%, Root grub 33%
September	16	218.6	SWA 2-3 grade, White fly 5%, Rust 35% Root grub 35-40%
October	04	64.8	SWA 2-3 grade, Mealy bug 2%, Rust 45% White fly 2%
November	0	0	SWA 2-3 grade, Mealy bug 2%, Rust 36%
December	0	0	SWA 2-3 grade Rust 21%
Total	84	679.2	

YEARLY RESEARCH PLAN FOR THE YEAR 2013-14

1. Project No. : a) D. R. No. 112
b) HOD. No. Bot.
2. Department. : Genetics and Plant Breeding
3. Project Title. : Varietal Improvement in Sugarcane
4. Experiment Title. : Initial Varietal Trial - Early
5. Project Leader. : Dr. S. B. Patil,
Sugarcane Breeder
ARS, Sankeshwar.
6. Location : ARS, Sankeshwar.
7. Experiment. : New
8. Year of start. : 2013-14
9. Likely year of completion. : 2016-17

10. Experimental details.

a) Varieties:

1	Co 10004		Checks
2	Co 10005	13	CoC 671
3	Co 10006	14	Co 94008
4	Co 10024	15	Co 85004
5	Co 10026		
6	Co 10027		
7	CoM 10081		
8	CoM 10082		
9	CoN 10071		
10	CoN 10072		
11	CoT 10366		
12	Co 10367		

- b) Design. : R. B. D.
- c) Replication : Two
- d) Plot size. : 6 x 5.4 m.
- e) Spacing. : 90 cm.
- f) Seed rate. : 12 eye buds/m.
- g) Fertilizers. : 250:75:188 NPK Kg/ha.
- h) Date of Planting : **09.01.2013**

1. Initial Varietal Trial (Early)

Location: Sankeshwar

Sl. No.	Clone	CCS Yield (t/ha)	Cane Yield (t/ha)	Brix % (10M)	Sucrose % (10M)	Purity % (10M)	CCS % (10M)	PoI% CANE (10M)	Extraction % (10M)	Fibre % 10M	NMC (10M) ('000/ha)
1	Co 10004	12.23	111.50	18.48	16.05	86.73	11.00	12.29	57.29	13.39	53.99
2	Co 10005	12.88	97.79	19.83	18.57	93.64	13.18	13.64	63.96	16.53	87.00
3	Co 10006	7.56	66.37	18.72	16.50	88.17	11.40	12.51	61.42	14.17	68.54
4	Co 10024	8.65	72.69	18.96	17.07	90.00	11.90	12.73	53.91	15.41	56.02
5	Co 10026	13.07	113.50	17.37	16.28	94.34	11.56	12.08	64.27	15.82	83.80
6	Co 10027	9.86	87.78	17.36	15.96	92.03	11.24	12.13	59.92	14.01	68.47
7	CoM 10081	12.05	97.02	18.62	17.43	93.59	12.37	12.98	57.75	15.51	90.15
8	CoM 10082	8.47	87.78	17.11	14.48	84.15	9.80	11.01	54.76	13.83	57.47
9	CoN 10071	8.61	98.71	16.37	13.08	79.19	8.58	10.20	61.74	12.04	44.30
10	CoN 10072	7.86	96.10	14.85	12.55	84.37	8.48	9.69	60.42	12.60	79.93
11	CoT 10366	8.49	103.49	15.44	12.47	80.61	8.24	9.32	52.74	15.23	82.50
12	Co 10367	11.96	104.72	17.61	16.20	92.24	11.42	11.86	60.37	16.77	71.42
Standards											
1	CoC 671	11.02	96.40	18.28	16.41	90.15	11.43	12.32	59.39	14.91	63.59
2	Co 94008	10.77	98.71	17.28	15.60	90.48	10.90	11.60	56.13	15.63	59.53
3	Co 85004	12.76	105.80	18.55	17.08	92.15	12.03	12.85	55.26	14.73	106.25
	CD 5%	3.45	18.37	3.50	4.11	17.78	3.50	3.11	7.87	1.81	23.00
	CV %	15.44	8.93	9.24	12.19	9.34	14.96	12.28	6.26	5.73	14.99

Table No. 1. Contd.....

