

To

Dr. Bakshi Ram,

Principal Investigator / Director

Crop Improvement-AICRP(S),

Sugarcane Breeding Institute, Coimbatore -641007 TN.

RRS/K/

Dated:

Subject: Annual report on AICRP(S)- Crop Improvement data

Kindly find enclosed here with hard copy of annual report of AICRP(S) - Crop Improvement data for the experiments conducted at CCS HAU, Regional Centre, Uchani -Karnal for the year 2015-16. The data has been sent as per prescribed format sent by you. Every care has been taken in observing guidelines for uniformity and compilation of the data. Soft copy of the report has already been sent through mail. It is for your kind information and further n/a please.

S. P. Kadian

Consultant Faculty

CCS HAU Regional Research Station,

Uchani - Karnal 132991

CC: Dr. O. K Sinha Director cum Project Coordinator (Sugarcane), Indian Institute of Sugarcane Research (IISR)-Lucknow- 226002

Advanced Varietal Trial (Mid late II Plant)											
S.N.	Clone	CCS (t/ha)	Cane yield (t/ha)	Brix % at harvest	Sucrose% at harvest	Purity % at harvest	CCS% at harvest	Pol % Cane at harvest	Juice Extraction %	Fiber%	NMC at harvest ('000/ha)
1	Co 10036	11.05	102.2	21.93	17.18	74.45	10.82	11.42	48.40	13.73	111.23
2	CoH10262	14.82	118.1	23.90	19.13	80.05	12.57	13.34	53.73	12.47	117.07
3	CoPb 10181	11.34	97.9	23.73	18.12	76.34	11.59	12.20	50.47	13.33	139.37
4	CoPb10182	9.48	99.5	21.83	15.55	71.17	9.51	10.30	52.80	12.60	109.83
5	CoPant 10221	10.93	92.4	23.30	18.24	78.28	11.83	12.28	54.20	12.33	134.43
6	CoS 767	10.33	89.6	23.03	17.86	77.53	11.53	12.21	50.00	13.53	124.97
7	CoS 8436	11.30	98.6	22.67	17.70	78.11	11.47	11.86	55.20	12.20	115.60
8	Co Pant 97222	10.83	90.5	23.60	18.46	78.19	11.97	12.40	51.33	13.87	121.87
	CD	1.20	5.87	NA	1.11	4.12	0.99	0.81	1.62	0.72	6.71
	CV	0.39	3.37	3.65	3.52	3.03	4.95	3.84	1.76	3.13	3.12

Advanced Varietal Trial (Mid late II Plant)										
S.N.	Clone	Stalk Length (m)	Stalk diameter (cm)	Single cane weight (kg)	Brix % (10m)	Sucrose% (10m)	Purity % (10m)	CCS% (10m)	No. of tillers ('000/ha) 120 days	Germination % (45 days)
1	Co 10036	2.78	2.35	0.86	20.27	17.61	86.90	12.08	131.67	48.53
2	CoH10262	2.52	2.45	1.15	20.53	18.73	91.22	13.15	122.57	48.70
3	CoPb 10181	2.57	2.21	0.92	22.13	18.60	84.26	12.55	167.00	49.20
4	CoPb10182	2.73	2.74	0.86	19.23	16.89	87.83	11.65	125.97	49.40
5	CoPant 10221	2.41	2.37	0.75	20.47	18.70	91.39	13.13	159.13	49.37
6	CoS 767	2.81	2.08	0.77	20.30	18.14	89.33	12.61	136.17	51.77
7	CoS 8436	1.85	2.29	0.81	19.83	18.59	93.73	13.21	126.07	51.47
8	Co Pant 97222	2.43	2.23	0.98	20.60	18.37	89.14	12.76	142.47	48.43
	CD	0.08	0.28	0.07	1.12	0.92	5.04	0.89	9.64	2.14
	CV	1.82	6.81	4.38	3.11	2.87	3.20	3.99	3.92	2.4

S.N.	Clone	CCS (t/ha)	Cane yield (t/ha)	Brix % at harvest	Sucrose% at harvest	Purity % at harvest	CCS% at harvest	Pol % Cane at harvest	Juice Extraction %	Fiber%	NMC at harvest ('000/ha)
1	Co 12026	14.32	111.40	22.03	18.88	85.69	12.86	13.37	53.40	12.53	106.433
2	Co 12027	16.327	119.47	20.00	19.15	96.67	13.73	13.23	52.33	12.93	112.467
3	CoH 12261	16.9	128.77	21.80	19.06	87.35	13.11	13.63	53.63	12.33	113.733
4	CoLk 11201	12.86	101.73	21.80	18.61	85.40	12.65	13.20	53.47	12.47	119.4
5	CoLk 11202	10.047	94.97	20.13	16.11	80.09	10.59	11.40	49.33	13.37	136.933
6	CoLk 11203	11.02	99.80	19.63	16.42	84.54	11.04	11.73	50.07	13.73	110.7
7	CoLk 12204	11.39	101.90	19.60	16.52	84.29	11.16	11.43	51.30	12.77	141.2
8	Co Pant 12221	10.473	104.90	18.53	15.02	80.80	9.94	10.47	49.00	13.50	113.733
9	Co Pant 12222	11.41	96.30	20.77	17.51	84.35	11.83	12.70	53.10	12.63	130.467
10	CoS 12231	11.16	124.13	18.17	13.96	76.59	8.96	9.80	49.35	13.27	116.267
11	Co0238	13.907	109.10	21.97	18.73	85.37	12.72	13.33	54.13	12.40	129.833
12	CoJ64	12.913	100.97	21.10	18.55	88.01	12.79	13.00	50.77	13.50	138.667
	CD	2.532	5.71	N/A	2.42	N/A	2.10	1.28	1.62	0.65	8.254
	CV	11.674	3.11	7.95	8.17	7.88	10.44	6.13	1.84	2.96	3.954

