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## **Crop production Summary Kharif 2023**

The major agronomic research trials on maize-based systems during *Kharif* 2023 were focused on nutrients for different maturity pre-released maize hybrids, precision nutrient management, tillage optimization, integrated nutrient management, development of best weed management practices, crop residue management in traditional and emerging systems, sustainability of the baby corn-based system and best water management in maize systems.

**Response of *Kharif* pre-release genotypes to nutrient levels:** In *Kharif* 2023, experiments were conducted on the agronomy of pre-release genotypes of long/medium/short duration field corn hybrid/OPV, QPM, sweet corn and baby corn in different zones. The yield of long duration field corn hybrid was increased significantly with 125% RDF in PZ and with 150% RDF in CWZ. In the PZ, none of the tested genotypes were significantly superior over check (NK 6240) but these were at par to check. However, in CWZ, R 8050 performed significantly better over check (Bio 9862).

In medium duration genotypes, JKM 4546 and check LG 34.05 were at par with the check (Bio 9544) but PM 21103 was significantly inferior to check in PZ. In PZ, 150% RDF was significantly superior over 100% RDF. Grain yield in short duration genotype CP 999 was significantly superior to over check DKC 7074 in NWPZ while SMH 4555 and CP 111 were at par with check.

In QPM, best check VMH 45 had significantly higher yield over other checks (HQPM 1, Vivek QPM 9 and HQPM 4). The IQPMH 2102 and IQPMH 2105 genotypes were at par with best check while FQPLH 20 and FWQH 1 were significantly inferior to best check in NHZ. In NWPZ, grain yield of IQPMH 2109 was significantly higher over best check while AQWH 4, ALPQH 1 and APTQH 1 were at par with best check. In NEPZ, grain yield of ALQH 9, ALPQH 1, APTQH 1 and APQH 4 were at par with best check (HQPM 1) while IQPMH 2109 was significantly superior over best check. Similarly, APQH 4 was at par with best check but the genotypes ALPQH 1 and APTQH 1 were significantly inferior to HQPM 4 in PZ.

The OPV was tested in NHZ and yield was significantly increased with 150% RDF over 100% RDF and at par with 125% RDF. In sweet corn, APSKH 1 had significantly higher cob yield over check in NWPZ, NEPZ and PZ. However, 150% RDF was significantly higher over 100% RDF and at par with 125% RDF in NWPZ, NEPZ and PZ.

Baby corn yield was significantly higher in JH 32048 over check (CMVL baby corn 2, IMHB 1539) in NHZ. In NWPZ, check ABHS4-1 was significantly higher over ABSHS 27 and JH 32434. In NEPZ, check ABHS4-1 was significantly higher over AH 7023 and at par with JH 32434, CMVL 2 and ABSHS 27. However, 150% RDF was significantly higher over 100% RDF and at par with 125% RDF in NWPZ and NEPZ. In PZ, check ABHS4-1 had significantly higher yield over ABSHS 27 and it was at par with JH 32434. In CWZ, check ABHS4-1 had significantly higher yield over ABSHS 27 and at par with JH 32434.

**Nutrient management in maize-wheat-green gram/cowpea cropping systems under different tillage practices:** In the long-term experiment at Pantnagar, Dholi and Udaipur effect of tillage practices and nutrient management were studied. At Pantnagar, significantly higher grain yield was observed with CT over permanent beds which was at par with ZT. However, the net returns and BC

ratio were significantly higher with ZT over permanent beds. Concerning nutrient management practices, no significant difference in grain yield, net return and BC ratio was recorded.

At Dholi, the grain yield, net returns, and BC ratio were significantly higher with permanent bed and 60% RDN+GS over CT and RDF but at par with ZT and SSNM, respectively. At Udaipur, significantly higher grain yield, net return and BC ratio observed with CT over ZT and permanent bed. Regarding nutrient management, 33%RDF+GS significantly gave higher grain yield, net return and BC ratio over RDF and was at par with SSNM.

**Nutrient management in rice-maize cropping system under different tillage practices:** The trials were established in futuristic rice-maize cropping system at Dholi and Kalyani for eastern IGP for optimization of tillage and nutrient management practices. At Dholi, different tillage practices were at par for grain yield, net return and BC ratio. In nutrient management, yield and economics were significantly higher with 60% RDN+GS over RDF and at par with SSNM. The grain yield was significantly higher with ZT over CT and permanent bed at the Kalyani. The yield and economics were at par under different nutrient management practices at this location.

**Nutrient management in maize-based rainfed cropping systems under different tillage practices:** The tillage and nutrient management optimization in the rainfed maize system were conducted at Srinagar (maize-oat), Banswara (maize-chickpea) and Chhindwara (maize-mustard). At Srinagar, the grain yield differed non-significantly with different tillage practices but in nutrient management RDF had significantly higher yield and net return over 33%RDN+GS and was at par with SSNM.

At Banswara, the grain yield was significantly superior with ZT over CT and permanent bed and in nutrient management 33%RDN+GS was statically superior over RDF and at par with SSNM. At Chhindwara, the grain yield and economics differed non-significantly with different tillage practices but in nutrient management, SSNM had significantly higher over 33%RDN+GS and 100% RDF.

**Long-term trial on integrated nutrient management in maize system:** This trial was initiated in 2018 for long-term evaluation of integrated nutrient management in the maize systems at Bhubaneswar, Coimbatore, Kolhapur, Chhindwara, Srinagar, Pantnagar, Dharwad, Ambikapur and Banswara. Data indicated that at all locations, application of 100% RDF with 5 t/ha FYM produced significantly higher maize grain yield over other treatments. However, this treatment was at par with 100% RDF (Srinagar), 75% RDF + 5 t/ha FYM (Pantnagar), 100% RDF and 75% RDF + 5 t/ha (Dharwad), 100% RDF and 100% RDF + 5 kg Zn/ha (Ambikapur) and 100% RDF, 75% RDF + 5 t/ha and 100% RDF + 5 kg Zn/ha (Banswara). The Zn application resulted in very encouraging results which shows that there is a need to apply Zn in maize for enhancing productivity and profitability.

**Efficacy of nano urea in maize-wheat cropping systems:** A trial was initiated in 2022 for the evaluation of nano urea at 15 locations. Significantly highest yield was found with 100% RDN at all locations except at Karaikal and Udaipur. However, this treatment was at par with 75% RDN + 1 Nano Urea spray (Srinagar), 75% RDN + 1 or 2 Nano Urea spray (Chitrakoot), 75% RDN, 50% RDN and 2/3<sup>rd</sup> RDN + 1 Urea spray (Bhubaneswar), 2/3<sup>rd</sup> RDN + 1 Nano Urea spray, 1/3<sup>rd</sup> RDN + 2%

Urea two spray and  $2/3^{\text{rd}}$  RDN + 1 Urea spray(Ludhiana), 75% RDN + 1 Nano Urea spray, 75% RDN + 2 Nano Urea spray (Vagarai), 75% RDN + 2 Nano Urea spray and  $2/3^{\text{rd}}$  RDN + 1 Nano Urea spray(Banswara and Buldana), 75% RDN, 75% RDN + 1 or 2 Nano Urea spray,  $2/3^{\text{rd}}$  RDN + 1 Nano Urea spray and with  $2/3^{\text{rd}}$  RDN + 1 Urea spray (Dharwad and Kolhapur).

At Karaikal grain yield was significantly superior with 75% RDN + 2 Nano Urea spray over the rest of the N application. At Udaipur significantly higher yield with  $1/3^{\text{rd}}$  RDN basal + 2 Nano Urea spray over the rest of the nutrient application and at par with 100% RDN,  $2/3^{\text{rd}}$  RDN + 1 Nano Urea spray,  $1/3^{\text{rd}}$  RDN or  $2/3^{\text{rd}}$  RDN + 2% Urea two spray.

**Crop residue management in traditional and emerging maize systems:** An experiment was started in 2020 to assess the effect of crop residue in traditional and emerging maize systems at 10 locations. At Karnal, Ludhiana, Dharwad and Chhindwara, grain yield was significantly superior with residue incorporation + spray of microbial consortium on residue ( $M_3$ ) over the rest of residue management. However, this treatment was at par with only residue incorporation (Pantnagar and Kalyani) and with zero tillage + residue (Dholi). Zero tillage + residue produced significantly higher grain yield over other residue management but it is at par with residue incorporation + spray of microbial consortium on residue at Banswara. At two locations Karimnagar and Ambikapur, grain yield was non-significant with residue management. At Karnal and Dholi, 100% RDF was significantly highest yield over 100% RDN and P + 50% RDK. However, at Ludhiana, 125% RDN+100%PK was significantly highest over 100% RDF and 100and RDN and P + 50% RDK. At Chhindwara, yield was significantly superior with 100% RDN and P and 50% RDK. However, at Pantnagar, grain yield was significantly higher with 100% RDK (40 kg  $K_2O$ /ha) over 75% RDK and 50% RDK. At Banswara, Ambikapur, Kalyani and Dharwad grain yield was non-responsive towards nutrient management.

**Enhancing water use efficiency in maize:** The efficacy of organic superabsorbent *i.e.*, Fasal Amrit on water use efficiency in maize was assessed in this trial at Srinagar. Grain yield was non-significant with control and Fasal Amrit but it was higher with Fasal Amrit @ 20 kg/ha + RDF.

**Enhancing water use efficiency in spring maize:** Due to the greater adoption of irrigated spring maize at a much faster pace, it has become imperative to grow this crop water efficiently. Hence, this experiment was planned to generate the best water management practices in this irrigated crop for enhancing water use efficiency at Karnal and Ludhiana. At Karnal, significantly higher yield with ridge slop planting over conventional till flat and zero tillage flat planting. Similarly, the application of paddy mulch produced significantly higher yield over no mulching at Karnal and with organic mulching significantly higher over no mulching at Ludhiana.

**Enhancing sustainability of baby corn-based intensive cropping system:** The area of baby corn is increasing at a very fast pace around NCR and big cities and farmers grow baby corn around the year which might affect the sustainability of this system. So, to generate information on sustainable production practices this experiment was initiated in 2021 at Karnal and Kalyani. In comparison to continuous baby corn with farmers' practice and other treatments, a significantly higher baby corn equivalent yield (kg/ha) was obtained with baby corn-potato-baby corn-green manuring with 10 t/ha FYM/year + RDF at Karnal. At Kalyani,

significantly highest baby corn yield without husk was obtained with continuous baby corn with 20 t/ha FYM/year + RDF and at par with continuous baby corn with 15 t/ha FYM/year + RDF. Significantly higher baby corn yield with husk was obtained with continuous baby corn with 5 or 10 or 15 or 20 t/ha FYM/year + RDF, over farmer's practice. These results show that the inclusion of legumes or the addition of organic manure needs to be integrated with such baby corn-growing areas for long-term sustainability.

