

Vasantrao Naik Marathwada Krishi Vidyapeeth
REGIONAL SUGARCANE RESEARCH STATION
Basamathnagar-431 512 Dist. Hingoli (M.S.)

No. SB/05/2016
Date: 05-04-2016

To,
The Convener
Crop Sciences (Food and Cash Crops-I) and
HoD, Agronomy
Crop Improvement Sub-Committee
Research Review Committee (RRC)
VNMKV, Parbhani

Sub: Annual Report of RSRS 2015-2016

Res. Sir,

Please find enclosed herewith the annual report of research work carried out during the year 2015-2016 at Regional Sugarcane Research Station (RSRS), Basmathnagar, Dist. Hingoli (M.S.).

Encl: As above

(D. C. Lokhande)
Agronomist
Regional Sugarcane Research Station
Basmathnagar, Dist. Hingoli (M.S.)

Copy submitted for favour of information to:

- 1) The Hon. Vice – Chancellor, VNMKV, Parbhani
- 2) The Director of Research, VNMKV, Parbhani with 3 Copies of the Annual Report
- 3) The Director of Instruction and Dean, F/A, VNMKV, Parbhani
- 4) The Director of Extension Education

Copy f.w.c.s. to Asst. Librarian, VNMKV, Parbhani

Copy f.w.c.s. to Dr / Shri. ----- for information

CONTENTS

Sr. No.	Particulars	Page No.
PART - I	Decisions of RRC Meeting-2015	2
PART - II	Research Achievements	3
1.	Initial Varietal Trial of Sugarcane Varieties- (Early)	4-5
2.	Advanced Varietal Trial of Sugarcane Varieties - (Early)- I Plant	6-7
3.	Advanced Varietal Trial of Sugarcane Varieties - (Early)- II Plant	8-9
4.	Advanced Varietal Trial of Sugarcane Varieties - (Early) - Ratoon	10-11
5.	Initial Varietal Trial of Sugarcane Varieties - (Mid-late)	12-13
6.	Advanced Varietal Trial of Sugarcane Varieties -(Mid-late)-I-Plant	14-15
7.	Paddy Trial- IVT	16
PART - III	Proposed Technical Programme - 2016-201	17-18
	Seed Production Programme - 2015-2016	19
Appendix - I	Weekly Meteorological Data recorded during 2015 at RSRS, Basmathnagar	20-21
Appendix - II	Summary of Results: English and Marathi	22-23

Part - I

Action taken on the decisions of RRC Meeting-2015

Decision No.	Particulars of Decision	Action Taken
No	No	No

Part - II

Research Work Carried Out During 2015-16

Programme	: Genetic Enhancement
Sub - Programme	: Conservation Evaluation and Bio- diversity application.
Project	: Evaluation of Sugarcane Varieties for Marathwada region.
Sub - Project	: Initial Varietal Trial of Sugarcane Varieties - Early
Project location	: Regional Sugarcane Research Station, Basmathnagar
Project Scientist	: Dr. D. C. Lokhande, Agronomist, RSRS, Basmathnagar

Supporting Staff:

- 1) Shri. S.P. Chenalwad, Senior Research Asst., RSRS, Basmathnagar
- 2) Shri. R. G. Thorat, Agriculture Asst., RSRS, Basmathnagar

Experimental Details:

An experiment was conducted with twelve sugarcane varieties and three standards Viz., Co-85004, Co-94008 and Co-671, to study the cane yield and CCS (t/ha) during 2015-2016. Planting was done on 07th January, 2015 and harvested on 11th November, 2015. Experiment was laid out in Randomized Block Design with gross plot size of 6 m x 6 rows x 1.2 m and net plot size of 5m x 4rows x 1.2 m. Planting was done in furrow opened at 1.2 m distance.

Results :

The data on cane yield (t /ha), CCS (t /ha) and yield contributing characters are presented in Table 1.

Cane Yield

Standard CoC - 671 recorded significantly highest cane yield (t/ha) over rest of the entries.

CCS (t /ha)

Standard CoC - 671 recorded significantly highest CCS (t /ha) over rest of the entries.

Yield Contributing Characters

As regards to number of millable cane, standard CoC- 671 found significantly superior over rest of the entries. Similar trend was noted with respect to single cane weight. While, standard CoC-671 recorded significantly higher CCS per cent than rest of the entries, however, it was found on par with standard Co-94008, Co-85004 and entry CoT-12367, CoT-12366, Co-12006, Co-12008 and CoN-12071.