Sl. No.	Clone	Stalk length (cm)	Stalk girth (CM)	SCW (kg)	Brix % 8M	Sucrose % 8M	Purity % 8M	CCS % 8M	No. of shoots ('000/ha) 120 days	No. of shoots ('000/ha) 240 days	Germination % 30 DAP
1	Co 10004	236.00	3.22	2.06	14.76	11.69	78.96	7.64	78.23	50.20	27.95
2	Co 10005	212.50	2.50	1.12	14.21	11.35	79.96	7.45	114.42	88.86	36.04
3	Co 10006	174.50	2.54	0.97	14.90	12.90	86.59	8.83	55.75	48.51	18.48
4	Co 10024	197.00	2.93	1.30	13.35	9.78	72.94	6.09	104.26	67.91	37.31
5	Co 10026	249.50	2.53	1.35	14.50	12.34	85.58	8.38	154.46	93.02	57.06
6	Co 10027	179.30	2.98	1.29	12.54	9.57	74.77	6.12	98.56	76.69	35.34
7	CoM 10081	201.50	2.46	1.08	12.64	10.05	79.43	6.58	154.15	96.40	52.32
8	CoM 10082	199.00	3.10	1.54	13.84	11.25	81.30	7.46	85.47	68.07	23.56
9	CoN 10071	220.30	3.51	2.23	12.03	8.58	70.85	5.25	38.65	44.20	11.20
10	CoN 10072	196.50	2.82	1.21	10.57	5.39	50.94	2.42	110.42	81.77	36.96
11	CoT 10366	165.15	2.97	1.28	12.22	8.67	70.87	5.29	63.76	60.37	26.45
12	Co 10367	208.80	2.73	1.47	13.47	10.41	77.31	6.71	106.41	86.24	59.94
Standards											
1	CoC 671	205.00	2.95	1.52	14.66	11.85	80.80	7.83	115.04	89.17	38.46
2	Co 94008	216.00	3.12	1.66	12.16	8.95	73.76	5.60	94.40	77.62	45.62
3	Co 85004	175.30	2.55	1.01	12.70	10.19	79.98	6.71	156.93	110.73	51.28
	CD 5%	29.36	0.30	0.23	1.28	2.94	18.78	2.76	46.72	21.61	14.77
	CV %	6.76	4.93	7.55	4.50	13.44	11.48	19.64	21.34	13.26	18.51

Twelve entries were tested along with three standards for cane and sugar yield and their component traits. The entry Co 10026 recorded numerically superior cane and sugar yield over best standard Co 85004. Two entries viz., Co 10005 and CoM 10081 recorded better juice quality over best standard.

YEARLY RESEARCH PLAN FOR THE YEAR 2013-14

1. Project No. : a) D. R. No. 112
b) HOD. No. Bot.
2. Department. : Genetics and Plant Breeding
3. Project Title. : Varietal Improvement in Sugarcane
4. Experiment Title. : Advanced Varietal Trial - Early PC -II
5. Project Leader. : Dr. S. B. Patil,
Sugarcane Breeder
ARS, Sankeshwar.
6. Location : ARS, Sankeshwar.
7. Experiment. : Continued
8. Year of start. : 2011-12
9. Likely year of completion. : 2013-14
10. Experimental details.

a) Varieties:

1	Co 8001		Checks
2	VSI 08121	3	CoC 671
		4	Co 94008
		5	Co 85004

- b) Design. : R. B. D.
- c) Replication : Three
- d) Plot size. : 6 x 5.4 m.
- e) Spacing. : 90 cm.
- f) Seed rate. : 12 eye buds/m.
- g) Fertilizers. : 250:75:188 NPK Kg/ha.
- h) Date of Planting : 09.01.2013

2. Advanced Varietal Trial (Early II Plant)

Location: Sankeshwar

Sl. No.	Clone	CCS Yield (t/ha)	Cane Yield (t/ha)	Brix % (10M)	Sucrose % (10M)	Purity % (10M)	CCS % (10M)	PoI% CANE (10M)	Extraction % (10M)	Fibre % 10M	NMC (10M) ('000/ha)
1	Co 8001	11.68	91.68	19.02	17.90	94.10	12.74	14.15	68.46	10.94	69.67
2	VSI 08121	12.66	95.79	19.36	18.50	95.60	13.25	14.15	60.74	13.53	72.69
Standard											
1	CoC 671	11.31	87.47	19.56	18.24	93.31	12.93	13.96	60.69	13.42	63.79
2	Co 94008	10.34	83.26	18.98	17.58	92.67	12.42	13.15	59.79	15.20	60.42
3	Co 85004	13.90	106.26	19.32	18.27	94.49	13.03	13.53	61.14	15.98	116.96
	CD 5%	2.30	12.05	1.39	1.73	5.55	1.47	1.23	6.51	2.68	17.36
	CV %	11.05	7.42	4.08	5.39	3.32	6.45	5.00	5.90	11.07	13.29