**Weed management in maize system:** Weed management plays a crucial role in the higher grain yield of maize hence trial was conducted at 22 locations of across India. The grain yield was significantly superior with a weed-free check over a weedy check and at par with all treatments at Hyderabad, Dholi, Ambikapur, Vagarai and Pantnagar locations. However, this treatment was at par with pyroxasulfone @ 127 g/ha fb mesotrione + atrazine @ 300 g/ha (Imphal), atrazine 500 g/ha fb tembotrione @ 120 g/ha or topramezone @ 25 g/ha or mesotrione + atrazine @ 300 g/ha and pyroxasulfone @ 127 g/ha fb halosulfuron methyl @ 67 g/ha or tembotrione @ 120 g/ha or topramezone @ 25 g/ha or mesotrione + atrazine @ 300 g/ha (Ludhiana), atrazine 500 g/ha + hand weeding or halosulfuron methyl @ 67 g/ha or mesotrione + atrazine @ 300 g/ha and pyroxasulfone @ 127 g/ha fb topramezone @ 25 g/ha (Bahraich), atrazine 500 g/ha + hand weeding or halosulfuron methyl @ 67 g/ha or tembotrione @ 120 g/ha or topramezone @ 25 g/ha and pyroxasulfone @ 127 g/ha fb topramezone @ 25 g/ha (Bhubaneswar), atrazine 500 g/ha fb halosulfuron methyl @ 67 g/ha or tembotrione @ 120 g/ha or topramezone @ 25 g/ha or mesotrione + atrazine @ 300 g/ha (Ranchi), atrazine 500 g/ha + hand weeding and pyroxasulfone @ 127 g/ha + hand weeding or mesotrione + atrazine @ 300 g/ha (Chhindwara and Varanasi), atrazine 500 g/ha + hand weeding and pyroxasulfone @ 127 g/ha + hand weeding or tembotrione @ 120 g/ha or topramezone @ 25 g/ha or mesotrione + atrazine @ 300 g/ha (Karimnagar). At Kolhapur and Bajaura, grain yield was significantly higher with pyroxasulfone @ 127 g/ha fb mesotrione + atrazine @ 300 g/ha, which was at par with weed-free check. At Karnal, significantly higher with pyroxasulfone @ 127 g/ha fb tembotrione @ 120 g/ha which was at par with weed-free check, atrazine 500 g/ha fb tembotrione @ 120 g/ha or topramezone @ 25 g/ha and pyroxasulfone @ 127 g/ha fb halosulfuron methyl @ 67 g/ha or topramezone @ 25 g/ha or mesotrione + atrazine @ 300 g/ha. At Chitrakoot, yield significantly higher with pyroxasulfone @ 127 g/ha fb + topramezone @ 25 g/ha which was at par with weed-free check, atrazine 500 g/ha fb + tembotrione @ 120 g/ha or topramezone @ 25 g/ha and pyroxasulfone @ 127 g/ha fb + halosulfuron methyl @ 67 g/ha or tembotrione @ 120 g/ha or mesotrione + atrazine @ 300 g/ha. At Dharwad, yield was significantly superior with pyroxasulfone @ 127 g/ha + hand weeding to over weed check and at par with across all treatments.

**Management of *Rottboellia cochinchinensis* in maize:** Management of *Rottboellia cochinchinensis* trial was conducted at Coimbatore and Hyderabad location. The grain yield of maize significantly higher with weed-free treatment to over untreated control, isoxaflutole 225 g/l + thien carbazone-methyl 90 g/l sc (adengo), 73.12 + 29.25 a.i.(g), 325 ml, single application as pre- emergence or post emergence, 375-500 lit/ha and isoxaflutole 225 g/l + thien carbazone-methyl 90 g/l sc, 90+36 a.i.(g), 400 ml, single application as pre-emergence or post-emergence, 375-500 lit/ha at Coimbatore and Hyderabad.



## A-1

**Table 1: Performance of pre release genotypes of late maturity under varying nutrient levels in North West Plain Zone (NWPZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			NWPZ (mean)	Stover yield (kg/ha)		
		Karnal	Ludhiana	Pantnagar		Karnal	Ludhiana	Pantnagar
100% RDF	PM 21111L	8295	7125	8379	<b>7933</b>	10800	7212	12153
	NK 6240 (C)	8694	7920	7859	<b>8158</b>	10302	8979	13542
125% RDF	PM 21111L	8704	7753	9869	<b>8776</b>	11244	8649	14410
	NK 6240 (C)	9128	8594	9479	<b>9067</b>	10814	10535	16042
150% RDF	PM 21111L	9110	7913	10220	<b>9081</b>	11802	9403	14757
	NK 6240 (C)	9549	8684	9686	<b>9306</b>	11387	11392	16493

Location mean	8913.3	7998.3	9248.7	8720.1	11058.1	9361.7	14566.0
C.D.(5%) AiBj-AiBk	225.9	1333.1	1503.5	1020.8	198.0	1641.5	2069.0
C.D.(5%) AiBk-AjBk	189.5	1008.6	1559.3	919.1	168.3	1529.7	1525.9
F(5%)	NS	NS	NS	-	NS	NS	NS

100% RDF	8494	7523	8119	<b>8045</b>	10551	8095	12847
125% RDF	8916	8174	9674	<b>8921</b>	11029	9592	15226
150% RDF	9329	8299	9953	<b>9194</b>	11595	10398	15625

C.D. (5%) Ai-Aj	102.5	361.0	1144.9	536.1	93.9	1000.8	436.4
C.V. (%) Error A	0.7	2.8	7.7	3.8	0.5	6.7	1.9
F (5%)	S	S	S	S	S	S	S

PM 21111L	8703	7597	9489	<b>8597</b>	11282	8421	13773
NK 6240 (C)	9124	8399	9008	<b>8844</b>	10834	10302	15359

C.D. (5%) Bi-Bj	130.4	769.6	868.0	589.4	114.3	947.7	1194.6
C.V. (%) Error B	1.3	8.3	8.1	5.9	0.9	8.8	7.1
F (5%)	S	S	NS	NS	S	S	S

Cont...

## A-2

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		
		Karnal	Ludhiana	Pantnagar	Karnal	Ludhiana	Pantnagar
100% RDF	PM 21111L	81.9	81.3	62.5	80.6	79.2	62.5
	NK 6240 (C)	81.9	81.6	65.3	80.2	79.9	65.3
125% RDF	PM 21111L	82.6	81.3	65.3	81.6	79.2	65.3
	NK 6240 (C)	82.3	82.3	62.5	81.6	80.9	62.5
150% RDF	PM 21111L	82.6	81.3	63.9	81.3	80.2	63.9
	NK 6240 (C)	82.3	82.3	65.3	81.6	80.9	65.3

Location mean	82.3	81.7	64.1	81.1	80.0	64.1
C.D.(5%) AiBj-AiBk	1.6	2.1	6.8	2.4	1.7	6.8
C.D.(5%) AiBk-AjBk	1.6	2.4	7.2	2.1	1.8	7.2
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	81.9	81.4	63.9	80.4	79.5	63.9
125% RDF	82.5	81.8	63.9	81.6	80.0	63.9
150% RDF	82.5	81.8	64.6	81.4	80.6	64.6

C.D. (5%) Ai-Aj	1.2	1.8	5.3	1.2	1.4	5.3
C.V. (%) Error A	0.9	1.4	5.2	1.0	1.1	5.2
F (5%)	NS	NS	NS	NS	NS	NS

PM 21111L	82.4	81.3	63.9	81.1	79.5	63.9
NK 6240 (C)	82.2	82.1	64.4	81.1	80.6	64.4

C.D. (5%) Bi-Bj	0.9	1.2	3.9	1.4	1.0	3.9
C.V. (%) Error B	1.0	1.3	5.3	1.5	1.1	5.3
F (5%)	NS	NS	NS	NS	S	NS

Cont...

### A-3

Fertility levels	Genotypes	Plant height (cm)			Days to 50% tasseling		
		Karnal	Ludhiana	Pantnagar	Karnal	Ludhiana	Pantnagar
100% RDF	PM 21111L	249.0	187.7	185.5	53.0	61.0	53.3
	NK 6240 (C)	204.3	212.3	177.4	51.0	63.0	50.3
125% RDF	PM 21111L	256.3	194.3	200.9	52.0	60.7	53.0
	NK 6240 (C)	208.0	221.7	185.5	50.0	62.7	50.3
150% RDF	PM 21111L	261.3	196.0	203.9	51.0	60.3	53.0
	NK 6240 (C)	213.3	222.7	186.8	49.3	62.3	50.0

Location mean	232.1	205.8	190.0	51.1	61.7	51.7
C.D.(5%) AiBj-AiBk	2.1	21.4	12.2	1.2	0.8	0.5
C.D.(5%) AiBk-AjBk	2.4	30.7	13.5	1.0	0.9	0.7
F(5%)	S	NS	NS	NS	NS	NS

100% RDF	226.7	200.0	181.4	52.0	62.0	51.8
125% RDF	232.2	208.0	193.2	51.0	61.7	51.7
150% RDF	237.3	209.3	195.3	50.2	61.3	51.5

C.D. (5%) Ai-Aj	1.9	26.7	10.4	0.4	0.7	0.7
C.V. (%) Error A	0.5	8.1	3.4	0.5	0.7	0.8
F (5%)	S	NS	S	S	NS	NS

PM 21111L	255.6	192.7	196.7	52.0	60.7	53.1
NK 6240 (C)	208.6	218.9	183.2	50.1	62.7	50.2

C.D. (5%) Bi-Bj	1.2	12.4	7.0	0.7	0.5	0.3
C.V. (%) Error B	0.5	5.2	3.2	1.2	0.7	0.5
F (5%)	S	S	S	S	S	S

Cont...

# A-4

Fertility levels	Genotypes	Days to 50% silking			100-seed weight (g)	Shelling (%)	Barren plant/plot
		Karnal	Ludhiana	Pantnagar	Pantnagar	Karnal	Ludhiana
100% RDF	PM 21111L	55.0	63.3	55.3	23.3	83.0	2.00
	NK 6240 (C)	53.0	65.3	52.7	26.1	82.0	1.67
125% RDF	PM 21111L	54.0	62.7	55.3	23.9	83.0	2.00
	NK 6240 (C)	52.0	64.7	52.3	27.0	82.0	1.33
150% RDF	PM 21111L	53.0	62.3	55.0	24.3	83.3	1.00
	NK 6240 (C)	51.3	64.3	52.3	27.4	82.3	1.33

Location mean	53.1	63.8	53.8	25.3	82.6	1.56
C.D.(5%) AiBj-AiBk	1.2	1.2	1.1	2.8	1.6	0.82
C.D.(5%) AiBk-AjBk	1.0	1.2	1.0	2.8	1.7	0.95
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	54.0	64.3	54.0	24.7	82.5	1.83
125% RDF	53.0	63.7	53.8	25.5	82.5	1.67
150% RDF	52.2	63.3	53.7	25.8	82.8	1.17

C.D. (5%) Ai-Aj	0.4	0.9	0.7	2.0	1.2	0.76
C.V. (%) Error A	0.4	0.9	0.8	5.0	0.9	30.3
F (5%)	S	NS	NS	NS	NS	NS

PM 21111L	54.0	62.8	55.2	23.8	83.1	1.67
NK 6240 (C)	52.1	64.8	52.4	26.8	82.1	1.44

C.D. (5%) Bi-Bj	0.7	0.7	0.6	1.6	0.9	0.47
C.V. (%) Error B	1.2	0.9	1.0	5.5	1.0	26.2
F (5%)	S	S	S	S	S	NS

Cont...

## A-5

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C ratio		
		Karnal	Ludhiana	Pantnagar	Karnal	Ludhiana	Pantnagar
100% RDF	PM 21111L	109997	101834	128852	2.64	2.18	2.78
	NK 6240 (C)	118270	119556	117988	2.76	2.56	2.55
125% RDF	PM 21111L	116660	114190	158175	2.69	2.36	3.29
	NK 6240 (C)	125459	132939	150014	2.82	2.75	3.12
150% RDF	PM 21111L	123235	116525	163665	2.74	2.33	3.28
	NK 6240 (C)	132347	134036	152499	2.86	2.68	3.05

Location mean	120994.7	119846.4	145198.7	2.75	2.48	3.01
C.D.(5%) AiBj-AiBk	4686.7	24593.5	31423.2	0.07	0.51	0.65
C.D.(5%) AiBk-AjBk	3931.2	19038.1	32589.4	0.06	0.40	0.67
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	114134	110695	123420	2.70	2.37	2.67
125% RDF	121059	123564	154095	2.75	2.56	3.20
150% RDF	127791	125280	158082	2.80	2.50	3.17

C.D. (5%) Ai-Aj	2126.0	7795.2	23928.9	0.03	0.17	0.50
C.V. (%) Error A	1.1	4.1	10.3	0.8	4.2	10.3
F (5%)	S	S	S	S	NS	NS

PM 21111L	116631	110849	150230	2.69	2.29	3.12
NK 6240 (C)	125359	128843	140167	2.81	2.67	2.91

C.D. (5%) Bi-Bj	2705.9	14199.1	18142.2	0.04	0.29	0.37
C.V. (%) Error B	1.9	10.3	10.8	1.2	10.3	10.7
F (5%)	S	S	NS	S	S	NS