Table - 1 Mean Cane yield and CCS (t /ha) and other yield contributing characters.

Varieties	Cane Yield (t / ha)	Single cane weight (kg)	No. of Millable cane ('000./ha)	CCS (t /ha)	CCS (per cent)
Entry :					
CO-12001	53.87	1.12	48.12	5.27	9.70
CO-12003	58.57	1.15	50.74	5.65	9.59
CO-12006	61.44	1.28	48.21	6.30	10.26
CO-12007	80.27	1.25	64.81	6.35	7.89
CO-12008	52.44	1.18	43.69	6.08	11.37
COM-12081	68.00	1.22	55.68	6.58	9.80
COM-12082	80.26	1.50	53.61	6.83	8.50
COM-12083	59.64	1.47	40.25	4.97	8.43
CON-12071	59.28	1.25	47.33	6.87	11.48
CON-12072	54.21	1.13	48.24	5.09	9.43
COT-12366	64.86	1.15	58.83	6.89	10.13
COT-12367	63.32	1.18	54.10	6.41	10.12
Standard :					
CO-85004	84.79	1.29	65.80	8.93	10.47
CO-94008	83.16	1.35	61.40	8.47	10.26
COC-671	148.03	1.85	79.64	17.25	11.74
Mean	71.67	1.29	54.70	7.19	9.95
SE ±	9.88	0.10	4.13	1.05	0.64
CD at 5%	29.96	0.31	12.53	3.20	1.93
CV %	19.49	11.18	10.68	20.73	9.05

Programme : Genetic Enhancement
Sub - Programme : Conservation evaluation and Bio-diversity application.
Project : Evaluation of Sugarcane Varieties for Marathwada region.
Sub - Project : **Advanced Varietal Trial of Sugarcane Varieties–Early- I plant.**
Project location : Regional Sugarcane Research Station Basmathnagar
Project Scientist : Dr.D.C. Lokhande, Agronomist, RSRS, Basmathnagar

Supporting Staff:

- 1) Shri. S.P. Chenalwad, Senior Research Asst., RSRS, Basmathnagar
- 2) Shri. R. G. Thorat, Agriculture Asst.,RSRS, Basmathnagar

Experimental Details:

An experiment was conducted with eight sugarcane varieties and three standards Viz., Co-85004, Co-94008 and CoC-671, to study the cane yield and CCS (t/ha) during 2015 -2016. Planting was done on 21th February, 2015 and harvested on 23th December, 2015. Experiment was laid out in Randomized Block Design with gross plot size of 6 m x 8 rows x 1.2 m and net plot size of 5m x 6 rows x 1.2 m. Planting was done in furrow opened at 1.2 m distance.

Results :

The data on cane yield (t/ha), CCS (t/ha) and yield contributing characters are presented in Table 2.

Cane Yield

In case of cane yield (t/ha), entry Co-10027 was found significantly superior over rest of the entries, except standard Co-94008 and CoC-671.

CCS (t /ha)

Entry Co-10027 was found on par with standard CoC-671 and both were significantly superior over rest of the entries in producing higher CCS (t/ha).

Yield Contributing Characters

As regards to number of millable cane, standard CoC- 671 found significantly superior over rest of the entries, however, it was found on par with Co-10005, Co-10024, CoT-10367, Co-10027 and standard Co-94008 and Co-85004. While, in respect of single cane weight, standard CoC-671 was comparable with Co-94008 and Co-85004 and found significantly superior than rest of the entries. Whereas, entry Co-10005 noted significantly highest CCS per cent than rest of the entries.

Table- 2 Mean Cane yield and CCS (t/ha) and other yield contributing characters

Varieties	Cane Yield (t/ha)	Single cane weight (kg)	No. of Millable cane ('000./ha)	CCS (t/ha)	CCS per cent
Entry :					
CO-10004	60.22	1.31	45.97	7.17	11.90
CO-10005	65.40	1.17	56.22	8.33	12.74
CO-10006	64.62	1.33	49.17	7.88	12.20
Co-10024	80.73	1.42	57.40	9.89	12.25
CO-10026	62.76	1.31	48.02	7.31	11.65
CO-10027	124.48	1.84	67.64	15.22	12.24
COT-10366	62.07	1.18	52.40	7.06	11.39
COT-10367	90.28	1.47	61.11	11.08	12.27
Standard :					
CO-85004	67.11	1.13	59.36	7.20	10.74
CO-94008	103.33	1.75	58.33	11.07	10.75
COC-671	120.09	1.80	69.20	14.87	12.38
Mean	81.92	1.43	56.80	9.73	11.86
SE ±	8.25	0.12	4.57	0.93	0.11
CD at 5%	24.33	0.35	13.49	2.73	0.33
CV %	17.44	14.32	13.94	16.47	1.61

