

**THE
DECCAN SUGAR TECHNOLOGISTS'
ASSOCIATION (INDIA)**

PART ONE

Technical Papers submitted for discussions at the
TWELTH ANNUAL CONVENTION

1955

The Association is not responsible for the data & opinions
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APPENDIX No. 2-A.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA).*Programme of harvesting of Bombay State Sugarcane Competition Plots.*

S. No.	Factory	Area acres	Name of Competitor	Approximate date of harvest	Supervising Unit from	Staff			
						Manufacturing Officer	Harvesting Officer	Mukadam	Watchmen
1.	Phaltan Sugar Works Ltd. Sakharwadi.	1-0	Shri B. V. Karkhanis and ,, Shah	Third week of January 55	Walchandnagar Industries, Ltd.	1	1	2	1
2.	Godavari Sugar Mills Ltd. Laxmiwadi.	1-0	,, G. D. Patel	Second week of February 55	Ravalgaon Sugar Farm Ltd.	1	1	2	2
3.	Godavari Sugar Mills Ltd. Sakarwadi.	1-0	,, G. D. Patel	Third week of February 55	Nizam Sugar Factory Ltd.	1	1	2	2
4.	Walchandnagar Industries Ltd. Walchandnagar.	1-0	,, K. B. Nadgauda	Last week of February 1955.	Brihan Maharashtra Sugar Syndicate Ltd.	1	1	2	2

APPENDIX NO. 3-A.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA).

Sugarcane Prize Plot Competition - Bombay State.

Statement showing the lie, topography and soil type of plots (Planting season 1953-54 and Harvesting season 1954-55).

Sr. No.	Name of Competitor	S. No and Village	Area planted	Colour of soil	Depth of soil ft.	Genetic soil type	Nearness to river	Slope from and to	Previous Crop	Depth of water Table Ft.	Direction of Furrows	Furrow width ft.	Total No. of Furrows
1.	Shri B. V. Karkhanis and Shah	135 136 Hol	1-0	Black	4	B	One mile from big Nallah	W to E and N to S	Jowar	More than 5 feet below	North South	3-0	1
2.	„ G. D. Patel	17 Rui	1-0	Black	2	A	3½ miles	N to S	Irrigated cane	5 ft. below	East West	3 1/3	1
3.	„ G. D. Patel	63 Wari	1-0	Brownish Black	3 to 4	B	4 furlongs	W to E and N to S	Sugarcane plant & half area Lucerne	Below 4 ft.	North South	3½	1
4.	„ K. B. Nadgauda	175 Kalamb	1-0	Brown Black	4	D	4 furlongs	E to W and N to S	Paddy	5	East West	3	1

APPENDIX No. 4-A.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA).

Statement showing the cane yields and analytical data.

S. No.	Name of Competitor	Place	Survey No.	Area planted	Date of planting	Date of harvesting	Variety	Sugarcane Av. yield per acre tons	Mixed Juice			Pol % Cane	Fibre % cane	Recovery	Sugar per acre Tons
									Bx.	Pol.	Py.				
1.	Shri V. B. Karkhanis and Shah	Phaltan Sugar Works Ltd. Sakharwadi	135 136 Hol	1-0	2-8-53	17-1-55	Co 419	92.58	16.72	14.38	86.00	15.18	11.25	13.20	12.22
2.	G. D. Patel	Godavari Sugar Mills Ltd. Laxmiwadi	17 Rui	1-0	23-7-to 27-7-53	12-2-55	Co 419	75.0	15.86	13.13	82.79	13.06	10.74	11.11	8.33
3.	G. D. Patel	Godavari Sugar Mills Ltd. Sakarwadi	63 Wari	0-39	4-7-to 8-7-53	18-2-55	Co 419	79.89	16.00	13.30	83.12	12.57	13.10	10.65	8.50
4.	K. B. Nadgauda	Walchandnagar Industries Ltd. Walchandnagar	175 Kala- mb	1-0	—	5-3-55	Co 419	106.5	17.06	14.25	83.52	13.83	10.97	11.82	12.59

APPENDIX No. 5-A.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA)

Botanical observations of the Sugarcane Prize Plot Competition - Bombay State

Planting season 1953-54.