# A-6

**Table 2: Performance of pre release genotypes of late maturity under varying nutrient levels in Peninsular Zone (PZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			PZ (mean)	Stover yield (kg/ha)		
		Coimbatore	Dharwad	Karimnagar		Coimbatore	Dharwad	Karimnagar
100% RDF	ADV 7211	7728	6061	6790	<b>6860</b>	11207	7943	7932
	KMH 8333	9163	6486	8346	<b>7998</b>	12932	8127	9552
	BIO 207	6920	6569	8148	<b>7212</b>	10030	8497	9290
	NK 6240 (C)	7562	6363	7836	<b>7254</b>	10967	8240	9049
125% RDF	ADV 7211	8721	6522	7315	<b>7519</b>	12637	8301	8272
	KMH 8333	9523	6854	8370	<b>8249</b>	13808	8552	10494
	BIO 207	7969	7110	8315	<b>7798</b>	11553	8850	9938
	NK 6240 (C)	7877	6970	8009	<b>7619</b>	11403	8847	9599
150% RDF	ADV 7211	8623	6855	7549	<b>7675</b>	12462	8567	9136
	KMH 8333	10301	6956	8444	<b>8567</b>	14867	8897	9701
	BIO 207	8069	7085	8346	<b>7833</b>	11697	9353	10370
	NK 6240 (C)	8324	7186	8148	<b>7886</b>	12068	9820	9568

Location mean	8398.2	6751.4	7968.1	7705.9	12135.9	8666.2	9408.4
C.D.(5%) AiBj-AiBk	1862.7	483.3	1232.1	1192.7	2673.1	864.1	1388.7
C.D.(5%) AiBk-AjBk	2050.2	515.4	1348.7	1304.8	3010.5	1082.7	1636.7
F(5%)	NS	NS	NS	-	NS	NS	NS

100% RDF	7843	6370	7780	<b>7331</b>	11284	8202	8956
125% RDF	8522	6864	8002	<b>7796</b>	12350	8638	9576
150% RDF	8829	7020	8122	<b>7990</b>	12774	9159	9694

C.D. (5%) Ai-Aj	1293.5	307.9	843.4	814.9	1966.1	796.8	1132.6
C.V. (%) Error A	13.6	4.0	9.3	9.0	14.3	8.1	10.6
F (5%)	NS	S	NS	NS	NS	NS	NS

ADV 7211	8357	6479	7218	<b>7351</b>	12102	8271	8447
KMH 8333	9662	6765	8387	<b>8271</b>	13869	8525	9916
BIO 207	7653	6921	8270	<b>7615</b>	11094	8900	9866
NK 6240 (C)	7921	6840	7998	<b>7586</b>	11479	8969	9405

C.D. (5%) Bi-Bj	1075.5	279.0	711.4	688.6	1543.3	498.9	801.8
C.V. (%) Error B	12.9	4.2	9.0	8.7	12.8	5.8	8.6
F (5%)	S	S	S	S	S	S	S

Cont...

# A-7

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		
		Coimbatore	Dharwad	Karimnagar	Coimbatore	Dharwad	Karimnagar
100% RDF	ADV 7211	50.0	78.3	74.3	66.3	75.0	73.8
	KMH 8333	48.8	80.4	76.9	75.7	75.4	75.5
	BIO 207	47.2	79.4	76.6	64.7	75.5	75.4
	NK 6240 (C)	49.7	79.1	77.8	58.3	77.3	76.6
125% RDF	ADV 7211	51.2	81.2	76.1	71.0	78.1	75.0
	KMH 8333	50.3	80.1	78.6	74.0	78.4	77.4
	BIO 207	49.4	80.6	75.5	68.0	79.0	74.3
	NK 6240 (C)	48.5	79.0	74.2	55.7	78.2	73.2
150% RDF	ADV 7211	51.2	78.6	78.4	65.7	76.9	77.4
	KMH 8333	50.9	79.0	77.1	71.7	77.7	76.4
	BIO 207	49.4	78.8	76.7	64.3	76.9	75.9
	NK 6240 (C)	51.5	77.9	78.1	59.7	77.2	76.8

Location mean	49.8	79.4	76.7	66.3	77.1	75.6
C.D.(5%) AiBj-AiBk	4.1	2.7	2.5	13.3	2.8	2.7
C.D.(5%) AiBk-AjBk	4.2	2.7	3.6	23.2	3.1	3.7
F(5%)	NS	NS	S	NS	NS	NS

100% RDF	48.9	79.3	76.4	66.3	75.8	75.3
125% RDF	49.8	80.2	76.1	67.2	78.4	75.0
150% RDF	50.8	78.6	77.6	65.3	77.2	76.6

C.D. (5%) Ai-Aj	2.4	1.4	2.9	20.4	1.9	3.0
C.V. (%) Error A	4.2	1.6	3.3	27.1	2.1	3.5
F (5%)	NS	NS	NS	NS	S	NS

ADV 7211	50.8	79.4	76.3	67.7	76.7	75.4
KMH 8333	50.0	79.8	77.6	73.8	77.2	76.4
BIO 207	48.7	79.6	76.3	65.7	77.1	75.2
NK 6240 (C)	49.9	78.7	76.7	57.9	77.6	75.5

C.D. (5%) Bi-Bj	2.3	1.5	1.5	7.7	1.6	1.5
C.V. (%) Error B	4.7	2.0	1.9	11.7	2.2	2.1
F (5%)	NS	NS	NS	S	NS	NS

Cont...

# A-8

Fertility levels	Genotypes	Plant height (cm)			Ear height (cm)	Days to 50% tasseling		
		Coimbatore	Dharwad	Karimnagar	Karimnagar	Coimbatore	Dharwad	Karimnagar
100% RDF	ADV 7211	175.0	196.1	193.7	82.0	53.0	51.7	59.0
	KMH 8333	160.6	200.5	199.0	86.0	53.0	50.3	59.7
	BIO 207	172.6	209.5	203.7	87.3	52.0	52.0	59.3
	NK 6240 (C)	166.2	202.2	192.3	82.3	52.0	49.7	58.7
125% RDF	ADV 7211	164.7	203.2	196.7	80.0	54.0	49.7	58.3
	KMH 8333	158.8	193.2	199.7	86.0	54.0	48.3	60.7
	BIO 207	175.7	209.5	203.0	90.3	52.0	50.0	59.3
	NK 6240 (C)	147.9	208.0	199.3	86.0	51.0	50.0	60.3
150% RDF	ADV 7211	164.3	213.2	197.0	83.3	54.0	49.3	59.3
	KMH 8333	169.7	212.4	204.0	86.0	54.0	51.0	59.0
	BIO 207	158.7	217.2	206.3	90.7	52.0	50.3	60.0
	NK 6240 (C)	145.4	221.4	204.7	84.0	51.0	48.7	59.7

Location mean	163.3	207.2	199.9	85.3	52.7	50.1	59.4
C.D.(5%) AiBj-AiBk	17.1	14.5	21.4	11.3	1.5	2.3	1.6
C.D.(5%) AiBk-AjBk	24.6	14.3	25.2	12.6	1.3	2.3	1.8
F(5%)	NS	NS	NS	NS	NS	NS	NS

100% RDF	168.6	202.1	197.2	84.4	52.5	50.9	59.2
125% RDF	161.8	203.5	199.7	85.6	52.8	49.5	59.7
150% RDF	159.5	216.0	203.0	86.0	52.8	49.8	59.5

C.D. (5%) Ai-Aj	20.0	7.1	17.5	8.0	0.3	1.2	1.2
C.V. (%) Error A	10.8	3.0	7.7	8.3	0.5	2.0	1.8
F (5%)	NS	S	NS	NS	NS	NS	NS

ADV 7211	168.0	204.2	195.8	81.8	53.7	50.2	58.9
KMH 8333	163.0	202.0	200.9	86.0	53.7	49.9	59.8
BIO 207	169.0	212.1	204.3	89.4	52.0	50.8	59.6
NK 6240 (C)	153.2	210.5	198.8	84.1	51.3	49.4	59.6

C.D. (5%) Bi-Bj	9.9	8.4	12.3	6.5	0.9	1.3	0.9
C.V. (%) Error B	6.1	4.1	6.2	7.7	1.6	2.7	1.5
F (5%)	S	NS	NS	NS	S	NS	NS

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## A-9

Fertility levels	Genotypes	Days to 50% silking			100-seed weight (g)		
		Coimbatore	Dharwad	Karimnagar	Coimbatore	Dharwad	Karimnagar
100% RDF	ADV 7211	57.0	55.0	62.7	36.0	30.1	30.2
	KMH 8333	55.7	55.0	63.3	37.7	30.4	34.2
	BIO 207	55.0	55.3	63.0	37.0	30.5	33.0
	NK 6240 (C)	54.3	55.0	62.3	37.7	30.9	32.4
125% RDF	ADV 7211	57.0	54.3	62.3	37.7	31.0	29.5
	KMH 8333	57.0	55.0	64.3	39.0	29.8	34.9
	BIO 207	55.0	54.7	63.3	37.3	31.1	33.2
	NK 6240 (C)	53.0	55.0	63.7	33.7	30.8	32.7
150% RDF	ADV 7211	57.0	54.7	63.0	40.7	30.1	31.4
	KMH 8333	57.0	56.3	62.3	41.0	30.7	36.4
	BIO 207	55.0	55.3	63.3	32.7	31.7	33.8
	NK 6240 (C)	53.0	54.7	63.3	35.3	32.1	33.8

Location mean	55.5	55.0	63.1	37.1	30.8	33.0
C.D.(5%) AiBj-AiBk	1.9	1.5	1.6	10.7	1.7	5.9
C.D.(5%) AiBk-AjBk	1.7	2.1	1.7	10.2	2.3	6.0
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	55.5	55.1	62.8	37.1	30.5	32.5
125% RDF	55.5	54.8	63.4	36.9	30.7	32.6
150% RDF	55.5	55.3	63.0	37.4	31.2	33.8

C.D. (5%) Ai-Aj	0.3	1.6	1.1	4.4	1.8	3.3
C.V. (%) Error A	0.5	2.6	1.5	10.4	5.0	8.8
F (5%)	NS	NS	NS	NS	NS	NS

ADV 7211	57.0	54.7	62.7	38.1	30.4	30.4
KMH 8333	56.6	55.4	63.3	39.2	30.3	35.2
BIO 207	55.0	55.1	63.2	35.7	31.1	33.4
NK 6240 (C)	53.4	54.9	63.1	35.6	31.3	33.0

C.D. (5%) Bi-Bj	1.1	0.9	0.9	6.2	1.0	3.4
C.V. (%) Error B	2.0	1.6	1.4	16.9	3.3	10.4
F (5%)	S	NS	NS	NS	NS	NS

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# A-10

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C ratio		
		Coimbatore	Dharwad	Karimnagar	Coimbatore	Dharwad	Karimnagar
100% RDF	ADV 7211	110887	70381	85711	2.49	2.17	2.34
	KMH 8333	145333	77156	119842	2.95	2.32	2.87
	BIO 207	91500	79210	115451	2.23	2.35	2.80
	NK 6240 (C)	106913	78191	108696	2.43	2.27	2.69
125% RDF	ADV 7211	132570	75054	94743	2.73	2.26	2.43
	KMH 8333	151810	83138	119027	2.98	2.37	2.79
	BIO 207	114517	90713	117310	2.49	2.46	2.77
	NK 6240 (C)	112323	88830	110584	2.46	2.41	2.67
150% RDF	ADV 7211	128060	82849	98238	2.62	2.30	2.43
	KMH 8333	168353	85238	117510	3.13	2.33	2.71
	BIO 207	114780	84162	116115	2.46	2.37	2.69
	NK 6240 (C)	120887	90283	111184	2.53	2.41	2.62

Location mean	124827.8	82100.4	109534.2	2.63	2.33	2.65
C.D.(5%) AiBj-AiBk	44705.9	6881.2	26769.7	0.58	0.17	0.41
C.D.(5%) AiBk-AjBk	49204.8	8671.3	29482.7	0.63	0.17	0.45
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	113658	76235	107425	2.52	2.28	2.67
125% RDF	127805	84434	110416	2.67	2.38	2.66
150% RDF	133020	85633	110762	2.69	2.35	2.61

C.D. (5%) Ai-Aj	31045.1	6414.0	18620.7	0.38	0.10	0.28
C.V. (%) Error A	21.9	6.9	15.0	12.7	3.8	9.4
F (5%)	NS	S	NS	NS	NS	NS