Sl. No.	Clone	Stalk Length (m)	Stalk Diameter (cm)	Single Cane weight (kg)	Brix % 8M	Sucrose %	Purity %	CCS % 8M	No. of shoots ('000/ha) 240 days	No. of tillers ('000/ha) 120 days	Germination % 30 days
1	Co 8001	197.20	2.78	1.33	12.78	9.42	73.38	5.90	94.15	152.77	39.58
2	VSI 08121	200.20	2.74	1.33	13.65	11.47	83.97	7.73	85.32	160.26	37.58
Standard											
1	CoC 671	189.00	2.89	1.38	14.05	11.45	81.32	7.60	88.91	145.07	40.73
2	Co 94008	209.67	2.77	1.38	11.28	8.49	75.32	5.39	73.10	149.38	41.04
3	Co 85004	194.00	2.33	0.93	13.11	10.91	82.87	7.32	114.68	177.10	52.90
	CD 5%	23.95	0.24	0.26	1.24	2.44	12.70	2.19	11.54	27.22	9.44
	CV %	6.64	4.97	11.26	5.33	13.25	9.03	18.18	7.30	9.82	12.91

Both the entries Co 8001 and VSI 08121 recorded numerically lower cane and sugar yield compared to best check Co 85004

YEARLY RESEARCH PLAN FOR THE YEAR 2013-14

1. Project No. : a) D. R. No. 112
b) HOD. No. Bot.
2. Department. : Genetics and Plant Breeding
3. Project Title. : Varietal Improvement in Sugarcane
4. Experiment Title. : Advanced Varietal Trial - Early Ratoon
5. Project Leader. : Dr. S. B. Patil,
Sugarcane Breeder
ARS, Sankeshwar.
6. Location : ARS, Sankeshwar.
7. Experiment. : Continued
8. Year of start. : 2011-12
9. Likely year of completion. : 2013-14
10. Experimental details.

a) Varieties:

1	Co 8001		Checks
2	VSI 08121	3	CoC 671
		4	Co 94008
		5	Co 85004

- b) Design. : R. B. D.
- c) Replication : Three
- d) Plot size. : 6 x 5.4 m.
- e) Spacing. : 90 cm.
- f) Seed rate. : 12 eye buds/m.
- g) Fertilizers. : 250:75:188 NPK Kg/ha.
- h) Date of Ratooning : 10.03.2013

3. Advanced Varietal Trial (Early Ratoon)**Location: Sankeshwar**

Sl. No.	Clone	CCS Yield (t/ha)	Cane Yield (t/ha)	Brix % (9M)	Sucrose % (9M)	Purity % (9M)	CCS % (9M)	PoI% CANE (9M)	Extracti on % (9M)	Fibre % (9M)	NMC (9M) ('000/ha)	Stalk Length (m)	Stalk Diameter (cm)	Single Cane weight (kg)	No. of tillers ('000/ha) 120 days
1	Co 8001	13.02	83.16	23.09	21.85	94.64	15.59	17.01	56.26	12.12	81.55	182.20	2.70	1.02	89.32
2	VSI 08121	14.55	89.94	22.76	22.35	98.28	16.20	16.60	53.29	15.75	79.22	212.33	2.62	1.14	84.80
Standards															
1	CoC 671	13.48	91.99	20.80	20.29	97.57	14.66	15.59	48.79	13.14	84.01	176.10	2.74	1.10	92.50
2	Co 94008	14.09	92.19	22.21	21.28	95.72	15.26	15.88	56.09	15.32	110.77	195.53	2.32	0.83	89.11
3	Co 85004	13.59	82.75	22.77	22.21	97.51	16.05	16.58	56.98	15.34	79.40	174.77	2.70	1.04	78.75
	CD 5%	2.17	14.34	0.91	1.16	4.21	1.04	0.74	12.20	0.94	15.35	28.03	0.35	0.28	10.59
	CV %	9.09	9.37	2.28	3.02	2.45	3.76	2.58	13.04	3.47	10.01	8.33	7.59	15.16	6.59

The entry VSI 08121 (14.55 t/ha) recorded better sugar yield over best standard Co 94008 (14.09 t/ha) with numerically better juice quality over standards.