Programme : Genetic Enhancement
Sub - Programme : Conservation evaluation and Bio-diversity application.
Project : Evaluation of Sugarcane Varieties for Marathwada region.
Sub - Project : **Advanced Varietal Trial of Sugarcane Varieties- Early II Plant**
Project location : Regional Sugarcane Research Station Basmathnagar
Project Scientist : Dr. D.C. Lokhande, Agronomist, RSRS, Basmathnagar
Supporting Staff :

- 1) Shri. S.P. Chenalwad, Senior Research Asstt.RSRS, Basmathnagar
- 2) Shri. R. G. Thorat, Agriculture Asstt.RSRS, Basmathnagar

Experimental Details :

An experiment was conducted with three sugarcane varieties and three standards Viz., Co-85004, Co-94008 and CoC-671, to study the cane yield and CCS (t/ha) during 2015-2016. Planting was done on 21st February, 2015 and harvested on 23rd December, 2015. Experiment was laid out in Randomized Block Design with gross plot Size of 6m x 8 rows x 1.2 m and net plot size of 5m x 6 rows x 1.2 m. Planting was done in furrow opened at 1.2 m distance.

Results :

The data on cane yield (t/ha), CCS (t/ha) and yield contributing characters are presented in Table 3.

Cane Yield

Entry Co-09004 recorded significantly highest CCS (t/ha) over rest of the entries.

CCS (t /ha)

Entry Co-09004 recorded significantly highest cane yield (t/ha) over rest of the entries.

Yield Contributing Characters

Entry Co-09004 recorded significantly highest single cane weight (t/ha) as well as CCS per cent than rest of the entries. While, entry Co-09004 was comparable with entry CoN-09072, standard Co-85004 and Co-94008 and recorded significantly higher number of millable cane ('000./ha) over rest of the entries.

Table - 3 Mean Cane yield and CCS (t /ha) and other yield contributing characters

Varieties	Cane Yield (t /ha)	Single cane weight (kg)	No. of Millable cane ('000./ha)	CCS (t /ha)	CCS per cent
Entry :					
CO-09004	152.82	2.09	73.52	20.10	13.29
CO-09007	67.17	1.28	52.81	7.44	11.11
CO-09072	80.31	1.25	64.45	9.33	11.77
Standard :					
CO-85004	74.58	1.13	65.83	8.78	11.83
CO-94008	123.38	1.73	71.64	14.58	11.95
COC-671	94.33	1.65	57.29	10.60	11.35
Mean	98.76	1.52	64.26	11.80	11.88
SE +	9.28	0.11	4.46	0.87	0.43
CD at 5 %	27.96	0.33	13.45	2.61	1.29
CV %	18.79	14.43	13.89	14.68	7.21

Programme : Genetic Enhancement
Sub - Programme : Conservation evaluation and Bio-diversity application.
Project : Evaluation of Sugarcane Varieties for Marathwada region.
Sub - Project : **Advanced Varietal Trial of Sugarcane Varieties- Early – Ratoon**
Project location : Regional Sugarcane Research Station, Basmathnagar
Project Scientist : Dr. D.C. Lokhande, Agronomist, RSRS, Basmathnagar
Supporting Staff :
1) Shri. S.P. Chenalwad, Senior Research Asst., RSRS, Basmathnagar
2) Shri. R. G. Thorat, Agriculture Asst.,RSRS, Basmathnagar

Experimental Details:

An experiment was conducted with three sugarcane varieties and three standards Viz., Co-85004, Co-94008 and CoC-671, to study the cane yield and CCS (t/ha) during 2015-2016. Planting was done on 21st February, 2015 and harvested on 25th November, 2015. Experiment was laid out in Randomized Block Design with gross plots size of 6m x 8 rows x 1.2 m and net plot size of 5m x 6 rows x 1.2 m. Planting was done in furrow opened at 1.2 m distance.

Results :

The data on cane yield (t /ha), CCS (t/ha) and yield contributing characters are presented in Table 4.

Cane Yield

Standard CoC- 671 recorded significantly higher cane yield (t/ha) over rest of the entries, however it was found on par with entry Co-09004.