ADV 7211	123839	76095	92897	2.61	2.24	2.40
KMH 8333	155166	81844	118793	3.02	2.34	2.79
BIO 207	106932	84695	116292	2.39	2.39	2.75
NK 6240 (C)	113374	85768	110155	2.48	2.36	2.66

C.D. (5%) Bi-Bj	25810.9	3972.9	15455.5	0.34	0.10	0.24
C.V. (%) Error B	20.9	4.9	14.2	12.9	4.2	9.1
F (5%)	S	S	S	S	S	S

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# A-11

Fertility levels	Genotypes	Shelling (%)		Cob length (cm)		Cob girth (cm)	Cob diameter (mm)
		Coimbatore	Karimnagar	Karimnagar	Coimbatore	Coimbatore	Karimnagar
100% RDF	ADV 7211	83.8	74.3	14.4	19.5	15.6	42.4
	KMH 8333	84.8	75.8	17.7	19.2	15.2	46.4
	BIO 207	84.8	75.2	17.4	18.9	15.5	45.5
	NK 6240 (C)	82.4	73.8	16.9	19.0	14.9	44.2
125% RDF	ADV 7211	84.7	75.2	15.1	20.1	15.2	43.7
	KMH 8333	87.6	74.9	17.8	19.3	15.3	47.4
	BIO 207	84.8	75.3	17.4	19.8	16.6	46.5
	NK 6240 (C)	80.2	74.5	17.2	18.4	15.1	44.6
150% RDF	ADV 7211	83.6	73.6	16.3	20.3	15.4	44.5
	KMH 8333	85.6	76.3	18.8	19.6	16.0	48.0
	BIO 207	81.5	73.0	17.7	19.6	15.5	47.1
	NK 6240 (C)	85.6	75.7	17.6	19.4	15.3	44.5

Location mean	84.1	74.8	17.0	19.4	15.5	45.4
C.D.(5%) AiBj-AiBk	4.9	4.6	3.1	1.0	1.1	7.4
C.D.(5%) AiBk-AjBk	4.7	5.8	3.2	1.9	1.2	7.6
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	84.0	74.8	16.6	19.2	15.3	44.6
125% RDF	84.3	75.0	16.9	19.4	15.5	45.6
150% RDF	84.1	74.6	17.6	19.7	15.5	46.0

C.D. (5%) Ai-Aj	2.2	4.2	1.8	1.7	0.8	4.1
C.V. (%) Error A	2.3	5.0	9.3	7.8	4.6	8.0
F (5%)	NS	NS	NS	NS	NS	NS

ADV 7211	84.0	74.3	15.3	20.0	15.4	43.6
KMH 8333	86.0	75.6	18.1	19.4	15.5	47.3
BIO 207	83.7	74.5	17.5	19.4	15.8	46.4
NK 6240 (C)	82.7	74.7	17.2	18.9	15.1	44.4

C.D. (5%) Bi-Bj	2.8	2.7	1.8	0.6	0.6	4.3
C.V. (%) Error B	3.4	3.6	10.7	3.0	4.0	9.5
F (5%)	NS	NS	S	S	NS	NS

Cont...

## A-12

Fertility levels	Genotypes	Grain rows/cob		Grains/row		FAW (%) at 30 DAS
		Coimbatore	Karimnagar	Coimbatore	Karimnagar	Dharwad
100% RDF	ADV 7211	14.9	12.3	36.2	28.3	2.10
	KMH 8333	14.1	14.9	36.7	35.9	2.10
	BIO 207	15.5	13.9	34.9	35.2	2.00
	NK 6240 (C)	13.6	13.5	34.4	31.7	2.30
125% RDF	ADV 7211	14.3	13.4	33.5	28.9	2.80
	KMH 8333	13.3	14.6	38.3	34.9	2.87
	BIO 207	15.5	14.5	36.9	33.4	2.63
	NK 6240 (C)	13.1	14.1	31.8	32.9	3.23
150% RDF	ADV 7211	15.2	13.7	35.5	29.5	2.87
	KMH 8333	13.7	15.4	37.0	34.8	3.27
	BIO 207	16.1	15.9	35.4	33.0	3.43
	NK 6240 (C)	14.3	14.3	35.7	33.1	3.17

Location mean	14.5	14.2	35.5	32.6	2.73
C.D.(5%) AiBj-AiBk	1.7	2.6	4.9	4.6	1.22
C.D.(5%) AiBk-AjBk	1.7	2.6	4.8	6.8	1.12
F(5%)	NS	NS	NS	NS	NS

100% RDF	14.5	13.6	35.6	32.8	2.13
125% RDF	14.0	14.2	35.2	32.5	2.88
150% RDF	14.8	14.8	35.9	32.6	3.18

C.D. (5%) Ai-Aj	1.0	1.5	2.3	5.6	0.37
C.V. (%) Error A	5.9	9.2	5.7	15.1	12.1
F (5%)	NS	NS	NS	NS	S

ADV 7211	14.8	13.1	35.1	28.9	2.59
KMH 8333	13.7	15.0	37.3	35.2	2.74
BIO 207	15.7	14.8	35.8	33.9	2.69
NK 6240 (C)	13.6	14.0	34.0	32.6	2.90

C.D. (5%) Bi-Bj	1.0	1.5	2.8	2.7	0.70
C.V. (%) Error B	6.8	10.5	8.1	8.3	26.0
F (5%)	S	NS	NS	S	NS

# A-13

**Table 3: Performance of pre release genotypes of late maturity under varying nutrient levels in Central West Zone (CWZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			CWZ (mean)	Stover yield (kg/ha)		
		Banswara	Godhara	Udaipur		Banswara	Godhara	Udaipur
100% RDF	PM 21111L	5792	8286	4245	<b>6107</b>	8282	7905	6337
	R 8050	6758	8857	4732	<b>6782</b>	9838	7270	7266
	Bio 9862 (C)	6294	8000	4964	<b>6420</b>	9765	7651	7495
125% RDF	PM 21111L	6598	7460	4732	<b>6264</b>	9067	8000	6845
	R 8050	7375	9778	5259	<b>7471</b>	10131	6762	7827
	Bio 9862 (C)	7025	8127	5496	<b>6883</b>	9660	7429	8236
150% RDF	PM 21111L	6754	9270	4776	<b>6933</b>	9644	9143	7345
	R 8050	7411	12190	5474	<b>8358</b>	10787	9079	8520
	Bio 9862 (C)	7167	9778	5632	<b>7526</b>	11140	8635	8553

Location mean	6797.1	9082.9	5034.6	6971.5	9812.5	7985.9	7602.7
C.D.(5%) AiBj-AiBk	1216.5	1356.5	352.8	975.3	1805.9	913.9	501.5
C.D.(5%) AiBk-AjBk	1186.0	1480.4	480.0	1048.8	1648.8	1244.3	789.4
F(5%)	NS	NS	NS	-	NS	NS	NS

100% RDF	6281	8381	4647	<b>6436</b>	9295	7608	7033
125% RDF	6999	8455	5163	<b>6872</b>	9619	7397	7636
150% RDF	7111	10413	5294	<b>7606</b>	10524	8952	8139

C.D. (5%) Ai-Aj	660.1	997.8	388.2	682.0	752.9	1006.8	680.7
C.V. (%) Error A	7.4	8.4	5.9	7.2	5.9	9.6	6.8
F (5%)	S	S	S	S	S	S	S

PM 21111L	6381	8339	4585	<b>6435</b>	8998	8349	6842
R 8050	7181	10275	5155	<b>7537</b>	10252	7704	7871
Bio 9862 (C)	6829	8635	5364	<b>6943</b>	10188	7905	8095

C.D. (5%) Bi-Bj	702.4	783.2	203.7	563.1	1042.7	527.7	289.5
C.V. (%) Error B	10.1	8.4	3.9	7.5	10.3	6.4	3.7
F (5%)	NS	S	S	S	S	NS	S

Cont...

# A-14

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		
		Banswara	Godhara	Udaipur	Banswara	Godhara	Udaipur
100% RDF	PM 21111L	66.0	83.5	62.1	64.3	71.1	64.3
	R 8050	65.7	83.8	61.7	67.0	81.3	63.6
	Bio 9862 (C)	65.3	84.1	61.0	67.0	79.0	64.7
125% RDF	PM 21111L	65.7	84.1	62.2	66.0	78.1	65.1
	R 8050	66.3	83.5	61.8	68.0	87.9	64.6
	Bio 9862 (C)	66.7	83.5	62.8	68.3	82.2	66.3
150% RDF	PM 21111L	65.7	83.8	62.4	67.3	80.6	65.1
	R 8050	65.7	84.1	62.0	68.7	90.8	65.6
	Bio 9862 (C)	65.7	84.1	62.4	69.3	83.2	66.8

Location mean	65.9	83.8	62.0	67.3	81.6	65.1
C.D.(5%) AiBj-AiBk	1.6	1.4	3.1	3.1	13.9	1.6
C.D.(5%) AiBk-AjBk	1.6	1.5	3.6	3.0	12.3	3.2
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	65.7	83.8	61.6	66.1	77.1	64.2
125% RDF	66.2	83.7	62.3	67.4	82.8	65.3
150% RDF	65.7	84.0	62.3	68.4	84.9	65.8

C.D. (5%) Ai-Aj	1.0	1.0	2.6	1.6	4.8	2.9
C.V. (%) Error A	1.1	0.9	3.2	1.8	4.5	3.4
F (5%)	NS	NS	NS	S	S	NS

PM 21111L	65.8	83.8	62.3	65.9	76.6	64.8
R 8050	65.9	83.8	61.8	67.9	86.7	64.6
Bio 9862 (C)	65.9	83.9	62.1	68.2	81.5	65.9

C.D. (5%) Bi-Bj	0.9	0.8	1.8	1.8	8.0	0.9
C.V. (%) Error B	1.3	0.9	2.8	2.6	9.6	1.4
F (5%)	NS	NS	NS	S	NS	S

Cont...

## A-15

Fertility levels	Genotypes	Plant height (cm)			Days 50% tasseling		
		Banswara	Godhara	Udaipur	Banswara	Godhara	Udaipur
100% RDF	PM 21111L	248.3	209.3	172.5	53.3	50.0	55.7
	R 8050	251.7	185.7	195.3	54.0	49.3	54.0
	Bio 9862 (C)	250.0	181.0	187.0	52.0	49.7	55.3
125% RDF	PM 21111L	250.7	204.0	182.5	52.0	50.0	54.3
	R 8050	253.3	180.0	194.8	53.0	49.3	54.3
	Bio 9862 (C)	252.3	177.7	200.0	51.3	50.3	53.7
150% RDF	PM 21111L	252.3	218.3	201.3	51.7	49.3	54.7
	R 8050	254.3	195.7	205.2	53.0	48.7	54.7
	Bio 9862 (C)	252.7	186.0	212.0	51.3	49.3	51.3

Location mean	251.7	193.1	194.5	52.4	49.6	54.2
C.D.(5%) AiBj-AiBk	10.9	6.4	14.6	1.5	1.3	2.3
C.D.(5%) AiBk-AjBk	13.0	8.9	16.8	2.4	1.3	2.3
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	250.0	192.0	184.9	53.1	49.7	55.0
125% RDF	252.1	187.2	192.4	52.1	49.9	54.1
150% RDF	253.1	200.0	206.2	52.0	49.1	53.6

C.D. (5%) Ai-Aj	9.7	7.3	12.1	2.1	0.7	1.3
C.V. (%) Error A	2.9	2.9	4.7	3.1	1.1	1.9
F (5%)	NS	S	S	NS	NS	NS

PM 21111L	250.4	210.6	185.4	52.3	49.8	54.9
R 8050	253.1	187.1	198.4	53.3	49.1	54.3
Bio 9862 (C)	251.7	181.6	199.7	51.6	49.8	53.4

C.D. (5%) Bi-Bj	6.3	3.7	8.4	0.9	0.8	1.3
C.V. (%) Error B	2.4	1.9	4.2	1.6	1.5	2.4
F (5%)	NS	S	S	S	NS	NS