YEARLY RESEARCH PLAN FOR THE YEAR 2013-14

1. Project No. : a) D. R. No. 112
b) HOD. No. Bot.
2. Department. : Genetics and Plant Breeding
3. Project Title. : Varietal Improvement in Sugarcane
4. Experiment Title. : Initial Varietal Trial - Midlate
5. Project Leader. : Dr. S. B. Patil,
Sugarcane Breeder
ARS, Sankeshwar.
6. Location : ARS, Sankeshwar.
7. Experiment. : New
8. Year of start. : 2013-14
9. Likely year of completion. : 2016-17
10. Experimental details.

a) Varieties:

1	Co 10015	8	CoT 10368		Checks
2	Co 10017	9	CoT 10369		Co 86032
3	Co 10031	10	CoVC 10061		Co 99004
4	Co 10033	11	CoVSI 10121		
5	CoM 10083	12	CoVSI 10122		
6	CoM 10084	13	PI 10131		
7	CoN 10073	14	PI 10132		

- b) Design. : R. B. D.
- c) Replication : Two
- d) Plot size. : 6 x 5.4 m.
- e) Spacing. : 90 cm.
- f) Seed rate. : 12 eye buds/m.
- g) Fertilizers. : 250:75:188 NPK Kg/ha.
- h) Date of Planting : 09.01.2013

4. Initial Varietal Trial (Midlate)
Location: Sankeshwar

Sl. No.	Clone	CCS Yield (t/ha)	Cane Yield (t/ha)	Brix % (12M)	Sucrose % (12M)	Purity % (12M)	CCS % (12M)	Pol% CANE (12M)	Extraction % (12M)	Fibre % 12M	NMC (10M) ('000/ha)
1	Co 10015	6.71	46.97	21.82	20.14	92.17	14.21	15.23	54.93	14.37	48.92
2	Co 10017	--	--	--	--	--	--	--	--	--	--
3	Co 10031	8.60	58.67	21.76	20.62	94.74	14.72	15.76	66.79	13.57	48.86
4	Co 10033	13.87	96.56	20.99	20.05	95.52	14.36	15.44	57.75	13.00	63.89
5	CoM 10083	14.81	101.49	22.24	20.60	92.62	14.56	15.76	59.56	13.52	58.66
6	CoM 10084	12.26	86.39	21.30	19.95	93.60	14.16	15.12	55.90	14.22	53.72
7	CoN 10073	13.34	84.24	22.76	22.00	96.64	15.83	16.48	54.53	15.09	85.34
8	CoT 10368	14.01	92.40	22.30	21.20	95.05	15.15	16.35	58.92	12.93	91.72
9	CoT 10369	14.55	93.02	24.34	22.26	91.62	15.64	17.23	60.26	12.62	67.14
10	CoVC 10061	15.69	99.33	24.06	22.36	92.97	15.82	17.78	57.28	10.49	97.17
11	CoVSI 10121	16.95	108.42	22.34	21.67	97.02	15.62	16.91	56.00	11.97	68.19
12	CoVSI 10122	13.63	96.10	21.53	20.05	93.06	14.20	15.41	61.59	13.18	63.48
13	PI 10131	17.28	106.88	24.10	22.72	94.28	16.18	17.29	57.67	13.88	84.99
14	PI 10132	11.55	73.30	24.60	22.43	91.20	15.74	17.08	58.55	13.85	44.67
Standards											
15	Co 86032	12.59	92.71	21.14	19.32	91.41	13.57	15.00	61.88	12.36	71.52
16	Co 99004	14.77	90.24	23.85	22.83	95.73	16.37	17.35	57.23	13.99	63.25
	CD 5%	3.16	17.83	1.43	1.67	5.09	1.43	1.35	10.79	1.55	19.74
	CV %	11.01	9.40	2.95	3.66	2.53	4.41	3.87	8.59	5.45	13.65