CCS (t /ha)

Standard CoC- 671 recorded significantly higher CCS (t/ha) over rest of the entries, however it was found on par with entry Co-09004.

Yield Contributing Characters

Standard CoC-671 found significantly superior over rest of the entries, however it was found on par with standard Co-85004 and entry Co-09004 in producing higher number of millable cane ('000./ha). While, entry Co-09004 recorded significantly higher single cane weight over rest of the entries, except standard CoC-671. As regard to CCS per cent, standard Co-85004 was significantly superior over rest of the entries, but it was found at par with standard CoC- 671, Co-94008 and entry CO-09004.

Table - 4 Mean Cane yield and CCS (t /ha) and other yield contributing characters

Varieties	Cane Yield (t /ha)	Single cane weight (kg)	No. of Millable cane (‘000./ha)	CCS (t /ha)	CCS per cent
Entry :					
CO-09004	117.85	2.00	58.67	13.34	11.35
CO-09007	63.60	1.36	47.76	6.71	10.53
CO-09072	64.28	1.39	46.22	6.69	10.43
Standard :					
CO-85004	89.15	1.61	56.04	10.18	11.40
CO-94008	70.43	1.44	48.65	7.85	11.15
COC-671	125.51	1.94	65.91	13.98	11.13
Mean	88.47	1.62	53.88	9.79	11.00
SE +	7.40	0.12	4.35	0.80	0.15
CD at 5 %	22.30	0.36	13.13	2.41	0.44
CV %	16.72	14.87	16.17	16.35	2.67

Programme : Genetic Enhancement
Sub - Programme : Conservation Evaluation and Bio- diversity application.
Project : Evaluation of Sugarcane Varieties for Marathwada region.
Sub - Project : **Initial Varietal Trial of Sugarcane Varieties – Mid- late**
Project location : Regional Sugarcane Research Station, Basmathnagar .
Project Scientist : Dr. D. C. Lokhande, Agronomist, RSRS, Basmathnagar

Supporting Staff:

- 1) Shri. S.P. Chenalwad, Senior Research Asst., RSRS, Basmathnagar
- 2) Shri. R. G. Thorat, Agriculture Asst.,RSRS, Basmathnagar

Experimental Details:

An experiment was conducted with fifteen sugarcane varieties and two standards Viz., Co-86032 and Co-99004, to study the cane yield and CCS (t/ha) during 2015-2016. Planting was done on 24th January, 2015 and harvested on 17th January, 2016. Experiment was laid out in Randomized Block Design with gross plot size of 6 m x 6 rows x 1.2 m and net plot size of 5m x 4 rows x 1.2 m. Planting was done in furrow opened at 1.2 m distance.

Results :

The data on cane yield (t/ha), CCS (t/ha) and yield contributing characters are presented in Table 5.

Cane Yield

Entry Co-12017 was comparable with standard Co-99004 in respect of cane yield (t/ha) and proved significantly superior over rest of the entries.

CCS (t /ha)

Entry Co-12017 was comparable with standard Co-99004 in respect of CCS (t/ha) and proved significantly superior over rest of the entries.

Yield Contributing Characters

In case of number of millable cane ('000./ha), entry Co-12017 was found at par with standard Co-99004 and proved significantly superior over rest of the entries. While, standard Co-99004 recorded significantly higher single cane weight over rest of the entries, but it was found at par with entry Co-VSI-12121, CoN-12073, Co-12017 and Co-12016. As regards to CCS per cent, entry Co-12017 recorded significantly higher CCS per cent over rest of the entries, however it was found on par with standard Co-99004 and entry Co-12012, Co-12014, Co-12024 and CoM-12085.

Table -5 Mean Cane yield and CCS (t /ha) and other yield contributing characters.