Harvesting season 1954-55.

S. No.	Name of the Competitor	Planted length per acre in ft.	No. of Millable Canes	Av. height of cane in feet	Wt. of canes in tons per acre (calculated)	Av. weight of cane in lbs.	Wt. per foot height in lbs.	Wt. of cane per planting foot in lbs.	No. of arrowed canes per acre (calculated)	Wt. of arrowed canes per acre in tons (calculated)	No. of non-arrowed canes per acre (calculated)	Wt. of non-arrowed canes per acre in tons (calculated)	No. of Water shoots per acre (calculated)	Wt. of water shoots p/a in lbs. (calculated)	No. of internodes p/a (calculated)	Av. girth of cane inches (calculated)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Shri B. V. Karkhanis and ,, Shah	14520	47190	10.0	84.42	4.0	0.4	13.0	8712	20.74	33396	57.24	5082	6.48	—	—
2.	,, G. D. Patel Laxmiwadi	12875	42487	13.2	78.7	3.8	0.29	13.7	4828	10.34	36050	62.9	1609	5.4	35.2	4
3.	,, G. D. Patel Sakarwadi	11300	38662	—	75.66	4.3	—	15.0	5356	22.19	5650	12.11	nil Cane pieces 22600	nil 75.46	—	—
4.	,, K. B. Nadgauda	14000	77000	9.4	112.03	3.2	0.34	17.9	6650	14.2	46200	65.7	24150	32.0	—	—

APPENDIX NO. 6-A.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA).

Statement showing manures used per acre for Sugarcane Prize Competition Plots - Bombay State
 Planting season 1953-54. Harvesting season 1954-55.

S. No.	Name of Competitor and place	Green Manuring	Sheep folding	F. Y. M. Pharas	G. N. Cake Tons	Castor cake tons	Mahoda cake tons	Press Cake Pharas	Ash Pharas	Soil Pharas	Am. Sulphate Tons	Single super-phosphate tons	Double super-phosphate tons + Sulphate of potash	Soda Nitrate tons	Bonemeal tons	Manure Mixture tons	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.	Karkhanis and Shah Phaltan	—	—	80	5.9	—	—	—	4	—	0.7	—	0.17	—	—	—	Sulphate Nitrate 0.05
2.	G. D. Patel 17 Rui Laxmiwadi	—	—	91½	2-12-64	—	—	—	—	—	0-2-8	1-16-70	—	0-2-88	—	—	Castor Cake Manure Mixture 0-18-24 G.N.cake Mixture 1-2-96
3.	G. D. Patel 63 Wari Sakarwadi	—	—	60½	0-12-56	5-19-72	—	—	2-4-72	—	0-4-56	1-9-56	—	0-12-0	0-1-0	—	—
4.	K. B. Nadgauda Walchandnagar	nil	2000 one night	40	6.14	nil	—	nil	nil	nil	0.75	0.43	nil	nil	nil	—	nil

APPENDIX NO. 7-A.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA)

Statement showing the cost of cultivation per acre of Sugarcane Prize Competition Plots-Bombay State.
Planting season 1953-54. Harvesting season 1954-55.