Sl. No.	Clone	Stalk Length (m)	Stalk Diameter (cm)	Single Cane weight (kg)	Brix % 10M	Sucrose % 10M	Purity % 10 M	CCS % 10 M	No. of shoots ('000/ha) 240 days	No. of shoots ('000/ha) 120 days	Germination % 30 DAP
1	Co 10015	163.50	2.59	0.96	18.71	17.79	95.10	12.72	176.50	161.50	18.94
2	Co 10017 *	--	--	--	--	--	--	--	--	--	--
3	Co 10031	168.00	2.88	1.22	18.68	17.55	94.01	12.48	205.50	228.00	27.14
4	Co 10033	244.50	2.75	1.51	17.12	14.77	86.33	10.10	134.50	124.00	8.43
5	CoM 10083	215.00	3.04	1.73	19.61	18.13	92.42	12.80	173.00	175.00	17.44
6	CoM 10084	212.50	2.96	1.63	16.96	15.99	94.27	11.39	219.50	211.50	19.64
7	CoN 10073	176.00	2.54	1.00	18.64	17.18	92.25	12.12	198.50	268.50	20.33
8	CoT 10368	199.00	2.40	1.01	18.63	17.23	92.54	12.17	267.00	320.00	29.11
9	CoT 10369	189.50	2.79	1.39	19.45	17.52	90.02	12.22	275.00	399.50	35.46
10	CoVC 10061	185.00	2.56	1.02	17.35	15.31	88.20	10.58	321.50	377.50	42.27
11	CoVSI 10121	274.30	2.74	1.59	19.11	17.79	93.07	12.60	253.00	370.50	40.08
12	CoVSI 10122	230.55	2.72	1.51	17.33	15.99	92.28	11.28	250.00	292.00	33.84
13	PI 10131	189.00	2.69	1.26	19.60	18.01	91.83	12.68	228.00	333.50	38.12
14	PI 10132	242.00	2.89	1.78	18.74	17.34	92.47	12.25	125.00	119.50	12.82
Standards											
15	Co 86032	221.00	2.69	1.31	16.28	14.97	92.03	10.54	342.00	476.00	43.08
16	Co 99004	236.30	2.62	1.43	17.68	16.45	93.01	11.64	211.00	238.00	30.49
	CD 5%	42.01	0.35	0.47	1.55	1.63	6.16	1.36	52.06	92.21	11.64
	CV %	9.34	5.98	16.26	3.97	4.52	3.12	5.35	10.77	15.75	19.52

* Data not considered for analysis because of very poor stand

Out of 14 test entries three viz., PI 10131, CoVSI 10121 and CoVC 10061 recorded better cane and sugar yield over best check Co 99004, while former and later entries recorded better juice quality parameters also.

YEARLY RESEARCH PLAN FOR THE YEAR 2013-14

1. Project No. : a) D. R. No. 112
b) HOD. No. Bot.
2. Department. : Genetics and Plant Breeding
3. Project Title. : Varietal Improvement in Sugarcane
4. Experiment Title. : Advanced Varietal Trial -Midlate PC - II
Plant)
5. Project Leader. : Dr. S. B. Patil,
Sugarcane Breeder
ARS, Sankeshwar.
6. Location : ARS, Sankeshwar.
7. Experiment. : Continued
8. Year of start. : 2011-12
9. Likely year of completion. : 2013-14
10. Experimental details.

a) Varieties:

1	Co 08008		Checks
2	Co 08009	6	CoC 86032
3	Co08016	7	Co 99004
4	Co08020		
5	CoSnk 08101		

- b) Design. : R. B. D.
- c) Replication : Three
- d) Plot size. : 6 x 5.4 m.
- e) Spacing. : 90 cm.
- f) Seed rate. : 12 eye buds/m.
- g) Fertilizers. : 250:75:188 NPK Kg/ha.
- h) Date of Planting : 09.01.2013

5. Advanced Varietal Trial (Midlate II Plant)

Location: Sankeshwar

Clone	Clone	CCS Yield (t/ha)	Cane Yield (t/ha)	Brix % (12M)	Sucrose % (12M)	Purity % (12M)	CCS % (12M)	PoI% CANE (12M)	Extraction % (12M)	Fibre % 12M	NMC (12M) ('000/ha)
1	Co 08008	15.21	100.41	23.75	21.61	91.00	15.15	16.19	57.58	15.05	86.52
2	Co 08009	16.01	101.23	24.41	22.50	92.16	15.87	17.17	58.75	13.71	79.65
3	Co08016	17.53	115.60	24.14	21.74	90.10	15.17	15.75	55.50	17.57	92.55
4	Co08020	13.15	90.96	22.98	20.72	90.21	14.47	15.65	58.78	14.48	58.52
5	CoSnk 08101	14.48	101.33	21.86	20.23	92.59	14.29	15.81	62.12	11.84	71.14
Standards											
1	CoC 86032	15.95	116.22	20.91	19.40	92.76	13.72	15.00	63.19	12.67	68.93
2	Co 99004	15.83	103.69	23.64	21.70	91.84	15.28	15.89	56.43	16.79	68.18
	CD 5%	2.14	15.40	0.83	0.99	3.15	0.87	0.85	3.99	1.17	16.39
	CV %	7.78	8.31	2.02	2.63	1.94	3.28	2.99	3.81	4.53	12.27

