

# APPENDICES

**Appendix - 1A : Fortnightly Meteorological data during crop growth period in 1995-96**

1 – 15 Oct 1995	34.8	23.8	0
16– 30 Oct 1995	32.3	17.9	4
31– 14 Nov. 1995	28.33	15.5	0
15 – 29 Nov. 1995	25.86	15.5	1.5
30 – 14 Dec. 1995	22.4	12.4	0
15– 29 Nov. 1995	26.2	9.2	1
30– 13 Jan. 1996	20.73	7.1	10
14– 28 Jan. 1996	19.06	5.6	21.5
29 – 14 Feb. 1996	19.63	7.1	18.2
13– 27 Feb. 1996	22.83	10.1	9.3
28 – 13 Mar. 1996	26.6	12.4	0
14 – 28 Mar. 1996	28.2	16.6	0
29 – 12 Apr. 1996	34.3	17.8	0
13 – 27 Apr. 1996	35.2	20.93	0
28 – 12 May 1996	42.1	25.6	8.5
13 – 27 May. 1996	40.4	24.33	2.6

**Appendix - 1B : Fortnightly Meteorological data during crop growth period in 1996-97**

1 – 15 Oct 1996	33.2	22.1	0.3
16– 30 Oct 1996	30.9	19.6	0
31– 14 Nov. 1996	29.63	15.4	0
15 – 29 Nov. 1996	27.6	12.6	0
30 – 14 Dec. 1996	27.2	9.8	0
15– 29 Nov. 1996	26.86	8.4	0
30– 13 Jan. 1997	20.26	7.2	0
14– 28 Jan. 1997	18.06	5.66	8
29 – 14 Feb. 1997	18.06	7.53	5
13– 27 Feb. 1997	24.6	11.2	0
28 – 14 Mar. 1997	28.2	13.9	3
15 – 29 Mar. 1997	30.2	17.8	1
30 – 13 Apr. 1997	36.2	18.1	45
14 – 28 Apr. 1997	37.86	20.3	0
29 – 13 May 1997	38.33	23.3	3.8
14 – 28 May. 1997	41.86	24.6	10

**Appendix-II (a)**  
**Common cost of cultivation per hectare**

Sl. No.	Particulars	Cost (Rs/ha)	
		1995-96	1996-97
1.	Harrowing & ploughing	640	640
2.	Sowing & planking	425	450
3.	Irrigation (03)	300	300
4.	Threshing	160	160
5.	Labour charges		
	(a) Bund making	160	200
	(b) Irrigation	120	150
	(c) Sowing	160	200
	(d) Thinning	400	400
	(e) Spraying	100	100
	(f) Harvesting	640	800
6.	Inputs		
	Seed @ 5 kg/ha	125	150
	Potassium (MoP)	420	410
	Dimecron	500	500
7.	Interest on working capital	290	312
	<b>TOTAL</b>	<b>4440</b>	<b>4772</b>

**Appendix-II (b)**  
**Treatment wise cost of cultivation per hectare**

		<b>Common cost of cultivation</b>	
		<b>1995-96</b>	<b>1996-97</b>
		4440	4772
Nitrogen	@ 50 kg ha <sup>-1</sup>	385 + 27	385 + 27
	<b>TOTAL</b>	4852	5184
	@ 100 kg ha <sup>-1</sup>	770 + 54	770 + 54
	<b>TOTAL</b>	<b>5264</b>	<b>5596</b>
Sulphur	@ 25 kg ha <sup>-1</sup>	52 + 3	52 + 3
	<b>TOTAL</b>	4495	4827
	@ 50 kg ha <sup>-1</sup>	104 + 6	104 + 6
	<b>TOTAL</b>	<b>4550</b>	<b>4882</b>

Total cost = Cost of Nutrient + Interest on working capital.

**Appendix-II (c)**  
**Treatment combination wise cost of cultivation**

	(Rs.)	
	1995-96	1996-97
$N_0S_0$	4440	4772
$N_0S_1$	4495	4827
$N_0S_2$	4550	4882
$N_1S_0$	4852	5184
$N_1S_1$	4904	5239
$N_1S_2$	4956	5294
$N_2S_0$	5264	5596
$N_2S_1$	5319	5651
$N_2S_2$	5374	5706

**Appendix III (a)**  
**Economics (1995-96)**

Treatments	Yield (kg/ha)		Gross return		Total Return (Rs.)	Cost of Cultivation (Rs.)	Net Return (Rs.)	Addl. benefit over control (Rs.)	Net return of rupee invested (Rs.)
	Grain	Stover	Grain (Rs.)	Stover (Rs.)					
<b>Varieties</b>									
Vardan	1785	4721	17850	944	18794	4674	14120	6466	3.02
Bio 902	1532	4083	15320	817	16137	4674	11463	3809	2.45
RH 30	1170	3142	11700	628	12328	4674	7654	–	1.64
<b>N (levels kg/ha)</b>									
0	987	2428	9870	485	10355	4440	5915	–	–
50	1575	4205	15750	841	16591	4852	11739	5824	2.42
100	1925	5313	19250	1063	20313	5264	15049	9134	2.86
<b>Sulphur (levels kg/ha)</b>									
0	1295	3281	12950	656	13606	4440	9166	–	–
25	1546	4205	15460	841	16301	4495	11806	2640	2.63
50	1619	4460	16190	892	17082	4550	12532	3366	2.75

**Appendix III (b)**  
**Economics (1996-97)**

Treatments	Yield (kg/ha)		Gross return		Total Return (Rs.)	Cost of Cultivation (Rs.)	Net Return (Rs.)	Addl. benefit over control (Rs.)	Net return of rupee invested (Rs.)
	Grain	Stover	Grain (Rs.)	Stover (Rs.)					
<b>Varieties</b>									
Vardan	1682	4413	17661	882	18543	5005	13538	6422	2.70
Bio 902	1493	3926	15676	785	16461	5005	11456	4340	2.29
RH 30	1099	2905	11540	581	12121	5005	7116	–	1.42
<b>N (levels kg/ha)</b>									
0	961	2335	10090	467	10557	4772	5785	–	–
50	1497	3952	15718	790	16508	5184	11324	5539	2.18
100	1816	4957	19068	991	20059	5596	14463	8678	2.58
<b>Sulphur (levels kg/ha)</b>									
0	1259	3059	13220	612	13832	4772	9060	–	–
25	1463	3892	15362	778	16140	4827	11313	2253	2.34
50	1552	4293	16296	859	17155	4882	12273	3213	2.51



**Appendix IV**  
**Analysis of variance table**

VARIANCE DUE TO	D.F.	S.S.	M.S.S	F. VALUE	
				TABLE VALUE	CALCULATED VALUE
Replication	2				
Varieties	2				
Nitrogen	2				
V × N	4				
Error (a)	16				
Sulphur	2				
S × V	4				
S × N	4				
S × N × V	8				
Error (b)	36				
<b>Total</b>	<b>80</b>				