S. No.	Name of the Competitor	Place	Tillage and Harvesting	Bulky Manures	G. N. Cake and Fertilizers	Land rent	Irrigation Cess	Seed	Supervision	Sundry expenses	Per acre Total	Cost per ton of cane.
1	2	3	4	5	6	7	8	9	10	11	12	13
			Rs. a.p.	Rs. a.p.	Rs. a.p.	Rs. a.p.	Rs. a.p.	Rs. a.p.	Rs. a.p.	Rs. a.p.	Rs. a.p.	Rs.a.p.
1.	Karkhanis and Shah	Phaltan Sugar Works Ltd.	100-0-0	280-0-0	1576-8-0	75-0-0	150-0-0	100-0-0	nil	284-2-0	2928-3-0	32-9-9
2.	G. D. Patel	Godavari Sugar Mills Ltd. Laximiwadi	694-4-3	366-6-3	1883-8-6	21-0-0	255-0-0	216-0-0	48-12-0	23-13-0	3509-12-0	46-12-6
3.	G. D. Patel	Godavari Sugar Mills Ltd. Sakarwadi	722-0-0	243-3-0	2316-6-3	21-0-0	255-0-0	200-0-0	50-9-3	124-6-3	3932-8-9	42-2-3
4.	K. B. Nadgauda	Walchandnagar Industries Ltd.	63-0-0 170-0-0	162-0-0	2075-0-0	16-8-0	199-6-0	75-0-0	108-0-0	90-0-0	2946-0-0	27-4-0

APPENDIX 1-B

SETH GULABCHAND PRIZE

RULES AND CONDITIONS

As declared at the time of the 9th Convention of the Association held at Poona, a Prize of Rs. 1000/- (One thousand only) has been declared by Seth Gulabchand Hirachand on behalf of the Walchandnagar Industries Ltd., for producing the highest sugar per acre on 10 acre basis. The rules and regulations for growing such prize plots are as under:—

This Prize is for Planting Season 1953-54 and Harvesting Season 1954-55.

1. Sugar Factories and private sugarcane growers, who are members of the Deccan Sugar Technologists' Association will be eligible for taking part in this prize plot competition on the following conditions:

2. Factories growing 1200 acres of cane or more must grow at least 3 prize plots and those growing less than 1200 acres must grow at least 2 prize plots. Private Cultivators can grow only one plot.

3. The private cultivators taking part in the competition must be prepared to supply the cane grown in their prize plots to a Sugar Factory of their choice for crushing and test.

4. The area of the plot should be 10 acres in one compact block. It should not measure less by more than 5 gunthas i. e. the area should in no circumstances measure less than Acres 9-35. These plots which would measure less than 9-35 acres will not be taken into consideration.

5. For the purpose of prize plot, all the plots grown are eligible for the prize.

6. The entrance fee will be Rs. 100/- for each of the member factories, irrespective of the number of plots grown by them. For a private cultivator, the entrance fee will be Rs. 50/-.

7. Those who intend to take part in the competition, should send their application in the form prescribed by the Association before 30-6-1953. The entrance fee should also be sent with the application.

8. For becoming eligible for the prize, the prize plot should yield more than 12 tons of sugar per acre. The competitor, who will give the highest sugar above 12 tons, will get the prize.

9. Every competitor should send the monthly allocation sheets in the form prescribed by the Association with all the information contained in the form.

10. The rules regarding harvesting of the Prize plots and determining the sugar content will be published by the Committee in due time. The Technical Sub-Committee appointed by the Association will lay down the rules and regulations regarding the same.

11. The decision given by the Association will be final and binding on the competitor.

12. In order to enable the members to take part in the competition by growing these plots from June 1953, it is requested that all the factories and big Bagaitdars will take part in the competition and make the competition a success.

Note:—Forms of application will be supplied on request.

Sd/- **P. M. Govitrikar**
Hon. Secretary, D. S. T. A.

APPENDIX No. 2-B.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA).

Programme of harvesting of Seth Gulabchand Sugarcane Competition Plots.