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## A-16

Fertility levels	Genotypes	Days 50% silking			100-seed weight (g)	
		Banswara	Godhara	Udaipur	Godhara	Udaipur
100% RDF	PM 21111L	55.0	55.0	58.3	37.3	23.6
	R 8050	57.0	54.3	58.7	31.3	24.5
	Bio 9862 (C)	55.0	54.7	57.7	33.3	24.8
125% RDF	PM 21111L	55.0	55.0	58.0	34.3	25.4
	R 8050	57.0	54.3	58.3	30.7	25.6
	Bio 9862 (C)	55.0	55.3	57.0	32.0	25.8
150% RDF	PM 21111L	54.7	54.3	54.0	35.0	25.3
	R 8050	55.7	53.7	54.7	34.7	25.8
	Bio 9862 (C)	53.7	54.7	56.7	32.0	26.5

Location mean	55.3	54.6	57.0	33.4	25.3
C.D.(5%) AiBj-AiBk	1.6	1.4	2.0	2.0	1.0
C.D.(5%) AiBk-AjBk	1.5	1.3	2.4	2.1	1.4
F(5%)	NS	NS	NS	S	NS

100% RDF	55.7	54.7	58.2	34.0	24.3
125% RDF	55.7	54.9	57.8	32.3	25.6
150% RDF	54.7	54.2	55.1	33.9	25.9

C.D. (5%) Ai-Aj	0.8	0.5	1.8	1.3	1.2
C.V. (%) Error A	1.0	0.7	2.4	3.0	3.6
F (5%)	S	S	S	S	S

PM 21111L	54.9	54.8	56.8	35.6	24.7
R 8050	56.6	54.1	57.2	32.2	25.3
Bio 9862 (C)	54.6	54.9	57.1	32.4	25.7

C.D. (5%) Bi-Bj	0.9	0.8	1.2	1.1	0.6
C.V. (%) Error B	1.6	1.5	2.0	3.3	2.1
F (5%)	S	NS	NS	S	S

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# A-17

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C ratio		
		Banswara	Godhara	Udaipur	Banswara	Godhara	Udaipur
100% RDF	PM 21111L	79934	155206	72240	1.94	6.13	2.17
	R 8050	100137	165047	85090	2.44	6.45	2.56
	Bio 9862 (C)	90436	148857	90428	2.20	5.92	2.72
125% RDF	PM 21111L	95265	137456	82098	2.23	5.33	2.37
	R 8050	111498	180710	95925	2.61	6.69	2.77
	Bio 9862 (C)	104183	149361	102024	2.44	5.70	2.94
150% RDF	PM 21111L	96994	175764	83402	2.20	6.41	2.31
	R 8050	110719	234018	101228	2.51	8.20	2.81
	Bio 9862 (C)	105616	184653	104412	2.39	6.68	2.89

Location mean	99420.3	170119.2	90760.8	2.33	6.39	2.62
C.D.(5%) AiBj-AiBk	25425.6	28574.2	8522.0	0.59	0.89	0.24
C.D.(5%) AiBk-AjBk	24786.4	31714.9	12108.2	0.58	1.00	0.36
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	90169	156370	82586	2.19	6.17	2.48
125% RDF	103649	155843	93349	2.43	5.91	2.69
150% RDF	104443	198145	96347	2.36	7.10	2.67

C.D. (5%) Ai-Aj	13795.3	21813.1	10011.5	0.33	0.70	0.30
C.V. (%) Error A	10.6	9.8	8.4	10.8	8.3	8.8
F (5%)	NS	S	S	NS	S	NS

PM 21111L	90731	156142	79246	2.12	5.96	2.28
R 8050	107451	193259	94081	2.52	7.12	2.71
Bio 9862 (C)	100078	160957	98955	2.34	6.10	2.85

C.D. (5%) Bi-Bj	14679.5	16497.3	4920.2	0.34	0.51	0.14
C.V. (%) Error B	14.4	9.4	5.3	14.2	7.8	5.1
F (5%)	NS	S	S	NS	S	S

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## A-18

Fertility levels	Genotypes	Disease MLB (1-9)	Insect (FAW) damage (%)	Grain uptake (kg/ha)		
				N	P	K
		Godhara	Godhara	Udaipur	Udaipur	Udaipur
100% RDF	PM 21111L	2.33	4.00	67.8	15.8	19.4
	R 8050	1.67	4.00	79.6	17.7	21.6
	Bio 9862 (C)	2.00	4.00	82.4	18.8	22.7
125% RDF	PM 21111L	2.33	3.33	77.1	19.3	22.1
	R 8050	2.33	4.67	89.6	21.7	24.9
	Bio 9862 (C)	1.33	4.00	93.2	22.9	26.2
150% RDF	PM 21111L	2.67	4.00	78.3	19.6	22.4
	R 8050	1.33	4.00	95.4	23.1	25.9
	Bio 9862 (C)	2.33	2.67	100.2	24.0	27.1

Location mean	2.04	3.85	84.8	20.3	23.6
C.D.(5%) AiBj-AiBk	1.08	3.62	7.3	1.3	1.7
C.D.(5%) AiBk-AjBk	1.86	3.35	8.6	1.3	2.4
F(5%)	NS	NS	NS	NS	NS

100% RDF	2.00	4.00	76.6	17.4	21.3
125% RDF	2.00	4.00	86.6	21.3	24.4
150% RDF	2.11	3.56	91.3	22.2	25.1

C.D. (5%) Ai-Aj	1.65	1.59	6.2	0.8	2.0
C.V. (%) Error A	62.0	31.6	5.6	3.1	6.4
F (5%)	NS	NS	S	S	S

PM 21111L	2.44	3.78	74.4	18.2	21.3
R 8050	1.78	4.22	88.2	20.8	24.1
Bio 9862 (C)	1.89	3.56	92.0	21.9	25.3

C.D. (5%) Bi-Bj	0.63	2.09	4.2	0.8	1.0
C.V. (%) Error B	29.9	52.9	4.8	3.6	4.0
F (5%)	NS	NS	S	S	S

# A-19

**Table 4: Performance of pre release genotypes of medium maturity under varying nutrient levels in Peninsular Zone (PZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			PZ (mean)	Stover yield (kg/ha)		
		Hyderabad	Peddapuram	Vagarai		Hyderabad	Peddapuram	Vagarai
100% RDF	PM 21103	5500	4978	8703	<b>6394</b>	6710	5996	11550
	JKMH 4546	8000	5479	8369	<b>7283</b>	9137	7300	9659
	Bio 9544 (C)	6500	7086	7825	<b>7137</b>	7951	8012	9366
	LG 34.05 (C)	6250	6383	8456	<b>7030</b>	7518	7778	9710
125% RDF	PM 21103	6000	5653	8506	<b>6720</b>	7257	6721	11986
	JKMH 4546	8200	6263	8244	<b>7569</b>	9445	8035	10689
	Bio 9544 (C)	7750	7802	7725	<b>7759</b>	8906	9191	9688
	LG 34.05 (C)	6500	7264	8386	<b>7383</b>	7928	8504	9980
150% RDF	PM 21103	6500	6341	8392	<b>7078</b>	7737	8107	12222
	JKMH 4546	8450	6831	8028	<b>7770</b>	9591	8078	10856
	Bio 9544 (C)	8000	8002	7567	<b>7856</b>	9179	9874	9790
	LG 34.05 (C)	7750	7796	8217	<b>7921</b>	8992	8615	10179

Location mean	7116.7	6656.7	8201.4	7324.9	8362.5	8017.6	10472.9
C.D.(5%) AiBj-AiBk	1922.4	866.4	1060.3	1283.0	1953.9	1571.9	3174.5
C.D.(5%) AiBk-AjBk	1780.1	1017.8	989.9	1262.6	1853.9	1470.4	2857.2
F(5%)	NS	NS	NS	-	NS	NS	NS

100% RDF	6562	5982	8338	<b>6961</b>	7829	7272	10071
125% RDF	7112	6746	8215	<b>7358</b>	8384	8113	10586
150% RDF	7675	7243	8051	<b>7656</b>	8875	8668	10762

C.D. (5%) Ai-Aj	647.9	701.8	380.2	576.6	778.3	571.4	801.0
C.V. (%) Error A	8.0	9.3	4.1	7.1	8.2	6.3	6.7
F (5%)	S	S	NS	S	S	S	NS

PM 21103	6000	5657	8533	<b>6730</b>	7235	6941	11919
JKMH 4546	8217	6191	8214	<b>7540</b>	9391	7804	10401
Bio 9544 (C)	7417	7630	7706	<b>7584</b>	8679	9026	9615
LG 34.05 (C)	6833	7148	8353	<b>7445</b>	8146	8299	9956

C.D. (5%) Bi-Bj	1109.9	500.2	612.2	740.7	1128.1	907.5	1832.8
C.V. (%) Error B	15.7	7.6	7.5	10.3	13.6	11.4	17.7
F (5%)	S	S	NS	S	S	S	NS

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# A-20

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		
		Hyderabad	Peddapuram	Vagarai	Hyderabad	Peddapuram	Vagarai
100% RDF	PM 21103	73.3	80.9	64.7	72.9	77.8	62.8
	JKMH 4546	73.6	80.6	65.0	73.0	80.2	63.3
	Bio 9544 (C)	72.1	82.7	65.0	71.5	82.1	63.1
	LG 34.05 (C)	72.6	81.8	64.4	72.0	76.2	62.2
125% RDF	PM 21103	75.4	82.7	64.2	74.7	78.4	61.7
	JKMH 4546	73.3	80.9	64.7	72.8	74.1	62.8
	Bio 9544 (C)	75.4	81.8	65.3	74.8	80.8	63.9
	LG 34.05 (C)	72.9	82.4	64.7	72.2	75.9	62.8
150% RDF	PM 21103	75.4	83.0	65.3	74.8	82.1	63.6
	JKMH 4546	70.6	80.9	64.2	70.1	80.6	62.5
	Bio 9544 (C)	72.2	83.3	65.0	71.6	82.7	63.9
	LG 34.05 (C)	70.2	81.8	64.7	69.6	78.7	62.8

Location mean	73.1	81.9	64.8	72.5	79.1	62.9
C.D.(5%) AiBj-AiBk	5.3	2.4	1.2	5.3	4.4	2.2
C.D.(5%) AiBk-AjBk	7.0	2.3	1.3	7.1	6.2	2.1
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	72.9	81.5	64.8	72.3	79.1	62.8
125% RDF	74.3	81.9	64.7	73.6	77.3	62.8
150% RDF	72.1	82.3	64.8	71.6	81.0	63.2

C.D. (5%) Ai-Aj	5.4	1.0	0.8	5.5	5.0	0.9
C.V. (%) Error A	6.5	1.0	1.1	6.7	5.5	1.3
F (5%)	NS	NS	NS	NS	NS	NS

PM 21103	74.7	82.2	64.7	74.1	79.4	62.7
JKMH 4546	72.5	80.8	64.6	72.0	78.3	62.9
Bio 9544 (C)	73.2	82.6	65.1	72.6	81.9	63.6
LG 34.05 (C)	71.9	82.0	64.6	71.3	77.0	62.6

C.D. (5%) Bi-Bj	3.1	1.4	0.7	3.1	2.6	1.3
C.V. (%) Error B	4.2	1.7	1.1	4.3	3.3	2.1
F (5%)	NS	NS	NS	NS	S	NS

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## A-21

Fertility levels	Genotypes	Plant height (cm)			100-seed weight (g)		
		Hyderabad	Peddapuram	Vagarai	Hyderabad	Peddapuram	Vagarai
100% RDF	PM 21103	154.3	156.1	197.1	26.2	24.4	32.1
	JKMH 4546	154.9	176.1	203.5	30.6	25.3	31.0
	Bio 9544 (C)	156.6	197.2	180.4	30.5	28.0	29.1
	LG 34.05 (C)	155.0	187.2	207.1	29.3	25.3	34.5
125% RDF	PM 21103	157.7	163.9	198.8	29.2	27.5	31.8
	JKMH 4546	158.0	177.2	208.1	31.9	28.2	30.9
	Bio 9544 (C)	157.8	190.6	182.9	30.9	30.4	28.7
	LG 34.05 (C)	161.7	190.0	215.7	29.6	29.7	34.2
150% RDF	PM 21103	158.2	178.3	202.0	30.2	28.8	31.4
	JKMH 4546	161.2	185.6	212.6	33.9	29.9	30.4
	Bio 9544 (C)	162.7	212.8	186.3	33.5	31.6	28.4
	LG 34.05 (C)	162.9	201.1	219.9	33.1	30.2	33.7

Location mean	158.4	184.7	201.2	30.7	28.3	31.4
C.D.(5%) AiBj-AiBk	13.1	15.5	14.7	5.7	2.9	1.8
C.D.(5%) AiBk-AjBk	12.1	17.5	16.7	6.5	3.3	1.9
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	155.2	179.2	197.0	29.1	25.7	31.7
125% RDF	158.8	180.4	201.4	30.4	28.9	31.4
150% RDF	161.3	194.4	205.2	32.7	30.1	31.0

C.D. (5%) Ai-Aj	4.5	11.5	11.0	4.3	2.2	1.2
C.V. (%) Error A	2.5	5.5	4.8	12.3	6.8	3.3
F (5%)	S	S	NS	NS	S	NS

PM 21103	156.7	166.1	199.3	28.5	26.9	31.8
JKMH 4546	158.1	179.6	208.1	32.1	27.8	30.8
Bio 9544 (C)	159.0	200.2	183.2	31.6	30.0	28.7
LG 34.05 (C)	159.9	192.8	214.2	30.7	28.4	34.1

C.D. (5%) Bi-Bj	7.5	8.9	8.5	3.3	1.7	1.0
C.V. (%) Error B	4.8	4.9	4.3	10.8	6.0	3.4
F (5%)	NS	S	S	NS	S	S

Cont...