Varieties	Cane Yield (t / ha)	Single cane weight (kg)	No. of Millable cane ('000./ha)	CCS (t /ha)	CCS per cent
Entry :					
CO-12009	58.64	1.40	41.28	5.11	8.65
CO-12012	69.46	1.15	59.65	7.59	10.82
CO-12014	70.78	1.22	58.33	8.15	11.39
CO-12016	99.18	1.95	50.38	9.34	9.38
CO-12017	173.32	1.90	91.60	20.59	11.87
CO-12019	96.99	1.51	65.70	10.03	10.34
CO-12021	78.19	1.45	53.75	7.79	9.90
CO-12024	59.58	1.35	44.58	6.59	11.06
COM-12084	99.45	1.46	68.19	9.64	9.69
COM-12085	49.77	1.05	47.99	5.75	11.56
COM-12086	108.20	1.52	71.96	8.55	7.90
CON-12073	78.59	1.70	45.87	8.07	10.26
CON-12074	81.01	1.53	53.06	7.91	9.77
COT-120368	71.43	1.55	46.77	6.58	9.21
Co-VSI-12121	97.10	1.60	60.31	9.02	9.28
Standard :					
CO-86032	129.44	1.75	73.44	12.82	9.93
CO-99004	168.85	2.05	82.55	19.29	11.43
Mean	93.54	1.54	59.70	9.58	10.14
SE ±	11.59	0.16	6.03	1.26	0.42
CD at 5%	34.75	0.47	18.08	3.79	1.27
CV %	17.52	14.53	14.29	18.66	5.90

Programme : Genetic Enhancement
Sub - Programme : Conservation Evaluation and Bio- diversity application.
Project : Evaluation of Sugarcane Varieties for Marathwada region.
Sub - Project : **Advanced Varietal Trial of Sugarcane Varieties Mid-late I plant**
Project location : Regional Sugarcane Research Station, Basmathnagar .
Project Scientist : Dr. D. C. Lokhande, Agronomist, RSRS, Basmathnagar

Supporting Staff:

- 1) Shri. S.P. Chenalwad, Senior Research Asst., RSRS, Basmathnagar
- 2) Shri. R. G. Thorat, Agriculture Asst.,RSRS, Basmathnagar

Experimental Details:

An experiment was conducted with ten sugarcane varieties and two standards Viz., Co-86032 and Co-99004, to study the cane yield and CCS (t/ha) during 2015-2016. Planting was done on 15th February, 2015 and harvested on 19th February, 2016. Experiment was laid out in Randomized Block Design with gross plot size of 6 m x 8 rows x 1.2 m and net plot size of 5m x 6 rows x 1.2 m. Planting was done in furrow opened at 1.2 m distance.

Results :

The data on cane yield (t/ha), CCS (t/ha) and yield contributing characters are presented in Table 6.

Cane Yield

Entry Co-10017 recorded significantly higher cane yield over rest of the entries, however it was found at par with entry PI-10131 and standard Co-99004.

CCS (t /ha)

Entry PI-10131 recorded significantly higher CCS (t /ha) over rest of the entries, except that it was found at par with standard Co-99004 and entry Co-10017.

Yield Contributing Characters

Standard Co-99004 found significantly superior over rest of the entries, however, it was found at par with entry Co-10033, PI-10131 and standard Co-86032 in producing higher single cane weight. As regard to millable cane ('000./ha), entry Co-10017 proved significantly better than rest of the entries, except entry PI-10131. While, standard Co-86032 recorded significantly higher CCS per cent over rest of the entries, however it was found on par with standard Co-99004 and entry Co-10017, Co-10033, CoM-10083, CoT-10368, PI-10131 and PI-10132.

Table- 6 Mean Cane yield and CCS (t/ha) and other yield contributing characters.

Varieties	Cane Yield (t/ha)	Single cane weight (kg)	No. of Millable cane ('000./ha)	CCS (t/ha)	CCS per cent
Entry :					
CO-09009	60.18	1.36	44.79	7.71	12.90
CO-10015	63.86	1.50	42.06	7.35	11.61
CO-10017	129.83	1.55	85.60	16.94	13.04
CO-10031	67.33	1.56	42.74	8.75	12.88
CO-10033	91.87	1.95	48.06	12.56	13.61
COM-10083	60.95	1.23	49.96	8.35	13.70
COT-10368	38.84	1.06	36.88	5.49	14.13
COT-10369	67.89	1.34	50.14	8.40	12.33
PI-10131	128.52	2.15	61.15	18.52	14.42
PI-10132	56.44	1.44	39.17	7.78	13.78
Standard :					
CO-86032	53.36	1.80	31.93	7.76	14.52
CO-99004	116.06	2.36	48.91	15.51	13.51
Mean	77.94	1.61	48.45	10.43	13.37
SE ±	11.60	0.18	8.26	1.45	0.49
CD at 5%	36.09	0.56	25.71	4.52	1.53
CV %	21.04	15.87	24.11	19.70	5.19