S. No.	Factory	Area Acres	Name of Competitor	Approximate date of harvest	Supervising Unit from	Staff			
						Manu- facturing	Harvest- ing Officer	Mukada- ms	Watch- men
1.	Phalatan Sugar Works Ltd.	10	Karkhanis & Shaha	Third week of January	Walchandnagar Industries	1	1	2	1
2.	Walchandnagar Industries Ltd.	10	K. C. Kapadia	Third week of February	Brihan Maharashtra Sugar Syndicate	1	1	2	2
3.	- do -	10	V. V. Kulkarni	Last week of February	Phaltan Sugar Works Ltd.	1	1	2	2
4.	- do -	10	K. B. Nadgauda	Last week of February and First week of March	Brihan Maharashtra Sugar Syndicate	1	1	2	2
5.	Godavari Sugar Mills Ltd. Laxmiwadi. 17 Rui.	10	G. D. Patel	Second week of February	Ravalgaon Sugar Farm Ltd.	1	1	2	2
6.	Godavari Sugar Mills Ltd. Sakarwadi. 63 Wari.	9-35	G. D. Patel	Third week of February	Nizam Sugar Factory Ltd.	1	1	2	2
7.	- do - - do - 393 Samvatsar.	10	G. D. Patel	First week of February	Nizam Sugar Factory Ltd.	1	1	2	2
8.	- do - - do - 160 Samvatsar	9-36½	G. D. Patel	Second week of February	Nizam Sugar Factory Ltd.	1	1	2	2

4.	K. B. Nadgauda	—	Co 419	88.43	19.86	17.06	85.90	17.88	14.98	83.78	14.47	11.01	12.38	10.95	13.13
5.	G. D. Patel Laxmiwadi 17 Rui.	23rd to 27th July 1953	Co 419	84.03	17.85	15.00	84.03	15.67	12.68	80.92	12.48	10.06	10.49	8.81	10.80
6.	G. D. Patel Sakarwadi 63 Wari.	4th to 8th July 1953	Co 419	83.33	18.33	15.60	85.11	16.34	13.60	83.23	12.73	12.64	10.76	8.966	11.25
7.	G. D. Patel Sakarwadi 393 Samvatsar	15th to 23rd July 1953	Co 419	81.65	18.68	15.96	85.44	16.80	14.00	83.33	13.35	12.23	11.27	9.20	11.40
8.	G. D. Patel Sakarwadi 160 Samvatsar	9th to 25th June 1953	Co 419	72.71	19.30	16.87	87.41	17.21	14.67	85.24	13.82	11.69	11.81	8.587	11.30

APPENDIX No. 5-B

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA)

Botanical observations of the Sugarcane Prize Plot Competition (Seth Gulabchand) Prize

Planting season 1953-54

Harvesting season 1954-55

Sl. No.	Name of the Competitor	Planted Length per acre in ft.	No. of millable canes	Average height of cane in feet	Weight of canes in tons per acre (calculated)	Av. weight of cane in lbs	Wt. per foot height in lbs	Wt. of cane per planting foot in lbs	No. of arrowed canes per acre (calculated)	Wt. of arrowed cane per acre in tons (calculated)	No. of non-arrowed canes per acre (calculated)	Wt of non-arrowed canes per acre (calculated)	No. of water shoots per acre (calculated)	Wt. of water shoots per acre (calculated)	No. of Internodes per cane
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APPENDIX No. 2-B.

1.	Karkhanis and Shaha	14520	46018	11'-1"	88.42	4.3	0.38	13.62	14292	36.64	26279	47.03	4348	4.69	27.7
2.	K. C. Kapadia	14000	75601	8'-11"	114.82	3.4	0.38	18.37	11112	21.89	47031	67.21	17456		25.72
3.	V. V. Kulkarni	14520	57438	12'-0"	100.00	3.90	0.32	15.43	12159	27.00	34935	58.45	10344	14.55	32.24
4.	K. B. Nadgauda	14000	63612	8'-8"	80.12	2.82	0.32	12.82	5500	12.01	43312	50.47	15487		19.14
5.	G. D. Patel 17 Rui.	12875	43245	13'-5"	102.05	5.28	0.39	17.75	5742	16.19	35412	81.37	2510	5.37	35.4
6.	G. D. Patel 63 Wari	11300	48165	—	86.64	4.03	—	17.17	7817	25.22	8287	18.13	1977 Cane pieces 20481	3.44 38.93	
7.	G. D. Patel 393 Samvatsar	11000	31900	11'-6"	67.03	4.7	0.41	13.6	11825	33.4	9212.5	20.00	1650 Cane pieces 9212	3.19 10.47	
8.	G. D. Patel 160 Samvatsar	11000	48950	11'-0"	89.91	3.92	0.36	17.4	8525	22.65	6325	25.16	1650 Cane pieces 23925	3.8 38.27	