Initial Varietal Trial (Early)										
S.N.	Clone	Stalk Length (m)	Stalk diameter (cm)	Single cane weight (kg)	Brix % (8m)	Sucrose% (8m)	Purity % (8m)	CCS% (8m)	No. of tillers ('000/ha) 120 days	Germination % (45 days)
1	Co 12026	2.18	2.75	0.69	22.37	18.87	84.35	12.75	135.97	48.87
2	Co 12027	1.72	2.53	0.76	23.13	19.93	86.19	13.62	143.00	48.43
3	CoH 12261	2.38	2.21	0.94	20.50	16.71	81.44	11.09	134.87	53.73
4	CoLk 11201	1.63	1.99	0.77	20.90	17.56	83.89	11.84	148.83	51.00
5	CoLk 11202	1.88	2.09	0.77	21.63	17.75	82.11	11.82	162.80	49.00
6	CoLk 11203	2.03	2.03	0.79	20.20	16.70	82.66	11.17	140.63	49.33
7	CoLk 12204	1.87	2.17	0.63	18.10	9.70	80.29	9.59	169.33	51.10
8	Co Pant 12221	2.48	1.96	0.87	20.37	16.19	79.51	10.60	144.17	48.67
	Co Pant 12222	1.88	2.43	1.13	21.27	18.75	88.55	12.96	165.23	48.73
	CoS 12231	1.87	2.66	0.72	20.07	16.16	80.45	10.66	147.00	50.47
	Co0238	2.33	2.49	1.15	20.47	16.83	81.73	11.23	154.40	51.13
	CoJ64	1.72	2.25	0.65	21.57	18.47	85.63	12.58	165.33	52.83
	CD	0.16	0.09	0.04	N/A	N/A	N/A	2.27	7.59	2.29
	CV	4.63	2.40	2.70	8.58	17.70	4.49	11.42	2.95	2.68

Advanced Varietal Trial Mid late (Ratoon)															
S.N	Clone	CCS (t/ha)	Cane yield (t/ha)	Brix % at harvest	Sucrose % at harvest	Purity % at harvest	CCS% at harvest	Pol % Cane at harvest	Juice Extraction %	Fiber %	NMC at harvest ('000/ha)	Stalk Length (m)	Stalk diameter (cm)	Single cane weight (kg)	No. of tillers ('000/ha) 120 days
1	Co 10036	11.06	97.80	20.60	16.95	82.31	11.31	11.82	48.93	13.10	98.57	2.23	2.30	0.75	139.73
2	CoH10262	13.08	107.77	21.50	18.02	83.83	12.14	12.68	53.53	12.47	111.17	2.32	2.41	1.06	138.07
3	CoPb 10181	10.07	89.77	20.50	16.84	82.12	11.22	11.90	51.53	13.40	129.93	2.18	2.15	0.89	174.67
4	CoPb10182	9.77	94.83	19.60	15.69	80.05	10.31	11.05	52.27	12.60	106.13	2.10	2.61	0.74	132.00
5	CoPant 10221	9.09	85.47	19.00	15.83	83.03	10.63	11.66	54.00	12.47	124.63	1.95	2.25	0.73	167.93
6	CoS 767	9.45	85.73	20.10	16.53	82.25	11.02	11.65	51.40	13.53	113.70	2.00	2.02	0.72	150.10
7	CoS 8436	9.59	91.90	19.57	15.82	80.78	10.46	11.26	55.20	12.47	107.50	1.73	2.19	0.75	139.73
8	Co Pant 97222	9.12	83.17	20.47	16.57	81.05	10.96	11.75	50.93	13.73	110.03	2.05	2.15	0.85	151.07
	CD	1.24	4.60	N/A	N/A	N/A	N/A	0.88	2.21	0.67	6.21	0.06	0.19	0.03	9.08
	CV	6.88	2.83	4.26	5.57	2.82	6.64	4.23	2.40	2.91	3.12	1.70	4.78	2.03	3.44

Advanced Varietal Trial (Early-I Plant)											
S.N.	Clone	CCS (t/ha)	Cane yield (t/ha)	Brix % at harvest	Sucrose% at harvest	Purity % at harvest	CCS% at harvest	Pol % Cane at harvest	Juice Extraction %	Fiber%	NMC at harvest ('000/ha)
1	CoH 11262	15.05	118.23	19.73	18.10	91.91	12.74	13.27	54.77	12.37	124.37
2	CoLk 11201	12.36	101.57	19.97	17.62	88.27	12.18	12.45	54.60	12.50	126.10
3	CoLk 11202	12.63	105.13	20.07	17.50	87.26	12.03	12.61	53.37	12.97	118.90
4	CoLK 11203	12.36	96.03	19.50	18.17	93.27	12.88	12.99	50.10	13.53	122.53
5	Co0238	12.76	101.53	21.57	18.47	85.63	12.58	13.21	54.20	12.37	121.43
6	CoJ 64	12.12	95.57	21.63	18.68	85.25	12.69	12.82	50.47	13.57	115.07
	CD	0.80	6.37	1.58	N/A	5.38	N/A	N/A	1.28	0.48	5.61
	CV	3.38	3.36	4.19	3.35	3.30	4.20	2.91	1.32	2.01	2.51

Advanced Varietal Trial (Early-I Plant)										
S.N.	Clone	Stalk Length (m)	Stalk diameter (cm)	Single cane weight (kg)	Brix % (8m)	Sucrose% (8m)	Purity % (8m)	CCS% (8m)	No. of tillers ('000/ha) 120 days	Germination % (45 days)
1	CoH 11262	1.76	2.79	1.03	18.60	15.54	83.95	10.45	130.50	52.60
2	CoLk 11201	1.92	2.24	0.71	19.27	18.03	93.63	12.81	140.20	49.37
3	CoLk 11202	2.09	2.43	0.91	18.93	17.02	89.86	11.87	136.97	49.17
4	CoLK 11203	1.73	2.29	0.94	19.00	16.37	86.15	11.18	142.17	49.37
5	Co0238	1.22	2.56	0.99	18.33	17.23	94.19	12.26	131.07	50.30
6	CoJ 64	1.72	2.33	0.75	18.87	17.57	93.19	12.45	142.10	52.50
	CD	0.17	0.07	0.11	N/A	1.13	N/A	1.22	3.08	2.74
	CV	5.35	1.47	6.81	4.89	3.62	5.77	5.57	1.22	2.94