Programme : Genetic Enhancement
Sub - Programme : Conservation evaluation and Bio-diversity application.
Project : Evaluation of Paddy varieties for Marathwada region.
Sub - Project : **Initial Varietal Trial of Upland Rice *Kharif* –2015**
Project Scientist : Dr.D.C. Lokhande, Agronomist, RSRS, Basmathnagar

Supporting Staff:

- 1) Shri. S.P. Chenalwad, Senior Research Asst., RSRS, Basmathnagar
- 2) Shri. R.G. Thorat, Agriculture Asst.,RSRS, Basmathnagar

Experimental Details:

Thirteen varieties of paddy were tested for yield (kg/ha). Sowing was done on 23rd June, 2015. Experiment was laid out in Randomized Block Design with gross plot size of 4.50 m x 3.00 m and net plot size of 4.5 m x 3.0 m, respectively. Varieties grown are as below:

Sr. No.	Name of culture
1.	15136
2.	15137
3.	15138
4.	15139
5.	15140
6.	15141
7.	15142
8.	15143
9.	15144
10.	15145
11.	15146
12.	15147
13.	15148

Result :

Yield data is sent to the concerned research station.

PART-III

Proposed Technical Programme: 2016-2017

As per the Crop Improvement Technical Programme 2016 – 2017 allotted by the Directorate, Sugarcane Breeding Institute (SBI), Coimbatore and Sugarcane Specialist, CSRS, Padegaon, Tq. Phaltan, Dist. Satara (M.S.), following sugarcane trials have been conducted during 2016-2017 at RSRS, Basmathnagar, Dist. Hingoli (M.S.) location.

1. Initial Varietal Trial - Early

Entries (08) : Co-13002, Co-13003, Co-13004, CoN-13071, CoN-13072, CoSnk-13101,
CoSnk-13102, MS-13081

Standards (3) : Co 85004, Co 94008 and CoC 671

Design : Randomized Block Design

Replications : Three

Plot size : Gross : 6m x 6r x 1.2 m
Net : 5m x 4r x 1.2 m

Planting date : **02.02.2016**

2. Advanced Varietal Trial (Early) – I Plant

Entries (5) : Co 11001, Co 11004, CoM 11081, CoM 11082 and CoM 11084

Standards (3) : Co 85004, Co 94008 and CoC 671

Design : Randomized Block Design

Replications : Three

Plot size : Gross: 6m x 8r x 1.2 m
Net : 5m x 6r x 1.2 m

Planting date : **05.02.2016**

3. Advanced Varietal Trial (Early) – II Plant

Entries (8) : Co 10004, Co 10005, Co 10006, Co 10024, Co 10026, Co 10027, CoT 10366,
and CoT 10367

Standards (3) : Co 85004, Co 94008 and CoC 671

Design : Randomized Block Design

Replications : Three

Plot size : Gross: 6m x 8r x 1.2 m
Net : 5m x 6r x 1.2 m

Planting date : **06.02.2016**

4. Initial Varietal Trial (Mid-late)

Entries (20) : Co 13005, Co 13006, Co 13008, Co 13009, Co-13011, Co13013, Co-13014, Co13016, Co-13018, Co-13020, CoM 13082, CoN 13073, CoN13074, CoSnk 13103, CoSnk 13104, CoSnk 13105, Co Snk 13106, COT 13366, PI 13131 and PI 13132.

Standards (2) : Co 86032, Co 99004.

Design : Randomized Block Design

Replications : Two

Plot size : Gross: 6m x 6r x 1.2 m
Net : 5m x 4r x 1.2 m

Ratooning date: **02.02.2016**

5. Advanced Varietal Trial – Mid-late- I Plant

Entries (6) : Co 11005, Co 11007, Co 11012, Co 11019, CoM 11085 and CoM 11086,

Standards (2) : Co 86032 and Co 99004

Design : Randomized Block Design

Replications : Three

Plot size : Gross : 6m x 8r x 1.2 m
Net : 5m x 6r x 1.2 m

Planting date : **07.02.2016**

6. Advanced Varietal Trial (Mid-late) – II Plant

Entries (6) : Co 09009, Co 10015, Co 10017, Co 10031, Co 10033, CoM 10083, CoT 10368, CoT 10369, CoVC 10061, PI 10131 and PI 10132.