HUMEPIPES

FOR WATER MAINS AND DISTRIBUTION WITH

APPENDIX No. 7-B.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (
Statement showing the cost of cultivation per acre of Sugarcane
(*Seth Gulabchand Prize*)

54

Place	Tillage & Harvesting	Bulky Manures	G. N. Cake & Fertilizers	Land rent	Irrigation Cess	
	Rs.	Rs.	Rs.	Rs.	Rs.	
Phaltan	—	—	—	—	—	
Walchandnagar	67-0-0 260-0-0 327-0-0	153-0-0	1711-0-0	16-8-0	199-10-0	7
Walchandnagar	6264-3-0	3505-13-0	14748-9-0	25-0-0	194-0-0	18
Walchandnagar	233-0-0	162-0-0	2057-0-0	16.8	199.6	7 PE
Laxmiwadi 17 Rui.	695-4-6	366-6-3	1883-8-6	21-0-0	255-0-0	21 S
Sakarwadi 63 Wari	722-0-0	243-3-0	2316-6-3	21-0-0	255-0-0	20
Sakarwadi 393 Samvatsar	751-8-3	325-0-9	2164-2-3	21-0-0	255-0-0	18 IA,
Sakarwadi 160 Samvatsar	695-4-6	366-6-3	1883-8-6	21-0-0	255-0-0	21

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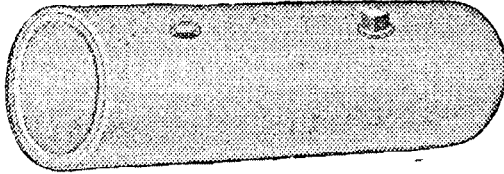
INDIA)
Prize Plots.

Harvesting season : 1954-55

	Seed	Supervision	Sundry expenses	Per acre total	Cost per ton of cane
	Rs.	Rs.	Rs.	Rs.	Rs.
		—	—	—	—
APPENDIX					
No. 2-R.					
5-0-0	108-0-0	110-0-0	2764-10-0	31-0-0	
6-0-0	846-0-0	nil	29400-9-0	32.3	
45.0	10.00	—	2753-0-0	31.3	
6-0-0	48-12-0	23-13-0	3509-12-0	41-12-9	
10-0-0	50-9-3	124-6-3	3932-8-9	47-6-0	
0-0-0	55-11-3	27-11-9	3780-2-3	46-10-6	
6-0-0	48-12-0	23-13-0	3509-12-0	41-12-9	

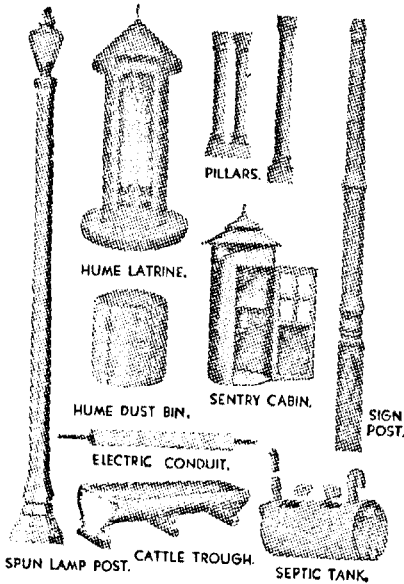
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Managing Director

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APPENDIX No. 7-B.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA)

Statement showing the cost of cultivation per acre of Sugarcane Prize Plots.