Crosses made at Sugarcane Breeding Institute, Coimbatore (T. N.) during the year 2014-15 and the fluff sown at HAU. RRS, Karnal during March, 2015

S. N.	Cross	Fluff receiv (gm)	Germination Yes/No	No Seedlings transplanted	No. Seedlings survived
Zonal Crosses					
1	Bo 91 (F) Co 453 (Male)	11.0	Yes	368	300
2	LG 95053(F) Bo 91(Male)	17.0	No	Nil	-
3	Co 0237(F) CoS 8436 (M)	11.5	No	Nil	-
4	Co 98010(F) Co 1148 (M)	10.0	Yes	236	180
5	Co 98008(F) Co 775(M)	9.5	Yes	52	30
6	CoS 8436(F) CoP 97222 (M)	15.0	Yes	162	60
7	Co 0238(F) CoSe92423 (M)	12.0	Yes	144	100
8	Co 98008(F) Co89003 (M)	14.0	No	-	-
9	Co 7201(F) PC	6.0	Yes	60	32
10	CoS 8436(F) Co89003 (M)	10.0	Yes	212	160
11	MS 68/47(F) CoV92102 (M)	21.0	Yes	805	435
12	Co 7314(F) Co1148 (M)	7.0	Yes	144	105

13	Co 0124(F) Co94008 (M)	4.0	No	16	10
Polycrosses Female Male					
1	CoSe92423 CoS 767	51.5	Yes	1846	1410
2	CoSe95422 Co 7314	42.5	Yes	615	410
3	CoV 89101 CoP97222	86.5	Yes	1845	1340
4	CoJ 88 Co 89003	53.0	Yes	2322	1705
5	Cos 8436 ISH 229	45.5	Yes	1015	815
6	ISH 100 Co 775	42.0	Yes	1108	740
7	Co 7201 Bo 91	46.5	Yes	966	705
8	CoJ 83 CoSe 92423	35	Yes	601	505
General crosses (GC)					
1	Co 0238	5.5	No	Nil	-
2	CoJ 72	13.0	Yes	315	250
3	CoS 96260	63.5	Yes	1375	1050
4	CoH 110	61.5	Yes	1320	1100
5	CoS 97261	41.0	Yes	1480	1250
6	CoLK 97169	7.5	Yes	170	100

7	Co 86011	24.0	Yes	1595	1200
8	CoH 15	25.0	Yes	272	210
9	Co 0237	26.0	Yes	185	150
10	ISH 229	26.5	Yes	1265	1050
11	CoH 12	39.5	Yes	1752	1400
12	CoH 112	40.5	Yes	1178	1010
13	Co 775	51.0	Yes	780	610
14	CoJ 82315	52.5	Yes	1045	810
15	CoH 14	48.5	Yes	770	520
16	CoS 8436	7.5	No	-	-
17	CoH 99	16.0	Yes	1980	1440
18	CoJ 77	24.5	Yes	1485	1150
19	Co 62198	66.0	Yes	110	60
20	CoH 14	39.0	Yes	980	720
21	CoH 119	48.0	Yes	48	20
22	CoH 92	79.5	Yes	1809	1560
23	Co 0327	75.0	Yes	1925	1470

24	CoH 98	54.0	Yes	1650	1230
25	CoS 510	34.5	Yes	1118	840
26	CoC 671	17.5	No	-	-
27	CoH 56	56.0	Yes	605	520
28	ISH 69	55.5	Yes	990	710
29	Co 7717	18.5	Yes	30	16
30	CoJ 87	31.5	Yes	428	324
31	CoJ 88	62.5	Yes	1320	700
32	CoH 102	77.5	Yes	1305	810
33	CoH 129	68.0	Yes	1056	680
34	Co 88039	55.0	Yes	1210	790
35	Co 0118	15.0	Yes	452	370
36	CoH 114	79.0	Yes	385	210
37	Co 94008	19.0	Yes	10.0	05
38	Co 99006	19.0	Yes	715	510
39	Co 88025	8.5	No	-	-
40	Co 85002	15.0	Yes	120	70

41	Co 7704	6.5	Yes	51	30
	Total (62)			45801	33927

Date of fluff receipt : 27/02/2015

Date of Fluff sowing : March13, 2015

Number of cross germinated : 55

Number of seedlings transplanted : 45801 (at the onset of monsoon in July, 2015)

Percent survival : 74.06

Table-2: Information regarding crosses made at Sugarcane Breeding Institute, Coimbatore (T. N.) during the year 2015-16 and the fluff sown at CCS HAU Uchani during March, 2016

S. N.	Cross	Fluff received (gm)	Germination Yes/No	No Seedlings transplanted	No. Seedlings survived
Zonal Crosses					
1	Co 0237(F) CoS 8436 (M)	13.0	No	-	-
2	Co 98010(F) Co 775 (M)	12.0	Yes		
3	Co 98008(F) Co 89003(M)	10.0	No	-	-
4	Co 0238(F) CoSe92423 (M)	7.50	No	-	-
5	Co 98008(F) Co 94008(M)	10.0	Yes		
6	CoS 8436(F) Co89003 (M)	12.0	Yes		