Standards (2) : Co 86032 and Co 99004

Design : Randomized Block Design

Replications : Two

Plot size : Gross : 6m x 8r x 1.2 m
Net : 5m x 6r x 1.2 m

Planting date : **08.02.2016**

Seed Production Programme 2015-2016

Sr.No.	Season / Crop	Variety	Stage	Area (ha)	Production (qt / ha)
(A)	<i>Kharif</i> season :				
1.	Soybean	JS-93-05	Breeder	1.70	Vitiated due to drought condition.
2.	Pigeon pea	BDN-711	Foundation	2.80	Vitiated due to drought condition.
3.	Turmeric	Selam	Truthful	0.60	Harvesting is in progress.
(B)	<i>Rabi</i> season: Could not implement because of severe drought condition.				
(C)	Sugarcane	Six varietal trials were conducted.	----	----	7.29 tons

APPENDIX-I

Weekly Weather Parameters Recorded At RSRS, Basmathnagar During Year-2015

MW	Date		Temperature		Wind Speed	RH %	Rain Fall	Progressive Rain Fall	Rainy Days (No)
	From	To	Min	Max					
1	01.1.2015	07.1.2015	10.76	26.86	1.14	49.71			
2	08.1.2015	14.1.2015	11.40	26.50	2.21	46.29			
3	15.1.2015	21.1.2015	11.89	26.50	2.60	41.00			
4	22.1.2015	28.1.2015	12.99	25.94	3.24	43.29			
5	29.1.2015	4.2.2015	12.89	30.57	2.99	43.43			
6	5.2.2015	11.2.2015	13.12	32.23	2.80	45.00			
7	12.2.2015	18.2.2015	14.11	30.91	2.49	49.00			
8	19.2.2015	25.2.2015	15.00	28.27	3.31	44.71			
9	26.2.2015	4.3.2015	16.53	22.53	1.10	51.00	25.0	25.0	2.0
10	5.3.2015	11.3.2015	22.73	31.04	1.40	55.86	23.0	48.0	1.0
11	12.3.2015	18.3.2015	23.63	32.29	1.01	63.57			
12	19.3.2015	25.3.2015	27.79	33.93	0.64	38.57			
13	26.3.2015	14.2015	26.64	36.26	2.44	45.86			
14	2.4.2015	8.4.2015	28.29	38.26	0.14	35.57			
15	9.4.2015	15.4.2015	21.67	34.89	1.17	76.14	67.0	115.0	3.0
16	16.4.2015	22.4.2015	24.19	30.77	2.44	67.43	19.0	134.0	2.0
17	23.4.2015	29.4.2015	27.49	38.29	1.36	52.29			
18	30.4.2015	6.5.2015	29.16	40.07	1.50	33.93			
19	7.5.2015	13.5.2015	28.54	39.91	2.47	43.86	5.5	139.5	1.0
20	14.5.2015	20.5.2015	28.24	41.01	2.50	51.71			
21	21.5.2015	27.5.2015	29.66	42.21	5.07	41.00			
22	28.5.2015	3.6.2015	30.56	42.46	5.76	46.86			
23	4.6.2015	10.6.2015	27.90	41.76	2.51	64.14	57.0	196.5	2.0
24	11.6.2015	17.6.2015	25.81	39.17	1.51	84.29	61.0	257.5	2.0
25	18.6.2015	24.6.2015	24.94	36.14	1.81	85.86	17.5	275.0	2.0
26	25.6.2015	1.7.2015	27.39	32.94	4.59	72.57	4.5	279.5	1.0
27	2.7.2015	8.7.2015	25.94	38.86	3.81	74.29	14.0	293.5	1.0
28	9.7.2015	15.7.2015	26.29	37.14	2.76	66.00			
29	16.7.2015	22.7.2015	27.36	37.81	3.76	69.71	3.0	296.5	1.0
30	23.7.2015	29.7.2015	26.76	35.44	3.64	78.71	16.0	312.5	1.0

Contd.....

Contd.....