Planting Season · 1953-54

(Seth Gulabchand Prize)

Harvesting season : 1954-55

S. No.	Name of the Competitor	Place	Tillage & Harvesting	Bulky Manures	G. N. Cake & Fertilizers	Land rent	Irrigation Cess	Seed	Supervision	Sundry expences	Per acre total	Cost per ton of cane
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1.	Karkhanis & Shah	Phaltan	—	—	—	—	—	—	—	—	—	—
2.	K. C. Kapadia	Walchand-nagar	67-0-0 260-0-0 <u>327-0-0</u>	153-0-0	1711-0-0	16-8-0	199-10-0	75-0-0	108-0-0	110-0-0	2764-10-0	31-0-0
3.	V. V. Kulkarni	Walchand-nagar	6264-3-0	3505-13-0	14748-9-0	25-0-0	194-0-0	1846-0-0	846-0-0	nil	29400-9-0	32.3
4.	K. B. Nadgauda	Walchand-nagar	233-0-0	162-0-0	2057-0-0	16.8	199.6	75.0	10.00	—	2753-0-0	31.3
5.	G. D. Patel	Laxmiwadi 17 Rui.	695-4-6	366-6-3	1883-8-6	21-0-0	255-0-0	216-0-0	48-12-0	23-13-0	3509-12-0	41-12-9
6.	G. D. Patel	Sakarwadi 63 Wari	722-0-0	243-3-0	2316-6-3	21-0-0	255-0-0:	200-0-0	50-9-3	124-6-3	3932-8-9	47-6-0
7.	G. D. Patel	Sakarwadi 393 Samvatsar	751-8-3	325-0-9	2164-2-3	21-0-0	255-0-0	180-0-0	55-11-3	27-11-9	3780-2-3	46-10-6
8.	G. D. Patel	Sakarwadi 160 Samvatsar	695-4-6	366-6-3	1883-8-6	21-0-0	255-0-0	216-0-0	48-12-0	23-13-0	3509-12-0	41-12-9

APPENDIX No. 6-B.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA).

Statement showing manures used per acre for Sugarcane Prize Plot (Seth Gulabchand Prize)

Planting season 1953-54.

Harvesting season 1954-55.

S. No.	Name of the Competitor	Green manuring	Sheep folding	F. Y. M. pharas	G. N. Cake Tons	Castor Cake Tons	Maheda Cake Tons	Press Cake Tons	Ash pharas	Soil pharas	Am. Sulphate Tons	Single Super-phosphate Tons	Double Super-phosphate Tons	Sulphate of Potash Tons	Soda Nitrate Tons	Bonemeal Tons	Manure mixtures Tons
1.	Karkhanis and Shaha	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	K. C. Kapadia	nil	500 sheep 5 days	20 and 20 pharas Com-post 53.7	4.86	1/4	—	—	—	—	0.6	0.5	—	—	—	—	—
3.	V. V. Kulkarni	—	—	—	4.3	1.9	—	17	—	5½ bags	1	—	—	—	—	—	—
4.	K. B. Nadgauda	nil	2000 one-night	40	6.14	nil	nil	nil	nil	nil	0.75	0.43	nil	nil	nil	nil	nil
5.	G. D. Patel 17 Rui	—	—	91½	T.Cwt.lb. 2-12-64	—	—	—	—	—	T. Cwt. lb. 0-2-8	T. Cwt. lb. 1-16-70	—	T. Cwt. lb. 0-2-88	—	—	C. Cake = 0-18-84 G. Cake = 1-2-96
6.	G. D. Patel 63 Wari	—	—	60½	0-12-56	5-19-72	nil	—	T. Cwt. lb. 2-4-72	—	0-4-56	1-9-56	—	0-12-0	0-1-0	—	—
7.	G. D. Patel 393 Samvatsar	—	—	54	3-7-21	2-2-96	nil	—	1-7-45	—	0-10-37	1-15-0	—	0-3-0	—	—	—
8.	G. D. Patel 160 Samvatsar	—	Com-post F.Y.M. 32½	44½	1-17-16	3-1-48	—	—	3-11-48	10½	0-5-28	2-2-0	—	0-3-0	—	—	—

APPENDIX No. 4-B.