Polycrosses Female Male						
1	CoSe92432	CoS 767	9.5	Yes		
2	Co7201	Co 7314	1.0	No	-	-
3	CoJ 88	CoP 97222	2.0	No	-	-
4	CoSe95422	CO 89003	1.5	No	-	-
5	CoV89101	ISH 229	17.0	Yes		
6	CoS 8436	Co 775	6.5	No	-	-
7	ISH 100	Bo 91	1.0	No	-	-
-8	CoJ 83	CoSe 92423	2.0	Yes		
General crosses (GC)						
1	CoH 92		65.0	Yes		
2	CoH 56		7.5	No	-	-
3	Co 7704		7.5	Yes		
4	CoS 97261		96.5	No	-	-
5	Co 89003		7.5	Yes		
6	CoLK 7901		49.0	No	-	-
7	CoH 119		17.0	No	-	-

8	CoS 8436	12.5	Yes		
9	CoS 96260	10.5	Yes		
10	CoH 128	38.5	Yes		
11	CoH 114	50.5	No	-	-
12	CoH 56 (Agali) repeat	7.0	No	-	-
13	CoH 119 (Agali) repeat	15.0	No	-	-
14	CoH 92 (Agali) repeat	10.5	No	-	-
Station crosses					
1	Co 0238 X Co89029	12.5	No	-	-
2	CoH 92 X Co89029	17.0	Yes		
3	Co 98010 x CoP97222	9.5	No	-	-
4	CoH 56 X CO1148	10.0	No	-	-
5	Co 92013 x Co 62198	14.5	No	-	-
6	CoH 110 X CoS 88216	15.5	Yes		
7	CoH 104 X Co775	42.5	Yes		
8	Co 0238 X CoP97222	9.0	No	-	-
9	CoH 70 X CoP97222	13.0	Yes		

10	CoS 97261X Co 06037	17.5	No	-	-
11	CoH 128 X Co 06037	19.0	Yes		
12	CoH 7802 X Co 97015	8.5 (Agali)	No	-	-
13	CoS 97261X Co 06037	17.5 (repeat)	No	-	-
14	Co 1158 X CoS 93278	24.0	Yes		
15	CoH 92 X Co1148	14.0	No	-	-
16	CoJ 83 XCo 87268	14.0	Yes		
17	Co 0237XCoS 510	12.0	No	-	-
18	CoJ 88 X Co 1158	8.5	No	-	-
19	CoH 128 X ISH 69	45.0	No	-	-
20	CoPb 10183 X Co 87268	20.0	No	-	-
21	CoH 110 X Co 62198	9.0	No	-	-
22	Co 8213 X CoH 70	17.0	Yes		
23	CoH 119 X Co 89003	17.0	No	-	-
24	CoH 119 X Co 1148	23.0	No	-	-
	Total (49)	904			

Date of fluff receipt

: 18/02/2016

Date of Fluff sowing : March1, 2016
Number of cross germinated : 21 (8 bip, 3 zonal, 3 PC and 7 GC)

Progress of fluff supply programme from 2009-2015 at Uchani centre

Year	Cross attempted	Seedlings transplanted	Seedlings survived	Seedlings selected
2009	48	23315	18984	1170
2010	76	6485	4540	281
2011	82	16504	13203	758
2012	69	20330	15488	545
2013	86	13687	9595	368
2014	62	18983	12588	373
2015	62	45801	33927	In the field

Replicated data of AICRP trials for the year 2015-16

Advanced Varietal Trial (Mid late II Plant)												
Clone	CCS (t/ha)			Cane yield (t/ha)			Stalk diameter (cm)			Single cane weight (kg)		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
Co 10036	9.90	11.43	11.82	102.3	99.2	105.1	2.44	2.34	2.26	0.80	0.88	0.90
CoH10262	14.99	14.95	14.53	115.2	117.2	121.8	2.42	2.68	2.26	1.20	1.09	1.15
CoPb 10181	11.34	11.66	11.03	97.4	101.6	94.7	2.20	2.28	2.15	0.92	0.87	0.96
CoPb10182	10.05	8.21	10.18	99	95.2	104.3	2.75	2.58	2.88	0.88	0.84	0.86
CoPant 10221	10.78	10.46	11.56	92.1	89.6	95.4	2.26	2.24	2.62	0.76	0.72	0.78
CoS 767	9.55	10.79	10.65	87.2	92.4	89.1	2.10	2.06	2.08	0.75	0.74	0.82
CoS 8436	11.70	11.15	11.06	102.4	97.6	95.8	2.16	2.48	2.24	0.78	0.80	0.86
Co Pant 97222	11.22	10.35	10.93	92.6	88.2	90.7	2.14	2.46	2.10	1.02	0.98	0.94

Advanced Varietal Trial (Mid late II Plant)												
Clone	Stalk length (m)			NMC at 10 m ('000/ha)			No of tillers ('000/ha) 120 days			Germination % (45 days)		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
Co 10036	2.77	2.82	2.75	105.2	115.9	112.6	125	136.1	133.9	47.3	48.1	50.2
CoH10262	2.52	2.46	2.58	120.4	114.1	116.7	125.8	119.3	122.6	48.2	48.6	49.3
CoPb 10181	2.56	2.52	2.64	142.2	140.5	135.4	170.9	158.4	171.7	50.6	49.2	47.8
CoPb10182	2.68	2.74	2.76	111.8	107.8	109.9	131.6	126.3	120	48.7	49.5	50.0
CoPant 10221	2.38	2.46	2.40	130.5	135.4	137.4	167.5	147.6	162.3	47.9	48.1	52.1
CoS 767	2.76	2.82	2.86	120.9	124.7	129.3	140.2	135.4	132.9	50.3	51.4	53.6
CoS 8436	1.90	1.82	1.84	115.2	119.2	112.4	128.6	122.2	127.4	52.3	50.4	51.7
Co Pant 97222	2.38	2.44	2.48	118.9	121.4	125.3	142.1	138.5	146.8	47.6	48.4	49.3