MW	Date		Temperature		Wind Speed	RH %	Rain Fall	Progressive Rain Fall	Rainy Days (No)
	From	To	Min	Max					
31	30.7.2015	5.8.2015	26.13	32.80	2.14	73.86	21.5	334.0	1.0
32	6.8.2015	12.8.2015	24.36	31.74	3.01	89.29	27.5	361.5	2.0
33	13.8.2015	19.8.2015	24.94	31.34	2.31	87.29	53.5	415.0	2.0
34	20.8.2015	26.8.2015	26.17	31.37	4.07	79.14			
35	27.8.2015	2.9.2015	24.90	30.44	2.20	84.86	8.0	423.0	1.0
36	3.9.2015	9.9.2015	24.26	29.73	2.34	86.14	77.0	500.0	2.0
37	10.9.2015	16.9.2015	24.76	30.61	3.97	95.00	36.0	536.0	2.0
38	17.9.2015	23.9.2015	23.99	30.13	3.17	93.00	46.0	582.0	1.0
39	24.9.2015	30.9.2015	27.47	31.29	1.57	77.86			
40	1.10.2015	7.10.2015	27.71	32.87	1.54	81.57		582.0	30.0
41	8.10.2015	14.10.2015	33.20	37.81	10.74	72.86			
42	15.10.2015	21.10.2015	33.29	37.47	11.14	72.29			
43	22.10.2015	28.10.2015	32.53	37.19	10.96	65.14			
44	29.10.2015	4.11.2015	31.10	36.46	11.10	61.57			
45	5.11.2015	11.11.2015	31.81	36.20	10.67	66.86			
46	12.11.2015	18.11.2015	29.60	36.49	9.87	63.43			
47	19.11.2015	25.11.2015	29.50	36.51	9.63	62.43			
48	26.11.2015	2.12.2015	28.09	35.82	9.99	59.86			
49	3.12.2015	9.12.2015	21.62	36.72	10.76	58.86			
50	10.12.2015	16.12.2015	20.12	37.93	12.63	61.14			
51	17.12.2015	23.12.2015	14.27	33.14	4.47	61.00			
52	24.12.2015	31.12.2015	12.66	34.08	3.50	59.75		582.0	30.0

Total rainfall: 582 mm

Total rainy days: 30 days

APPENDIX-II

Summary of Results of Sugarcane Research Work at RSRS, Basmathnagar during 2015-2016:

1) Initial Varietal Trial of Sugarcane Varieties – Early.

The standard CoC-671 recorded significantly highest cane yield and CCS t/ha than rest of the entries.

2) Advanced Varietal Trial of Sugarcane Varieties – Early I Plant.

The entry CO-10027 recorded significantly higher cane yield and CCS t/ha over rest of the entries, however it was found at par with standard COC-671.

3) Advanced Varietal Trial of Sugarcane Varieties – Early II Plant.

The entry Co-09004 was significantly better in respect of cane yield and CCS t/ha than rest of the entries.

4) Advanced Varietal Trial of Sugarcane Varieties – Early Ratoon.

The standard CoC-671 was comparable with entry Co-09004 and recorded significantly higher cane yield and CCS t/ha than rest of the entries.

5) Initial Varietal Trial of Sugarcane Varieties – Mid-late.

The entry Co-12017 was comparable with standard Co-99004 and recorded significantly higher cane yield and CCS t/ha than rest of the entries.

6) Advanced Varietal Trial of Sugarcane Varieties – Mid-late I Plant.

The entry Co-10017 recorded significantly higher cane yield and CCS t/ha over rest of the entries, however it was found at par with standard Co-99004.

6) {ÉÖ'ÉÇ-SÉÉSÉhÉÒ |ÉªÉÉäMÉÉSªÉÉ ½ÆβMÉÉ'ÉÒ >ðªÉÉ'ÉªªÉä {ÉÖ'ÉÇ-|ÉªÉÉªüÒiÉ
'ÉÉhÉ EðÉä-10017 'É |ÉªÉÉªüÒiÉ 'ÉÉhÉ EðÉä-99004 ½äβ <ÇiÉªü 'ÉÉhÉÆÉ{ÉäiÉÉ
+ÉªÉÉè >ðªÉ 'ÉªÉÉjÉªü =i{ÉÉnùxÉ näùhÉÉªä +Éfø³ý±Éä.

Regional Sugarcane Research Station (RSRS), Basmathnagar, Dist. Hingoli
Staff Position as on Dt. 18-04-2016

Sr.No.	Designation of post	Sanctioned post	Filled post	Vacant post	Remarks
1.	Agronomist	1	1*	--	*Additional Charge of Principal, ATS (Non-Granted), Basmath & DDO
2.	Sr. Res. Asst.	2	1	1	
3.	Jr. Res. Asst.	2	--	2	
4.	Agril. Asst.	4	1*	3	*On - Deputation at Registrar Office, VNMKV, Pbn for LE Exam. Work
5.	Jr. Clerk	1	1	--	
6.	Peon	2	--	2	
7.	Watchman	3	1	2	
8.	Lab Attendant	2	1	1	
9.	Mazdoor	21	20*	1	*04 On - Deputation at CoA, Golegaon
Total		38	26	12	