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA)

Statement showing the cane yield and analytical data

Seth Gulabchand Prize Plot.

Sl. No.	Name of the Competitor	Date of planting	Variety	Average Yield of Sugarcane per acre Tons	Crusher Juice			Mixed Juice			Pol. % cane	Fibre % cane	Recovery	Sugar per acre	Weekly recovery of the factory
					Brix	Pol	Purity	Brix	Pol	Purity					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Karkhanis and Shaha	2.8.53	Co 419	89.90	20.77	18.35	88.35	17.23	14.78	85.78	15.37	11.42	13.334	11.987	13.67
2.	K. C. Kapadia	—	Co 419	86.88	20.06	17.38	86.64	18.16	15.37	84.64	14.60	12.12	12.51	10.87	13.08
3.	V. V. Kulkarni	17.8.53	Co 419	91.04	19.70	17.31	87.87	17.96	15.34	85.41	14.49	11.33	12.78	11.63	13.08
4.	K. B. Nadgauda	—	Co 419	88.43	19.86	17.06	85.90	17.88	14.98	83.78	14.47	11.01	12.38	10.95	13.13
5.	G. D. Patel Laxmiwadi 17 Rui.	23rd to 27th July 1953	Co 419	84.03	17.85	15.00	84.03	15.67	12.68	80.92	12.48	10.06	10.49	8.81	10.80
6.	G. D. Patel Sakarwadi 63 Wari.	4th to 8th July 1953	Co 419	83.33	18.33	15.60	85.11	16.34	13.60	83.23	12.73	12.64	10.76	8.966	11.25
7.	G. D. Patel Sakarwadi 393 Samvatsar	15th to 23rd July 1953	Co 419	81.65	18.68	15.96	85.44	16.80	14.00	83.33	13.35	12.23	11.27	9.20	11.40
8.	G. D. Patel Sakarwadi 160 Samvatsar	9th to 25th June 1953	Co 419	72.71	19.30	16.87	87.41	17.21	14.67	85.24	13.82	11.69	11.81	8.587	11.30

APPENDIX No. 5-B

THE DECCAN SUGAR TECHNOLOGISTS' ASSOCIATION (INDIA)

Botanical observations of the Sugarcane Prize Plot Competition (Seth Gulabchand) Prize

Planting season 1953-54

Harvesting season 1954-55

Sl. No.	Name of the Competitor	Planted Length per acre in ft.	No. of millable canes	Average height of cant feet	Weight of canes in tons per acre (calculated)	Av. weight of cane in lbs	Wt. per foot height in lbs	Wt. of cane per planting foot in lbs	No. of arrowed canes per acre (calculated)	Wt. of arrowed cane per acre in tons (calculated)	No. of non-arrowed canes per acre (calculated)	Wt of non-arrowed canes per acre (calculated)	No. of water shoots per acre (calculated)	Wt. of water shoots per acre (calculated)	No. of Internodes per cane
1.	Karkhanis and Shaha	14520	46018	11'-1"	88.42	4.3	0.38	13.62	14292	36.64	26279	47.03	4348	4.69	27.7
2.	K. C. Kapadia	14000	75601	8'-11"	114.82	3.4	0.38	18.37	11112	21.89	47031	67.21	17456	25.72	
3.	V. V. Kulkarni	14520	57438	12'-0"	100.00	3.90	0.32	15.43	12159	27.00	34935	58.45	10344	14.55	32.24
4.	K. B. Nadgauda	14000	63612	8'-8"	80.12	2.82	0.32	12.82	5500	12.01	43312	50.47	15487	19.14	
5.	G. D. Patel 17 Rui.	12875	43245	13'-5"	102.05	5.28	0.39	17.75	5742	16.19	35412	81.37	2510	5.37	35.4
6.	G. D. Patel 63 Wari	11300	48165	—	86.64	4.03	—	17.17	7817	25.22	8287	18.13	1977 Cane pieces 20481	3.44 38.93	
7.	G. D. Patel 393 Samvatsar	11000	31900	11'-6"	67.03	4.7	0.41	13.6	11825	33.4	9212.5	20.00	1650 Cane pieces 9212	3.19 10.47	
8.	G. D. Patel 160 Samvatsar	11000	48950	11'-0"	89.91	3.92	0.36	17.4	8525	22.65	6325	25.16	1650 Cane pieces 23925	3.8 38.27	