Initial Varietal Trial (Early)													
S.N.	Clone	CCS (t/ha)			Cane yield (t/ha)			Stalk diameter (cm)			Single cane weight (kg)		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co 12026	14.13	14.34	14.49	108.6	110.2	115.4	2.78	2.66	2.82	0.69	0.68	0.70
2	Co 12027	18.70	16.13	14.15	115.6	118.2	124.6	2.52	2.50	2.58	0.78	0.75	0.76
3	CoH 12261	15.47	15.79	19.44	130.2	122.6	133.5	2.20	2.16	2.28	0.95	0.97	0.90
4	CoLk 11201	13.21	13.04	12.33	98.4	105.2	101.6	2.04	1.94	2.00	0.79	0.77	0.75
5	CoLk 11202	10.44	9.19	10.51	90.6	95.6	98.7	2.10	2.12	2.06	0.77	0.78	0.75
6	CoLk 11203	10.82	10.69	11.55	100.2	95.8	103.4	2.06	2.08	1.96	0.82	0.80	0.76
7	CoLk 12204	10.50	11.16	12.51	97.6	101.4	106.7	2.14	2.16	2.20	0.62	0.63	0.65
8	Co Pant 12221	10.91	12.32	8.19	105.4	108.6	100.7	2.02	1.90	1.96	0.88	0.87	0.86
9	Co Pant 12222	10.59	10.81	12.83	95.7	93.4	99.8	2.42	2.40	2.48	1.18	1.12	1.10
10	CoS 12231	8.78	11.50	13.20	120.4	124.6	127.4	2.66	2.72	2.60	0.70	0.75	0.72
1	Co0238	13.61	12.34	15.77	110.3	104.6	112.4	2.48	2.54	2.44	1.20	1.14	1.12
2	CoJ64	12.44	12.67	13.63	95.8	100.4	106.7	2.24	2.30	2.22	0.67	0.65	0.64

Initial Varietal Trial (Early)													
S.N.	Clone	Stalk length (m)			NMC at 10 m ('000/ha)			No of tillers ('000/ha) 120 days			Germination % (45 days)		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co 12026	2.20	2.25	2.10	105.6	110.2	103.5	132.2	140.3	135.4	48.2	50.3	48.1
2	Co 12027	1.80	1.75	1.60	113.2	105.8	118.4	143.2	145.2	140.6	46.8	48.4	50.1
3	CoH 12261	2.30	2.40	2.45	115.4	108.2	117.6	138.4	130.6	135.6	52.4	55.2	53.6
4	CoLk 11201	1.70	1.55	1.65	120.4	112.2	125.6	140.7	150.6	155.2	51.2	52.1	49.7
5	CoLk 11202	1.95	1.90	1.80	130.5	138.2	142.1	160.5	164.7	163.2	50.1	48.7	48.2
6	CoLk 11203	2.05	1.95	2.10	106.4	111.2	114.5	136.4	140.2	145.3	48.7	48.9	50.4
7	CoLk 12204	1.90	2.00	1.70	144.2	140.5	138.9	170.2	165.4	172.4	50.2	52.1	51.0
8	Co Pant 12221	2.50	2.55	2.40	113.2	117.6	110.4	143.7	140.2	148.6	48.3	47.6	50.1
9	Co Pant 12222	1.90	1.80	1.95	132.4	124.8	134.2	160.4	165.2	170.1	50.2	47.6	48.4
10	CoS 12231	1.80	1.95	1.85	122.5	111.0	115.3	152.6	140.8	147.6	48.6	50.7	52.1
1	Co0238	2.25	2.40	2.35	130.5	132.6	126.4	155.6	150.2	157.4	50.4	52.2	50.8
2	CoJ64	1.75	1.60	1.80	138.6	142.2	135.2	165.4	170.2	160.4	52.6	55.1	50.8

Advanced Varietal Trial Mid late (Ratoon)												
Clone	CCS (t/ha)			Cane yield (t/ha)			Stalk diameter (cm)			Single cane weight (kg)		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
Co 10036	10.76	11.19	11.22	95.6	98.2	99.6	2.32	2.36	2.22	0.74	0.75	0.76
CoH10262	13.27	12.74	13.22	104.6	110.2	108.5	2.40	2.60	2.22	1.05	1.02	1.10
CoPb 10181	9.91	9.64	10.67	90.7	86.2	92.4	2.16	2.20	2.10	0.89	0.88	0.91
CoPb10182	9.63	9.44	10.24	90.5	95.4	98.6	2.60	2.54	2.70	0.74	0.72	0.75
CoPant 10221	9.14	7.28	10.86	82.4	85.4	88.6	2.15	2.20	2.40	0.73	0.71	0.75
CoS 767	8.95	9.88	9.53	83.6	88.9	84.7	2.05	2.0	2.02	0.72	0.71	0.73
CoS 8436	10.25	9.01	9.50	90.4	96.2	89.1	2.08	2.30	2.18	0.75	0.72	0.77
Co Pant 97222	8.78	9.38	9.20	81.2	85.6	82.7	2.10	2.30	2.05	0.85	0.87	0.84

Advanced Varietal Trial Mid late (Ratoon)									
Clone	Stalk length (m)			NMC at 10 m ('000/ha)			No of tillers ('000/ha) 120 days		
	R1	R2	R3	R1	R2	R3	R1	R2	R3
Co 10036	2.25	2.23	2.21	95.2	98.4	102.1	135.4	138.6	145.2
CoH10262	2.3	2.35	2.32	110.2	114.7	108.6	140.2	135.6	138.4
CoPb 10181	2.15	2.17	2.22	130.6	132.4	126.8	175.4	180.2	168.4
CoPb10182	2.10	2.15	2.05	103.8	105.4	109.2	135.8	132.4	127.8
CoPant 10221	1.90	1.95	2.0	120.0	125.4	128.5	175.2	160.4	168.2
CoS 767	1.95	2.0	2.05	110.5	113.4	117.2	155.3	150.2	144.8
CoS 8436	1.70	1.74	1.76	108.6	102.4	111.5	135.6	140.2	143.4
Co Pant 97222	2.0	2.05	2.1	110.2	113.5	106.4	148.2	150.3	154.7