Clone	Clone	Stalk Length (m)	Stalk Diameter (CM)	Single Cane weight (kg)	Brix % 10M	Sucrose % 10M	Purity % 10M	CCS % 10M	NO. of Shoots ('000/ha) 240 days	No. of tillers ('000/ha) 120 days	Germination % 30 days
1	Co 08008	214.67	2.60	1.16	18.52	17.36	93.80	12.34	103.59	12.34	37.65
2	Co 08009	237.67	2.64	1.29	18.50	17.74	95.85	12.72	94.45	12.72	34.19
3	Co08016	258.00	2.37	1.25	18.35	16.61	90.53	11.62	117.25	11.62	52.36
4	Co08020	221.20	2.94	1.57	17.64	16.30	92.42	11.51	85.93	11.51	45.12
5	CoSnk 08101	205.67	2.83	1.43	16.78	16.04	95.56	11.49	92.19	11.49	48.43
Standards											
1	CoC 86032	239.67	2.95	1.69	16.50	15.88	96.26	11.41	99.79	11.41	34.65
2	Co 99004	247.33	2.56	1.54	19.43	18.89	97.19	13.63	80.70	13.63	38.50
	CD 5%	22.04	0.18	0.24	0.56	1.44	6.52	1.38	16.05	20.90	7.17
	CV %	5.34	3.75	9.53	1.77	4.76	3.88	6.39	9.37	8.52	9.70

Out of five test entries the entry Co 08016 recorded better cane and sugar yield compared to best standard Co 086032.

YEARLY RESEARCH PLAN FOR THE YEAR 2013-14

1. Project No. : a) D. R. No. 112
b) HOD. No. Bot.
2. Department. : Genetics and Plant Breeding
3. Project Title. : Varietal Improvement in Sugarcane
4. Experiment Title. : Advanced Varietal Trial - Midlate Ratoon
5. Project Leader. : Dr. S. B. Patil,
Sugarcane Breeder
ARS, Sankeshwar.
6. Location : ARS, Sankeshwar.
7. Experiment. : Continued
8. Year of start. : 2011-12
9. Likely year of completion. : 2013-14
10. Experimental details.

a) Varieties:

1	Co 08008		Checks
2	Co 08009	6	Co 86032
3	Co 08016	7	Co 99004
4	Co 08020		
5	Co SNK08101		

- b) Design. : R. B. D.
- c) Replication : Three
- d) Plot size. : 6 x 5.4 m.
- e) Spacing. : 90 cm.
- f) Seed rate. : 12 eye buds/m.
- g) Fertilizers. : 250:75:188 NPK Kg/ha.
- h) Date of Ratooning : 10.03.2013

6. Advanced Varietal Trial (Midlate- Ratoon)

Location: Sankeshwar

Sl. No	Clone	CCS Yield (t/ha)	Cane Yield (t/ha)	Brix % (11M)	Sucrose % (11M)	Purity % (11M)	CCS % (11M)	Pol% CANE (11M)	Extraction % (11M)	Fibre % 11M	NMC (11M)	Stalk Length (m)	Stalk Diameter (CM)	Single Cane weight (kg)	No. of shoots ('000/ha) 90 days
1	Co 08008	13.29	84.29	23.08	22.00	95.35	15.75	16.57	51.12	14.71	72.62	190.93	2.69	1.18	112.21
2	Co 08009	11.30	67.04	24.31	23.42	96.31	16.83	17.98	54.67	13.21	68.25	201.77	2.32	0.99	125.56
3	Co 08016	16.13	98.46	24.35	23.00	94.62	16.39	17.04	55.86	15.88	81.07	232.67	2.48	1.21	137.06
4	Co 08020	10.81	69.40	22.68	21.73	95.89	15.59	16.31	58.85	14.94	55.99	185.20	2.71	1.25	115.91
5	Co SNK08101	14.42	90.45	22.84	22.11	96.82	15.93	17.34	52.22	11.59	73.64	183.40	2.85	1.25	140.55
Standards															
1	Co 86032	15.58	103.80	21.90	20.93	95.60	14.99	16.17	52.16	12.71	86.59	187.33	2.90	1.28	117.76
2	Co 99004	13.08	80.49	23.91	22.76	95.16	16.27	16.84	57.72	15.99	58.46	187.30	2.84	1.40	46.51
	CD 5%	2.14	11.78	1.51	1.29	3.95	1.01	1.06	13.39	1.26	26.05	38.03	0.31	0.40	27.48
	CV %	8.89	7.80	3.64	3.25	2.32	3.55	3.54	13.77	5.00	20.64	10.93	6.45	18.49	13.59