## A-22

Fertility levels	Genotypes	Days to 50% tasseling			Days to 50% silking		
		Hyderabad	Peddapuram	Vagarai	Hyderabad	Peddapuram	Vagarai
100% RDF	PM 21103	61.7	54.7	51.0	64.7	57.3	53.0
	JKMH 4546	62.3	54.7	50.7	65.0	57.3	52.7
	Bio 9544 (C)	60.3	54.7	51.0	62.7	57.3	51.7
	LG 34.05 (C)	62.0	54.7	50.7	64.7	57.7	52.0
125% RDF	PM 21103	61.7	53.7	51.0	64.7	56.0	53.0
	JKMH 4546	61.0	53.7	51.0	63.7	56.7	52.3
	Bio 9544 (C)	61.7	53.3	50.7	65.0	56.3	53.0
	LG 34.05 (C)	61.3	54.3	51.0	64.0	56.7	52.7
150% RDF	PM 21103	60.3	53.0	51.7	63.0	55.0	53.0
	JKMH 4546	61.7	51.7	51.0	65.0	54.7	52.7
	Bio 9544 (C)	61.3	52.3	51.3	64.3	55.0	53.7
	LG 34.05 (C)	60.3	53.7	51.0	62.7	56.3	52.3

Location mean	61.3	53.7	51.0	64.1	56.4	52.7
C.D.(5%) AiBj-AiBk	1.2	1.8	1.3	1.7	1.5	1.3
C.D.(5%) AiBk-AjBk	1.3	2.1	1.2	1.5	1.8	1.1
F(5%)	S	NS	NS	S	NS	NS

100% RDF	61.6	54.7	50.8	64.3	57.4	52.3
125% RDF	61.4	53.8	50.9	64.3	56.4	52.8
150% RDF	60.9	52.7	51.3	63.8	55.3	52.9

C.D. (5%) Ai-Aj	0.9	1.4	0.2	0.5	1.3	0.3
C.V. (%) Error A	1.2	2.3	0.4	0.7	2.0	0.5
F (5%)	NS	S	S	NS	S	S

PM 21103	61.2	53.8	51.2	64.1	56.1	53.0
JKMH 4546	61.7	53.3	50.9	64.6	56.2	52.6
Bio 9544 (C)	61.1	53.4	51.0	64.0	56.2	52.8
LG 34.05 (C)	61.2	54.2	50.9	63.8	56.9	52.3

C.D. (5%) Bi-Bj	0.7	1.0	0.8	1.0	0.9	0.7
C.V. (%) Error B	1.1	1.9	1.5	1.5	1.6	1.4
F (5%)	NS	NS	NS	NS	NS	NS

Cont...

# A-23

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C Ratio		
		Hyderabad	Peddapuram	Vagarai	Hyderabad	Peddapuram	Vagarai
100% RDF	PM 21103	55553	39499	108499	1.84	1.61	2.34
	JKMH 4546	110230	49974	101166	2.67	1.77	2.25
	Bio 9544 (C)	77694	83569	89188	2.18	2.29	2.11
	LG 34.05 (C)	72036	68870	103060	2.09	2.07	2.28
125% RDF	PM 21103	63767	51550	104160	1.93	1.77	2.29
	JKMH 4546	111936	64296	98416	2.62	1.97	2.22
	Bio 9544 (C)	101991	96472	86988	2.48	2.45	2.08
	LG 34.05 (C)	74888	85222	101532	2.09	2.28	2.26
150% RDF	PM 21103	72457	63870	101655	2.02	1.93	2.26
	JKMH 4546	115067	74101	93649	2.62	2.08	2.16
	Bio 9544 (C)	105250	98588	83505	2.48	2.44	2.04
	LG 34.05 (C)	99838	94279	97805	2.40	2.37	2.21

Location mean	88392.2	72524.0	97468.6	2.28	2.09	2.21
C.D.(5%) AiBj-AiBk	42114.8	18106.9	23326.3	0.61	0.28	0.29
C.D.(5%) AiBk-AjBk	39013.5	21272.8	21777.9	0.56	0.32	0.27
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	78878	60478	100478	2.19	1.94	2.25
125% RDF	88146	74385	97774	2.28	2.12	2.21
150% RDF	98153	82709	94153	2.38	2.20	2.17

C.D. (5%) Ai-Aj	14242.2	14666.6	8363.9	0.21	0.22	0.10
C.V. (%) Error A	14.2	17.8	7.6	8.0	9.2	4.1
F (5%)	S	S	NS	NS	NS	NS

PM 21103	63926	51639	104771	1.93	1.77	2.30
JKMH 4546	112411	62790	97744	2.64	1.94	2.21
Bio 9544 (C)	94978	92876	86560	2.38	2.39	2.08
LG 34.05 (C)	82254	82790	100799	2.19	2.24	2.25

C.D. (5%) Bi-Bj	24315.0	10454.0	13467.4	0.35	0.16	0.16
C.V. (%) Error B	27.8	14.6	14.0	15.5	7.7	7.5
F (5%)	S	S	NS	S	S	NS

Cont...

# A-24

Fertility levels	Genotypes	Cob length (cm)			Cob girth (cm)		
		Hyderabad	Peddapuram	Vagarai	Hyderabad	Peddapuram	Vagarai
100% RDF	PM 21103	12.9	14.9	15.9	12.4	13.7	14.1
	JKMH 4546	15.9	15.3	16.0	13.5	13.9	13.7
	Bio 9544 (C)	14.6	16.2	15.5	12.3	15.6	13.6
	LG 34.05 (C)	14.2	16.0	15.7	12.6	14.1	14.9
125% RDF	PM 21103	14.0	15.4	16.0	12.8	13.9	13.6
	JKMH 4546	16.5	16.0	16.1	14.0	14.2	13.6
	Bio 9544 (C)	15.7	16.5	15.7	13.4	16.3	13.5
	LG 34.05 (C)	14.9	16.3	16.2	13.0	15.6	14.6
150% RDF	PM 21103	14.7	15.9	16.8	13.0	14.0	13.6
	JKMH 4546	16.9	16.1	16.9	14.0	14.5	13.5
	Bio 9544 (C)	16.5	17.2	15.9	13.6	16.3	13.2
	LG 34.05 (C)	16.0	17.0	16.7	13.3	16.6	14.4

Location mean	15.2	16.1	16.1	13.2	14.9	13.9
C.D.(5%) AiBj-AiBk	2.0	1.3	1.3	1.6	1.3	1.1
C.D.(5%) AiBk-AjBk	1.9	1.3	1.5	1.7	1.3	1.3
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	14.4	15.6	15.8	12.7	14.3	14.1
125% RDF	15.3	16.1	16.0	13.3	15.0	13.8
150% RDF	16.0	16.6	16.6	13.5	15.4	13.7

C.D. (5%) Ai-Aj	0.7	0.6	1.0	0.9	0.7	0.9
C.V. (%) Error A	4.1	3.1	5.3	6.2	4.4	6.0
F (5%)	S	S	NS	NS	S	NS

PM 21103	13.9	15.4	16.2	12.7	13.9	13.8
JKMH 4546	16.5	15.8	16.4	13.8	14.2	13.6
Bio 9544 (C)	15.6	16.6	15.7	13.1	16.1	13.4
LG 34.05 (C)	15.1	16.4	16.2	13.0	15.4	14.6

C.D. (5%) Bi-Bj	1.2	0.8	0.8	0.9	0.7	0.6
C.V. (%) Error B	7.7	4.8	4.8	7.2	5.0	4.5
F (5%)	S	S	NS	NS	S	S

Cont...



# A-25

Fertility levels	Genotypes	Grain rows/cob			Grains/row		
		Hyderabad	Peddapuram	Vagarai	Hyderabad	Peddapuram	Vagarai
100% RDF	PM 21103	13.7	12.9	15.2	25.2	31.2	35.4
	JKMH 4546	14.2	13.3	14.9	30.8	34.7	34.4
	Bio 9544 (C)	13.6	15.1	15.1	29.2	36.9	34.8
	LG 34.05 (C)	13.6	14.0	15.6	28.9	35.8	36.5
125% RDF	PM 21103	14.2	13.8	14.9	27.0	33.8	35.5
	JKMH 4546	14.9	14.0	14.8	31.2	35.6	34.5
	Bio 9544 (C)	14.2	15.4	14.9	30.9	37.8	35.3
	LG 34.05 (C)	14.3	15.1	15.1	29.3	36.9	36.9
150% RDF	PM 21103	14.2	14.0	14.4	28.0	34.6	35.9
	JKMH 4546	15.5	14.4	15.1	34.1	36.0	35.2
	Bio 9544 (C)	14.9	16.0	14.7	32.6	38.6	35.5
	LG 34.05 (C)	14.9	15.5	15.1	31.3	38.1	36.1

Location mean	14.3	14.5	15.0	29.9	35.8	35.5
C.D.(5%) AiBj-AiBk	2.2	0.9	1.4	3.5	1.8	2.8
C.D.(5%) AiBk-AjBk	2.6	1.1	1.5	4.1	1.9	2.5
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	13.8	13.8	15.2	28.5	34.6	35.3
125% RDF	14.4	14.6	14.9	29.6	36.0	35.6
150% RDF	14.9	15.0	14.8	31.5	36.8	35.7

C.D. (5%) Ai-Aj	1.8	0.8	0.9	2.8	1.2	0.4
C.V. (%) Error A	10.9	4.7	5.3	8.3	2.9	1.1
F (5%)	NS	S	NS	NS	S	NS

PM 21103	14.0	13.6	14.8	26.7	33.2	35.6
JKMH 4546	14.9	13.9	14.9	32.0	35.4	34.7
Bio 9544 (C)	14.2	15.5	14.9	30.9	37.8	35.2
LG 34.05 (C)	14.3	14.9	15.2	29.8	36.9	36.5

C.D. (5%) Bi-Bj	1.3	0.5	0.8	2.0	1.0	1.6
C.V. (%) Error B	9.1	3.7	5.4	6.9	2.9	4.6
F (5%)	NS	S	NS	S	S	NS

**Table 5: Performance of pre release genotypes of medium maturity under varying nutrient levels in Central West Zone (CWZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			CWZ (mean)	Stover yield (kg/ha)		
		Ambikapur	Banswara	Godhara		Ambikapur	Banswara	Godhara
100% RDF	JKMH 4546	4746	5833	7937	<b>6172</b>	6645	8323	6222
	PM 21103M	5096	5642	7365	<b>6034</b>	7134	8210	4635
	HM 21204	5108	4933	4444	<b>4829</b>	7152	7654	4000
	Bio 9544 (C)	5062	4889	6921	<b>5624</b>	7087	7393	5683
125% RDF	JKMH 4546	4859	6500	8159	<b>6506</b>	6803	8949	6476
	PM 21103M	5209	6333	7048	<b>6197</b>	7293	8750	4952
	HM 21204	5455	5667	6984	<b>6035</b>	7637	7793	5460
	Bio 9544 (C)	5628	5278	6603	<b>5836</b>	7879	7941	5587
150% RDF	JKMH 4546	4990	6556	6825	<b>6124</b>	6986	9369	6286
	PM 21103M	5420	6389	7397	<b>6402</b>	7588	9297	6032
	HM 21204	5592	5778	6667	<b>6012</b>	7828	8955	5905
	Bio 9544 (C)	5824	5389	6095	<b>5769</b>	8153	8159	5619