Advanced Varietal Trial (Early-I Plant)												
Clone	CCS (t/ha)			Cane yield (t/ha)			Stalk diameter (cm)			Single cane weight (kg)		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
CoH 11262	15.81	14.69	14.65	120.2	112.2	122.3	2.82	2.75	2.79	1.04	1.01	1.03
CoLk 11201	12.41	12.02	12.66	100.4	97.8	106.5	2.20	2.25	2.28	0.71	0.70	0.72
CoLk 11202	13.33	12.51	12.05	105.6	101.2	108.6	2.42	2.40	2.48	0.90	0.91	0.92
CoLK 11203	12.49	12.38	12.20	95.6	92.7	99.8	2.25	2.30	2.32	0.92	0.97	0.94
Co0238	12.50	12.79	12.99	100.6	105.4	98.6	2.52	2.57	2.60	0.98	0.99	1.01
CoJ 64	12.05	11.76	12.55	92.3	95.7	98.7	2.32	2.37	2.30	0.65	0.67	0.92

Advanced Varietal Trial (Early-I Plant)												
Clone	Stalk length (m)			NMC at 10 m ('000/ha)			No of tillers ('000/ha) 120 days			Germination % (45 days)		
	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
CoH 11262	1.66	1.71	1.90	125.4	120.3	127.4	134.0	128.0	129.5	52.4	55.2	50.2
CoLk 11201	1.81	1.94	2.00	130.2	125.8	122.3	145.0	135.0	140.6	48.5	49.4	50.2
CoLk 11202	2.10	2.18	1.98	118.4	114.7	123.6	142.0	132.0	136.9	50.2	48.7	48.6
CoLK 11203	1.61	1.84	1.74	122.6	116.6	128.4	147.0	137.0	142.5	47.8	49.2	51.1
Co0238	1.20	1.26	1.19	120.5	118.4	125.4	135.0	125.0	133.2	50.2	51.2	49.5
CoJ 64	1.71	1.84	1.62	115.4	111.0	118.8	148.0	134.0	144.3	52.1	52.0	53.4

Juice quality of sugarcane clones (AVT Mid late-II Plant) tested during January. 2016

S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%			Pol in Cane		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co10036	20.6	20.6	19.6	18.10	17.76	16.98	87.84	86.23	86.62	12.48	12.14	11.63	12.72	12.55	11.82
2	CoH10262	20.2	20.6	20.8	18.41	18.76	19.02	91.14	91.05	91.46	12.92	13.15	13.37	13.22	13.84	13.84
3	CoP10221	23.5	21.4	21.5	18.19	18.50	19.12	77.41	86.45	88.92	11.73	12.66	13.26	12.00	12.88	13.66
4	CoPb10181	20	20.9	20.5	18.67	18.76	18.67	93.33	89.77	91.06	13.24	13.07	13.09	13.08	13.27	13.42
5	CoPb10182	19.6	20.6	20.7	17.43	18.67	18.31	88.93	90.61	88.45	12.09	13.06	12.67	12.46	13.22	12.92
6	CoS767	19.7	19.9	19.9	19.02	18.79	17.95	96.56	94.40	90.22	13.69	13.39	12.54	13.76	13.24	12.66
7	CoS8436	20.4	20.2	21.2	17.81	18.12	19.17	87.31	89.7	90.41	12.25	12.62	13.40	12.64	12.98	12.72
8	CoP97222	19.4	19.5	18.8	17.22	16.76	16.69	88.74	85.97	88.79	11.93	11.44	11.57	12.42	11.82	11.88

Juice quality of sugarcane clones (AVT Mid late-II Plant) tested during March . 2016

S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%			Pol in Cane		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co10036	20.1	23.3	22.4	16.21	17.93	17.41	68.69	76.95	77.71	9.68	11.52	11.25	10.42	12.00	11.84
2	CoH10262	25.1	23.2	23.4	19.9	19.12	18.36	79.29	82.41	78.45	13.01	12.76	11.93	13.42	13.20	13.40
3	CoP10221	23.9	23.6	23.7	18.21	17.98	18.17	76.21	76.17	76.65	11.64	11.48	11.65	12.22	12.04	12.34
4	CoP97222	22.4	21.5	21.6	16.34	14.58	15.72	72.93	67.80	72.77	10.15	8.62	9.76	10.84	9.62	10.44
5	CoPb10181	22.8	23.2	23.9	17.98	18.05	18.69	78.85	77.79	78.20	11.71	11.67	12.12	12.05	11.96	12.82
6	CoPb10182	22.5	23.6	23	17.14	18.17	18.26	76.20	76.98	79.40	10.95	11.68	11.95	11.68	12.08	12.86
7	CoS767	23.1	22.8	22.1	17.79	17.69	17.62	77.00	77.59	79.73	11.43	11.42	11.55	11.84	11.77	11.96
8	CoS8436	23.6	23.4	23.8	18.6	18.17	18.60	78.8	77.64	78.13	12.12	11.73	12.05	12.74	12.02	12.44

AVT-ML 2 ND Plant							
S.N.	Clone	Juice Extraction			Fiber%		
		R1	R2	R3	R1	R2	R3
1	Co10036	48.4	47.6	49.2	13.6	14.2	13.4
2	CoH10262	54.2	52.6	54.4	12.8	12.4	12.2
3	CoP10221	50.4	51.2	49.8	13.2	13.0	13.8
4	CoPb10181	52.2	53.4	52.8	12.6	12.2	13.0
5	CoPb10182	54.0	53.6	55	12.2	12.8	12.0
1	CoS767	50.2	50.0	49.8	13.4	13.0	14.2
2	CoS8436	54.4	55.0	56.2	12.2	12.0	12.4
3	CoP97222	49.2	51.9	52.9	13.6	13.8	14.2