The entry Co 08016 recorded better sugar yield over Co 86032. The juice quality parameters are also better than Co 86032.

Details of fluff Germination During 2013

Date of sowing: 12.04.2014

LOC : SANKESHWAR

Year	Place of crossing	Cross	PC	GC	Self	No. of seedlings in ground nursery				Grand Total
						Cross	PC	GC	Self	
2013	SBI, Coimbatore	28	12	13	--	1920	976	189	--	3085
Total										3085

Year	Crosses	PC/GC	Selfs	No. of seedlings	Present stage					
					C1	C2	C3	C4	C5	C6
2007	37	14	-	13024	697	98	54	08	08 (To be Proposed for IVT)	06 (Accepted for IVT)
2008	30	44	-	41131	41131	1500	120	59	06 (To be Proposed for IVT)	-
2009	816	1297	--	2113	614	145	66	11	-	-
2010		22	-	1936	314	62	-	-	-	-
2011	32	23	-	1262	86	-	-	-	-	-
2012	2131	1082	-	3213	Under evaluation	-	-	-	-	-

**Cross wise seedlings obtained 2013
(National Hybridization Season 2013-14)**

Sl. No.	Cross No.	Female	Male	No. of Seedlings
1	61	Co 0237	Co 62198	0
2	80	CP 52-1	Co 62198	0
3	101	BO 91	Co 62198	70
4	202	CP 61-23	ISH 69	0
5	224	CP 52-1	ISH 307	0
6	225	CP 52-1	ISH 306	10
7	226	Co 06036	ISH 307	0
8	251	Co 86011	Co 62198	50
9	576	ISH 100	Co 97015	90
10	577	NB 94-545	85 R 186	179
11	513	CoSnk 03632	Co 97015	40
12	524	Co 7201	Co 94008	0
13	525	Co 7204	CoPant 97222	215
14	544	CoSnkl 03707	ISH 2	30
15	578	CoSnk 03061	CoA 7602	61
Total				745

Zonal Crosses

Sl. No.	Cross No.	Female	Male	No. of Seedlings
16	178	Co 86002	Co 1148	112
17	179	Co 85002	Co 62174	138
18	210	Co 8213	Co 86011	40
19	211	Co 8213	CoT 8201	13
20	299	CoV 94101	Co 97015	0
21	328	Co 8371	CoT 8201	62
22	394	CoC 671	CoT 8201	0
23	395	CoC 671	Co 94008	0
24	504	Co 740	Co 775	0
25	506	CoM 0265	Co 99006	0
26	584	Co 86032	Co 86250	0
27	653	Co 8371	Co 86011	800
28	654	CoM 0265	Co 775	10
Total				1175

PCGC

Sl. No.	Female	No. of Seedlings
29	CoM 0265	10
30	ISH 100	70
31	Co 94012	29
32	Co 85002	146
33	CoA 7602	46
34	86V46	40
35	CoC 671	0
36	CP 52-68	10
37	Co 2000-10	15
38	CoC 90063	0
39	Co 7201	10
40	Co 8371	600
Total		976

GC's

Sl. No.	Female	No. of Seedlings
41	CP 44-101	0
42	CoTI 85118	57
43	Co 8339	30
44	CP 52-1	0
45	Co 8318	19
46	CoSnk 05103	53
47	Co 87267	0
48	NB 94-545	30
49	CoV 94101	0
50	Co 7224	0
51	Co 97015	0
52	CoSnk 03632	0
53	Co 87004	0
Total		189