Location mean	5249.1	5765.5	6870.4	5961.7	7348.8	8399.5	5571.4
C.D.(5%) AiBj-AiBk	562.1	1084.3	1388.3	1011.5	787.0	1631.1	1133.3
C.D.(5%) AiBk-AjBk	728.5	1008.6	1316.5	1017.9	1019.9	1501.9	1050.2
F(5%)	NS	NS	S	-	NS	NS	NS

100% RDF	5003	5324	6667	<b>5665</b>	7004	7895	5135
125% RDF	5288	5944	7198	<b>6144</b>	7403	8358	5619
150% RDF	5456	6028	6746	<b>6077</b>	7639	8945	5960

C.D. (5%) Ai-Aj	551.4	378.7	551.1	493.7	772.0	524.7	384.1
C.V. (%) Error A	9.3	5.8	7.1	7.4	9.3	5.5	6.1
F (5%)	NS	S	NS	NS	NS	S	S

JKMH 4546	4865	6296	7640	<b>6267</b>	6811	8880	6328
PM 21103M	5242	6121	7270	<b>6211</b>	7338	8752	5206
HM 21204	5385	5459	6032	<b>5625</b>	7539	8134	5122
Bio 9544 (C)	5504	5185	6540	<b>5743</b>	7706	7831	5630

C.D. (5%) Bi-Bj	324.5	626.0	801.5	584.0	454.4	941.7	654.3
C.V. (%) Error B	6.2	11.0	11.8	9.7	6.2	11.3	11.9
F (5%)	S	S	S	NS	S	NS	S

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# A-27

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		Plant height (cm)		
		Ambikapur	Banswara	Godhara	Banswara	Godhara	Ambikapur	Banswara	Godhara
100% RDF	JKMH 4546	63.3	62.9	81.6	63.7	85.1	188.7	248.3	174.0
	PM 21103M	62.5	63.3	83.8	64.3	74.6	166.4	225.0	159.0
	HM 21204	61.2	62.6	84.8	62.0	74.6	192.9	223.3	159.7
	Bio 9544 (C)	61.4	62.6	83.5	62.3	75.6	172.0	213.3	157.7
125% RDF	JKMH 4546	60.9	64.0	84.1	64.0	81.0	210.7	245.0	182.3
	PM 21103M	63.5	63.3	84.8	65.0	69.8	170.3	216.7	162.7
	HM 21204	63.0	63.6	82.2	64.3	86.7	205.3	220.0	160.7
	Bio 9544 (C)	61.6	64.0	84.4	63.7	80.0	190.2	245.0	160.3
150% RDF	JKMH 4546	60.0	64.8	83.8	65.0	73.0	215.3	245.0	172.7
	PM 21103M	63.0	63.3	82.5	65.3	76.5	186.8	241.7	168.3
	HM 21204	61.5	63.2	82.2	65.0	69.8	210.2	241.7	165.3
	Bio 9544 (C)	62.6	63.6	77.8	64.3	68.6	216.2	228.3	164.0

Location mean	62.0	63.4	83.0	64.1	76.3	193.8	232.8	165.6
C.D.(5%) AiBj-AiBk	3.8	3.0	4.6	4.3	11.1	16.8	10.8	8.6
C.D.(5%) AiBk-AjBk	4.6	3.7	4.8	4.0	11.5	18.5	16.3	10.5
F(5%)	NS	NS	NS	NS	NS	NS	S	NS

100% RDF	62.1	62.8	83.4	63.1	77.5	180.0	227.5	162.6
125% RDF	62.2	63.7	83.9	64.3	79.4	194.1	231.7	166.5
150% RDF	61.8	63.8	81.6	64.9	72.0	207.1	239.2	167.6

C.D. (5%) Ai-Aj	3.2	2.7	2.8	1.6	6.5	11.6	13.5	7.6
C.V. (%) Error A	4.5	3.8	3.0	2.3	7.6	5.3	5.1	4.1
F (5%)	NS	NS	NS	NS	NS	S	NS	NS

JKMH 4546	61.4	63.9	83.2	64.2	79.7	204.9	246.1	176.3
PM 21103M	63.0	63.3	83.7	64.9	73.7	174.5	227.8	163.3
HM 21204	61.9	63.1	83.1	63.8	77.0	202.8	228.3	161.9
Bio 9544 (C)	61.8	63.4	81.9	63.4	74.7	192.8	228.9	160.7

C.D. (5%) Bi-Bj	2.2	1.7	2.6	2.5	6.4	9.7	6.2	5.0
C.V. (%) Error B	3.6	2.7	3.2	3.9	8.5	5.1	2.7	3.0
F (5%)	NS	NS	NS	NS	NS	S	S	S

Cont...

# A-28

Fertility levels	Genotypes	Days to 50% tasseling			Days to 50% silking			100-seed weight (g)
		Ambikapur	Banswara	Godhara	Ambikapur	Banswara	Godhara	Godhara
100% RDF	JKMH 4546	57.1	51.3	49.3	56.5	54.0	54.3	33.0
	PM 21103M	56.0	50.3	50.3	55.2	52.0	55.3	31.3
	HM 21204	55.4	51.0	50.7	56.9	54.0	56.0	33.3
	Bio 9544 (C)	56.3	49.0	51.0	56.2	52.0	56.0	35.0
125% RDF	JKMH 4546	52.3	51.0	50.7	55.4	54.0	55.7	32.7
	PM 21103M	51.7	49.0	49.0	56.3	52.0	54.0	32.7
	HM 21204	53.7	50.0	49.0	52.3	54.0	54.0	34.7
	Bio 9544 (C)	53.0	48.3	51.0	52.6	52.0	56.0	34.3
150% RDF	JKMH 4546	51.9	51.0	49.0	53.7	54.0	54.0	31.7
	PM 21103M	52.9	48.7	49.0	53.0	51.7	54.0	32.3
	HM 21204	53.4	50.0	49.7	51.9	52.7	55.0	36.3
	Bio 9544 (C)	52.1	48.3	51.0	56.3	50.7	56.3	33.7

Location mean	53.8	49.8	50.0	54.7	52.8	55.1	33.4
C.D.(5%) AiBj-AiBk	2.8	1.4	1.4	2.8	1.3	1.2	1.7
C.D.(5%) AiBk-AjBk	2.5	2.0	2.4	2.9	1.3	2.4	1.9
F(5%)	NS	NS	NS	S	NS	S	S

100% RDF	56.2	50.4	50.3	56.2	53.0	55.4	33.2
125% RDF	52.7	49.6	49.9	54.2	53.0	54.9	33.6
150% RDF	52.6	49.5	49.7	53.7	52.3	54.8	33.5

C.D. (5%) Ai-Aj	0.7	1.7	2.2	1.6	0.6	2.3	1.2
C.V. (%) Error A	1.2	3.0	3.8	2.6	0.9	3.6	3.3
F (5%)	S	NS	NS	S	S	NS	NS

JKMH 4546	53.8	51.1	49.7	55.2	54.0	54.7	32.4
PM 21103M	53.6	49.3	49.4	54.8	51.9	54.4	32.1
HM 21204	54.2	50.3	49.8	53.7	53.6	55.0	34.8
Bio 9544 (C)	53.8	48.6	51.0	55.0	51.6	56.1	34.3

C.D. (5%) Bi-Bj	1.6	0.8	0.8	1.6	0.8	0.7	1.0
C.V. (%) Error B	3.0	1.6	1.6	3.0	1.4	1.2	3.0
F (5%)	NS	S	S	NS	S	S	S

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# A-29

Fertility levels	Genotypes	Net returns (Rs/ha)			B:C ratio			Insect (FAW) damage (%)	Disease MLB (1-9)
		Ambikapur	Banswara	Godhara	Ambikapur	Banswara	Godhara		
100% RDF	JKMH 4546	51512	80805	144015	1.19	1.31	5.76	4.00	1.67
	PM 21103M	58498	76799	128618	1.35	1.29	5.25	4.67	3.33
	HM 21204	58752	61995	68619	1.35	1.19	3.27	4.00	2.67
	Bio 9544 (C)	57825	61066	122349	1.33	1.25	5.04	6.00	3.00
125% RDF	JKMH 4546	53221	93210	147615	1.21	1.47	5.65	5.33	2.67
	PM 21103M	60228	89727	121583	1.37	1.35	4.83	3.33	3.00
	HM 21204	65148	75794	121583	1.48	1.34	4.83	6.00	2.67
	Bio 9544 (C)	68594	67666	114281	1.56	1.16	4.60	4.00	2.00
150% RDF	JKMH 4546	55184	92844	119732	1.24	1.36	4.69	4.00	2.33
	PM 21103M	63777	89360	128986	1.43	1.40	4.97	4.67	3.00
	HM 21204	67210	76588	115605	1.51	1.23	4.56	3.33	2.67
	Bio 9544 (C)	71850	68460	103462	1.61	1.18	4.18	2.67	2.67

Location mean	60983.2	77859.5	119704.1	1.39	1.29	4.80	4.33	2.64
C.D.(5%) AiBj-AiBk	11242.6	22660.9	29668.4	0.26	0.45	0.96	3.07	1.75
C.D.(5%) AiBk-AjBk	14569.4	21080.7	28027.2	0.33	0.49	0.90	2.67	1.81
F(5%)	NS	NS	S	NS	NS	S	NS	NS

100% RDF	56647	70166	115900	1.30	1.26	4.83	4.67	2.67
125% RDF	61798	81599	126266	1.41	1.33	4.98	4.67	2.58
150% RDF	64505	81813	116946	1.45	1.29	4.60	3.67	2.67

C.D. (5%) Ai-Aj	11027.9	7915.1	11505.8	0.25	0.30	0.36	0.33	1.00
C.V. (%) Error A	16.0	9.0	8.5	16.2	20.3	6.7	6.7	33.4
F (5%)	NS	S	NS	NS	NS	NS	S	NS

JKMH 4546	53305	88953	137121	1.21	1.38	5.36	4.44	2.22
PM 21103M	60834	85295	126396	1.38	1.34	5.02	4.22	3.11
HM 21204	63703	71459	101936	1.45	1.26	4.22	4.44	2.67
Bio 9544 (C)	66090	65731	113364	1.50	1.20	4.61	4.22	2.56

C.D. (5%) Bi-Bj	6490.9	13083.3	17129.0	0.15	0.26	0.55	1.77	1.01
C.V. (%) Error B	10.7	17.0	14.4	10.8	20.4	11.6	41.2	38.8
F (5%)	S	S	S	S	NS	S	NS	NS

**Table 6: Performance of pre release genotypes of early maturity under varying nutrient levels in Northern Hill Zone (NHZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			NHZ (mean)	Stover yield (kg/ha)		
		Almora	Bajaura	Imphal		Almora	Bajaura	Imphal
100% RDF	JH 32662	8101	6290	8022	<b>7471</b>	8611	9916	13812
	Bio 605 (C)	7456	7366	4598	<b>6473</b>	10556	10857	11331
125% RDF	JH 32662	7349	7230	6678	<b>7086</b>	13889	11542	14300
	Bio 605 (C)	7770	7979	4648	<b>6799</b>	10694	11993	11442
150% RDF	JH 32662	8667	7437	7802	<b>7968</b>	15764	11982	15069
	Bio 605 (C)	9403	8387	5293	<b>7694</b>	14028	12014	11821

Location mean	8124.1	7448.2	6173.6	7248.6	12256.9	11384.1	12962.6
C.D.(5%) AiBj-AiBk	1251.4	1226.0	1842.5	1440.0	1825.8	1813.8	2137.9
C.D.(5%) AiBk-AjBk	1429.3	1058.0	1950.3	1479.2	2391.1	2198.2	2483.8
F(5%)	NS	NS	NS	-	S	NS	NS