Juice quality of sugarcane clones(IVT Early) tested during Nov. 2015													
S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co12026	23.1	21.8	22.2	19.48	18.67	18.45	84.31	85.63	83.12	13.16	12.71	12.38
2	Co12027	22.9	23.4	23.1	20.26	19.76	19.78	88.47	84.45	85.65	14.02	13.36	13.47
3	CoH12261	20.5	21.7	19.3	16.57	18.12	15.43	80.85	83.50	79.96	10.95	12.18	10.14
4	CoLk12201	19.1	23.8	19.8	15.43	20.26	16.98	80.80	85.12	85.75	10.19	13.76	11.57
5	CoLk12202	23.8	19.6	21.5	19.12	16.19	17.93	80.33	82.62	83.39	12.59	10.83	12.05
6	CoLk12203	20.5	20.2	19.9	17.43	16.38	16.29	85.02	81.11	81.85	11.83	10.85	10.84
7	CoLk12204	17.2	19	18.1	13.44	15.67	0.00	78.11	82.48	80.29	8.71	10.47	9.59
8	CoP12221	21.8	20.1	19.2	16.84	16.79	14.93	77.23	83.52	77.78	10.84	11.29	9.66
9	CoP12222	20.4	22.7	20.7	18.71	17.60	19.95	91.74	77.52	96.38	13.17	11.36	14.35
10	CoS12231	18	21.5	20.7	14.12	17.36	17.00	78.47	80.74	82.14	9.18	11.46	11.33
11	Co0238	23.2	16.1	22.1	19.40	12.34	18.76	83.64	76.65	84.89	13.06	7.91	12.72
12	CoJ64	21.6	20.8	22.3	18.33	17.81	19.26	84.88	85.63	86.37	12.43	12.13	13.17

Juice quality of sugarcane clones(IVT Early) tested during January, 2016																
S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%			Pol in cane %		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co12026	24.3	24	23.5	18.95	18.40	17.98	77.99	76.69	76.50	12.27	11.80	11.51	13.7	13.5	12.9
2	Co12027	25.7	24.2	25.2	20.66	19.12	20.07	80.40	79.00	79.64	13.61	12.47	13.15	13.6	13.3	12.8
3	CoH12261	21.8	24.9	23.6	16.98	19.33	18.12	77.88	77.64	76.78	10.99	12.49	11.63	12.6	13.4	14.9
4	CoLk12201	26	25.2	24.4	20.43	20.35	19.09	78.56	80.77	78.26	13.28	13.44	12.39	13.8	13.0	12.8
5	CoLk12202	24.3	23.6	24.9	18.93	18.36	18.95	77.89	77.79	76.11	12.25	11.87	12.10	12.2	10.8	11.2
6	CoLK12203	24.4	22.7	24.1	18.88	17.03	18.60	77.38	75.00	77.16	12.17	10.77	11.97	11.4	11.8	12.0
7	CoLk12204	23.3	24.4	23.3	18.10	19.14	18.14	77.66	78.45	77.87	11.69	12.44	11.74	10.9	11.6	11.8
8	CoP12221	24.1	23.7	23.6	18.60	18.76	18.02	77.16	79.16	76.37	11.97	12.25	11.53	10.2	11.6	9.6
9	CoP12222	23.1	23.5	23.8	17.79	19.40	18.48	77.00	82.57	77.63	11.43	12.97	11.93	12.0	12.7	13.4
10	CoS12231	25.3	23.9	25.6	19.31	18.88	19.86	76.32	79.00	77.56	12.35	12.32	12.82	9.4	9.2	10.8
11	Co0238	25.1	23.9	24.8	19.83	19.38	20.31	79.01	81.09	81.88	12.94	12.83	13.51	13.6	13.0	13.4
12	CoJ64	24.4	23.9	26.3	19.33	18.57	19.48	79.23	77.70	74.05	12.63	12.00	12.22	12.4	12.2	14.4

IVT Early							
S.N.	Clone	Juice Extraction			Fiber%		
		R1	R2	R3	R1	R2	R3
1	Co12026	53.6	54.2	52.4	12.6	12.2	12.8
2	Co12027	52.4	50.6	54.0	12.8	13.4	12.6
3	CoH12261	54.5	52.6	53.8	12.6	12.4	12.0
4	CoLk12201	54.4	53.3	52.7	12.8	12.2	12.4
6	CoLK12202	50.4	48.6	49.0	13.3	13.8	13.0
7	CoLk12203	50.2	48.9	51.1	13.4	13.8	14
8	CoLk12204	51.3	50.6	52.0	12.8	13.1	12.4
9	CoP12221	48.4	49.2	49.4	13.4	13.3	13.8
10	CoP12222	54.1	52.8	52.4	12.7	12.8	12.4
11	CoS12231	49.46	48.2	50.4	13.6	13.8	12.4
1	CoJ64	53.8	54.6	54.0	12.2	12.6	12.4
2	Co0238	49.9	50.0	52.4	13.2	13.3	14.0

Juice quality of sugarcane clones(AVT Mid late -Ratoon) tested during Dec . 2015																
S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%			Pol in Cane		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co10036	18.5	18.5	18.1	15.05	15.60	17.19	81.36	84.32	94.98	9.98	10.54	12.29	10.42	11.24	12.22
2	CoH10262	20	20.9	19.9	16.88	19.16	18.52	84.42	92.16	93.08	11.41	13.58	13.12	11.98	13.66	13.84
3	CoP10221	20.6	22.3	21.4	18.00	19.43	15.88	87.38	87.12	74.23	12.38	13.34	9.99	12.48	13.22	10.44
4	CoP97222	19.7	18.7	17.9	15.91	15.65	16.98	80.75	83.67	94.85	10.51	10.53	12.12	11.04	11.06	12.42
5	CoPb10181	20	20.1	19.6	17.33	17.60	16.91	86.67	87.54	86.26	11.88	12.11	11.56	12.22	12.46	11.94
6	CoPb10182	20.5	19.6	15.8	16.26	16.60	11.34	79.34	84.68	71.79	10.64	11.24	6.98	11.22	11.88	8.68
7	CoS767	18.9	20.4	20.6	15.46	17.72	16.55	81.78	86.84	80.34	10.28	12.15	10.90	10.64	12.42	11.66
8	CoS8436	20.6	19.6	18.6	17.50	17.10	17.79	84.96	87.23	95.63	11.87	11.75	12.75	12.22	12.84	13.44