Statement showing the lie, topography and soil type of plots

Seth Gulabchand Prize Plot

S. No.	Competitor.	Survey No.	Genetic soil type.	Depth of soil.	Colour of soil	Substratum.	General depth of Water Table.	Previous crop.	Slope of Soil.	Direction of Furrow	Furrow Width.	Approximate distance from river or big Nallah	The direction & the situation of plot with respect to 13.	Preparatory tillage given.	Outturn of Av. Adsali crop within the vicinity of the Prize plot during previous years.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Karkhanis & Shaha	135-36 Hol	B	4 feet.	Black	Murum in the upper, part & black soil in lower Portion.	More than 5 ft. Below.	Jowar (Outturn 8 bags /acre)	West to East North to South	North to South	3 ft.	One mile from big Nallah	South-West	Two ploughings Three discings, Rooter twice. Ridging by Tractor	About 60 tons all the years
2.	K. C. Kapadia	175-76 Kalamb	D	3 to 4 feet.	Brown Black	Soft Murum.	5 feet.	Jowar & Vegetable	North to South East to West	East West	3 ft.	6 fur-longs	North of river on the left Bank	Three ploughings, Three discings with tractor implement	60-65 tons
3.	V. V. Kulkarni	48-52 Kalamb	D	3 ft.	Greyish	Murum to the depth of 3½ ft.	8 feet.	Paddy	West to East North to South	—	3 ft.	3 miles 4 fur-longs	To North of river	2 ploughings 2 Discings, ridging by bullocks	60 tons 52 tons
4.	K. B. Nadgauda	175 - Kalamb	D	4 ft.	Brown- Black	Soft Murum.	5 feet.	Paddy	East to West North to South	East West	3 ft.	4 fur-longs	North of River	3 ploughings 3 discings with Tractor	60 to 65 tons
5.	G. D. Patel	17 Rui	A	2 ft.	Black	Soft Murum.	Below 5 ft.	Irrigated cane	North to South	East West	3 1/3 ft.	3½ miles from river	To the West of River	2 ploughings 2 discings by Tractor	41 tons and 64 tons
6.	G. D. Patel	63 Wari	B	3 to 4 feet.	Brownish Black	Murum.	Below 4 ft.	Plant cane & Lucerne	West to East North to South	North South	3 1/8 ft.	4 fur-longs	North-East	2 ploughings 2 discings	Plant: 40 tons Adsali: 80 tons
7.	G. D. Patel	393 Sam- vatsar	A	2 to 2½ feet.	Coffee- Black	Soft Murum.	6 feet.	Sunhemp	South to North	North South	3½ ft.	4 fur-longs	North-East	2 ploughings 1 harrowing 1 Ridging.	62 tons 77 tons
8.	G. D. Patel	160 Sam- vatsar	C	2½ to 3½ feet.	Greyish Black	Soft Murum.	8 to 9 feet.	Adsali cane.	North to South West to East	North South	3½ ft.	1 mile	To North of river	2 ploughings 1 harrowing 1 Ridging.	60 and 72 tons

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