Juice quality of sugarcane clones (AVT Mid late-Ratoon) tested during February, 2016																
S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%			Pol in Cane		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
1	Co10036	20.2	20.7	20.9	16.79	17.07	17.00	83.11	82.48	81.35	11.26	11.40	11.27	11.86	11.92	11.68
2	CoH10262	21.8	21.4	21.3	18.64	17.43	18.00	85.52	81.45	84.51	12.69	11.56	12.18	13.04	12.26	12.74
3	CoP10221	20.5	20.3	20.7	16.55	16.74	17.22	80.73	82.47	83.17	10.93	11.18	11.55	11.48	11.78	12.44
4	CoP97222	19.4	19.8	19.6	15.96	15.34	15.77	82.25	77.46	80.44	10.64	9.89	10.39	11.22	10.84	11.08
5	CoPb10181	19.1	16.9	21	16.31	13.17	18.00	85.41	77.95	85.72	11.09	8.53	12.26	11.92	10.42	12.64
6	CoPb10182	19.2	20.2	20.9	15.96	16.65	16.98	83.10	82.40	81.24	10.70	11.11	11.25	11.04	11.84	12.06
7	CoS767	20.1	18.6	20	16.84	14.48	16.15	83.76	77.86	80.73	11.34	9.37	10.66	11.64	10.88	11.25
8	CoS8436	21.4	19.9	20.1	16.69	16.41	16.62	78.00	82.45	82.69	10.81	10.96	11.12	11.42	11.82	12.02

AVT-ML Ratoon							
S.N.	Clone	Juice Extraction			Fiber%		
		R1	R2	R3	R1	R2	R3
1	Co10036	50.0	46.6	50.2	13.0	13.2	13.1
2	CoH10262	53.4	51.8	55.4	12.6	12.8	12.0
3	CoP10221	52.4	50.4	51.8	13.4	13.6	13.2
4	CoPb10181	53.2	52.4	51.2	12.4	12.6	12.8
5	CoPb10182	55.0	54.6	52.4	12.0	12.6	12.8
1	CoS767	51.2	50.9	52.1	13.2	13.8	13.6
2	CoS8436	55.2	56.0	54.4	12.4	12.2	12.8
3	CoP97222	50.4	50.8	51.6	13.4	13.2	14.6

Juice quality of sugarcane clones(AVT Early-I Plant) tested during Nov. 2015																
S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%			Pol in Cane		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
2	CoLk11201	19	16.8	20	15.93	15.22	15.48	83.85	90.59	77.40	10.73	10.65	9.98	11.42	11.23	10.92
3	CoH11262	18.8	20	19	17.55	18.33	18.21	93.35	91.67	95.87	12.45	12.90	13.07	12.84	13.42	13.84
4	CoLk11202	19.4	18	19.4	17.62	15.69	17.76	90.83	87.19	91.56	12.34	10.78	12.49	12.82	11.24	12.88
5	CoLk11203	19	19	19	16.84	15.00	17.26	88.61	78.97	90.86	11.66	9.79	12.10	11.98	11.42	12.64
Std																
1	CoJ64	19.4	18	17.6	17.22	16.38	18.10	88.74	91.02	102.82	11.93	11.49	13.35	12.42	11.68	13.46
2	Co0238	20	18	18.6	18.12	16.48	18.12	90.60	91.55	97.42	12.68	11.59	13.09	12.88	13.44	13.04

Juice quality of sugarcane clones(AVT Early-I Plant) tested during Jan. 2016																
S.N.	Clone	Brix % (10m)			Sucrose%			Purity %			CCS%			Pol in Cane		
		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3
2	CoH11262	20.2	18.6	20.4	18.64	18.12	17.55	92.29	97.42	86.02	13.15	13.09	11.98	13.66	13.32	12.84

3	CoLk11201	19.6	20.5	19.8	17.69	17.88	17.29	90.26	87.23	87.31	12.36	12.29	11.89	12.68	12.44	12.24
4	CoLK11202	20.2	19.6	20.4	18.12	17.69	16.69	89.70	90.26	81.83	12.62	12.36	11.10	13.02	12.88	11.92
5	CoLk11203	19	19.5	20	18.21	18.64	17.67	95.87	95.60	88.34	13.07	13.36	12.22	13.02	12.94	13.00
1	CoJ64	21.6	20.8	22.3	18.33	17.81	19.26	84.88	85.63	86.37	12.43	12.13	13.17	13.00	12.94	13.68
2	Co0238	23.2	19.6	22.1	19.4	17.88	18.76	83.64	87.23	84.89	13.06	12.29	12.72	13.22	12.42	12.82

AVT Early 1 st Plant							
S.N.	Clone	Juice Extraction			Fiber%		
		R1	R2	R3	R1	R2	R3
1	CoH11262	54.4	55.3	54.6	12.4	12.6	12.1
2	CoLk11201	54.0	54.8	55.0	12.8	12.4	12.3
3	CoLK11202	52.5	54.0	53.6	12.7	13.2	13.0
4	CoLk11203	50.1	51.2	49.0	13.2	13.6	13.8
1	CoJ64	54.2	53.6	54.8	12.5	12.40	12.2
2	Co0238	49.4	50.8	51.2	13.4	13.5	13.8