100% RDF	7778	6828	6310	<b>6972</b>	9583	10387	12572
125% RDF	7559	7605	5663	<b>6942</b>	12292	11767	12871
150% RDF	9035	7912	6548	<b>7831</b>	14896	11998	13445

C.D. (5%) Ai-Aj	1126.0	609.6	1456.5	1064.0	2017.5	1790.3	1976.7
C.V. (%) Error A	8.6	5.1	14.7	9.5	10.3	9.8	9.5
F (5%)	S	S	NS	NS	S	NS	NS

JH 32662	8039	6986	7501	<b>7508</b>	12755	11147	14394
Bio 605 (C)	8209	7911	4847	<b>6989</b>	11759	11621	11532

C.D. (5%) Bi-Bj	722.5	707.8	1063.8	831.4	1054.1	1047.2	1234.3
C.V. (%) Error B	7.7	8.2	14.9	10.3	7.5	8.0	8.3
F (5%)	NS	S	S	NS	NS	NS	S

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# A-31

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	JH 32662	81.3	72.0	57.3	81.3	73.0	59.2
	Bio 605 (C)	68.8	80.0	47.5	68.8	78.7	48.7
125% RDF	JH 32662	70.1	73.3	59.6	70.1	73.0	60.3
	Bio 605 (C)	63.2	81.3	49.6	63.2	79.3	51.5
150% RDF	JH 32662	81.9	73.7	58.3	84.7	73.7	59.4
	Bio 605 (C)	56.9	81.7	48.8	79.2	79.3	50.6

Location mean	70.4	77.0	53.5	74.5	76.2	55.0
C.D.(5%) AiBj-AiBk	25.2	2.4	8.0	20.6	2.2	7.2
C.D.(5%) AiBk-AjBk	21.3	2.3	8.6	19.4	3.1	8.2
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	75.0	76.0	52.4	75.0	75.8	54.0
125% RDF	66.7	77.3	54.6	66.7	76.2	55.9
150% RDF	69.4	77.7	53.5	81.9	76.5	55.0

C.D. (5%) Ai-Aj	11.8	1.5	6.5	12.9	2.7	6.5
C.V. (%) Error A	10.4	1.2	7.6	10.8	2.2	7.3
F (5%)	NS	NS	NS	NS	NS	NS

JH 32662	77.8	73.0	58.4	78.7	73.2	59.6
Bio 605 (C)	63.0	81.0	48.6	70.4	79.1	50.3

C.D. (5%) Bi-Bj	14.6	1.4	4.6	11.9	1.2	4.2
C.V. (%) Error B	17.9	1.6	7.5	13.9	1.4	6.6
F (5%)	S	S	S	NS	S	S

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## A-32

Fertility levels	Genotypes	Plant height (cm)			100-seed weight (g)		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	JH 32662	322.4	184.5	260.7	26.6	27.0	34.6
	Bio 605 (C)	313.8	178.5	234.3	27.6	30.7	33.6
125% RDF	JH 32662	326.4	190.6	256.0	26.9	27.3	34.4
	Bio 605 (C)	310.7	182.7	229.0	28.2	31.0	33.4
150% RDF	JH 32662	330.1	192.2	262.0	26.8	28.0	35.0
	Bio 605 (C)	319.4	183.9	237.0	28.3	31.7	33.3

Location mean	320.5	185.4	246.5	27.4	29.3	34.0
C.D.(5%) AiBj-AiBk	16.5	8.4	27.2	1.8	2.2	1.9
C.D.(5%) AiBk-AjBk	21.9	13.4	30.7	1.9	2.0	1.8
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	318.1	181.5	247.5	27.1	28.8	34.1
125% RDF	318.5	186.7	242.5	27.6	29.2	33.9
150% RDF	324.7	188.0	249.5	27.5	29.8	34.1

C.D. (5%) Ai-Aj	18.6	12.1	24.0	1.5	1.4	1.2
C.V. (%) Error A	3.6	4.1	6.1	3.3	2.9	2.3
F (5%)	NS	NS	NS	NS	NS	NS

JH 32662	326.3	189.1	259.6	26.8	27.4	34.7
Bio 605 (C)	314.6	181.7	233.4	28.0	31.1	33.4

C.D. (5%) Bi-Bj	9.5	4.8	15.7	1.0	1.2	1.1
C.V. (%) Error B	2.6	2.3	5.5	3.2	3.7	2.8
F (5%)	S	S	S	S	S	S

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# A-33

Fertility levels	Genotypes	Days to 50% tasseling			Days to 50% silking		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	JH 32662	52.0	58.0	49.0	54.0	60.3	51.3
	Bio 605 (C)	51.3	58.0	53.3	53.3	60.3	55.7
125% RDF	JH 32662	51.7	56.7	49.0	53.7	58.7	51.3
	Bio 605 (C)	51.3	56.3	53.0	53.3	58.7	55.3
150% RDF	JH 32662	52.0	55.7	49.0	54.0	57.7	51.7
	Bio 605 (C)	51.0	54.3	53.0	53.0	56.3	56.0

Location mean	51.6	56.5	51.1	53.6	58.7	53.6
C.D.(5%) AiBj-AiBk	1.1	1.6	0.5	1.1	1.5	1.3
C.D.(5%) AiBk-AjBk	1.1	1.9	0.5	1.1	2.0	1.1
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	51.7	58.0	51.2	53.7	60.3	53.5
125% RDF	51.5	56.5	51.0	53.5	58.7	53.3
150% RDF	51.5	55.0	51.0	53.5	57.0	53.8

C.D. (5%) Ai-Aj	0.8	1.6	0.4	0.8	1.7	0.6
C.V. (%) Error A	0.9	1.8	0.5	0.9	1.8	0.7
F (5%)	NS	S	NS	NS	S	NS

JH 32662	51.9	56.8	49.0	53.9	58.9	51.4
Bio 605 (C)	51.2	56.2	53.1	53.2	58.4	55.7

C.D. (5%) Bi-Bj	0.6	0.9	0.3	0.6	0.9	0.8
C.V. (%) Error B	1.0	1.4	0.5	1.0	1.3	1.2
F (5%)	S	NS	S	S	NS	S

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# A-34

Fertility levels	Genotypes	Net returns (Rs./ha)		B:C Ratio		Cob length (cm)	Gob girth (cm)	Grain rows/cob	Grains/row
		Bajaura	Imphal	Bajaura	Imphal	Imphal			
100% RDF	JH 32662	58101	125895	1.62	3.59	19.5	14.0	13.6	41.7
	Bio 605 (C)	82572	53107	1.88	2.09	17.3	12.7	12.5	33.7
125% RDF	JH 32662	78735	95540	1.82	2.87	18.7	14.7	14.3	40.0
	Bio 605 (C)	95358	51685	1.99	2.01	17.4	12.9	12.7	35.3
150% RDF	JH 32662	81591	116980	1.83	3.18	19.3	14.1	13.8	42.0
	Bio 605 (C)	101605	62932	2.03	2.17	16.7	12.9	12.9	35.3

Location mean	82993.6	84356.3	1.86	2.65	18.2	13.6	13.3	38.0
C.D.(5%) AiBj-AiBk	26100.7	39299.3	0.27	0.78	3.1	1.8	1.6	7.1
C.D.(5%) AiBk-AjBk	22909.7	41774.1	0.24	0.84	3.7	2.7	1.4	7.5
F(5%)	NS	NS	NS	NS	NS	NS	NS	NS

100% RDF	70336	89501	1.75	2.84	18.4	13.4	13.0	37.7
125% RDF	87047	73612	1.90	2.44	18.1	13.8	13.5	37.7
150% RDF	91598	89956	1.93	2.68	18.0	13.5	13.3	38.7

C.D. (5%) Ai-Aj	13640.7	31301.6	0.14	0.63	3.0	2.4	0.8	5.6
C.V. (%) Error A	10.3	23.2	4.81	14.8	10.2	11.0	3.7	9.3
F (5%)	S	NS	S	NS	NS	NS	NS	NS

JH 32662	72809	112805	1.76	3.21	19.2	14.3	13.9	41.2
Bio 605 (C)	93178	55908	1.97	2.09	17.1	12.8	12.7	34.8

C.D. (5%) Bi-Bj	15069.2	22689.5	0.15	0.45	1.8	1.1	0.9	4.1
C.V. (%) Error B	15.7	23.3	7.2	14.8	8.6	6.8	6.1	9.3
F (5%)	S	S	S	S	S	S	S	S

**Table 7: Performance of pre release genotypes of early maturity under varying nutrient levels in North West Plain Zone (NWPZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			NWPZ (mean)	Stover yield (kg/ha)		
		Delhi	Ludhiana	Pantnagar		Delhi	Ludhiana	Pantnagar
100% RDF	SMH 4555	6435	5698	6790	<b>6308</b>	8665	7372	10972
	CP 999	6260	7031	6096	<b>6462</b>	7880	8719	11528
	CP 111	4140	6142	5841	<b>5374</b>	5050	6951	9722
	DKC 7074 (C)	5075	6580	5614	<b>5756</b>	7185	8090	9722
125% RDF	SMH 4555	5810	6656	7042	<b>6503</b>	8545	9080	11111
	CP 999	5885	8028	6701	<b>6871</b>	7905	10274	11667
	CP 111	4685	7264	6347	<b>6099</b>	6075	8389	10556
	DKC 7074 (C)	5670	7604	6045	<b>6440</b>	8545	9660	10972
150% RDF	SMH 4555	6050	6979	7235	<b>6755</b>	9295	9799	11250
	CP 999	6675	8372	6782	<b>7276</b>	9050	11132	12083
	CP 111	4465	7538	6706	<b>6236</b>	6110	9142	10833
	DKC 7074 (C)	5065	7903	6256	<b>6408</b>	7720	10434	11389

Location mean	5517.9	7149.6	6454.6	6374.0	7668.8	9086.8	10983.8
C.D.(5%) AiBj-AiBk	944.5	948.9	1350.1	1081.2	1222.2	1212.0	1848.1
C.D.(5%) AiBk-AjBk	1358.9	1205.8	1294.0	1286.2	1890.9	1529.7	2128.1
F(5%)	NS	NS	NS	-	NS	NS	NS

100% RDF	5478	6363	6085	<b>5975</b>	7195	7783	10486
125% RDF	5513	7388	6534	<b>6478</b>	7768	9351	11076
150% RDF	5564	7698	6745	<b>6669</b>	8044	10127	11389

C.D. (5%) Ai-Aj	1172.6	898.3	569.4	880.1	1682.3	1133.0	1431.8
C.V. (%) Error A	9.9	11.1	7.8	9.6	10.2	11.0	11.5
F (5%)	NS	S	NS	NS	NS	S	NS

SMH 4555	6098	6444	7022	<b>6522</b>	8835	8750	11111
CP 999	6273	7810	6527	<b>6870</b>	8278	10042	11759
CP 111	4430	6981	6298	<b>5903</b>	5745	8161	10370
DKC 7074 (C)	5270	7362	5972	<b>6201</b>	7817	9395	10694

C.D. (5%) Bi-Bj	545.3	547.9	779.5	624.2	705.7	699.8	1067.0
C.V. (%) Error B	7.6	7.7	12.2	9.2	7.0	7.8	9.8
F (5%)	S	S	NS	S	S	S	NS

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# A-36

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		Plant height (cm)	
		Delhi	Ludhiana	Pantnagar	Ludhiana	Pantnagar	Ludhiana	Pantnagar
100% RDF	SMH 4555	63.7	82.6	66.7	81.3	66.7	178.3	170.7
	CP 999	77.4	83.3	65.3	82.6	65.3	187.0	185.9
	CP 111	48.9	83.3	63.9	82.3	63.9	167.7	159.7
	DKC 7074 (C)	70.1	83.7	63.9	83.0	63.9	177.3	155.9
125% RDF	SMH 4555	69.5	83.0	63.9	82.6	63.9	192.0	171.8
	CP 999	67.4	83.3	62.5	83.3	62.5	201.3	189.5
	CP 111	64.5	83.3	66.7	82.3	66.7	183.0	162.4
	DKC 7074 (C)	63.1	84.4	62.5	83.0	62.5	195.0	159.7
150% RDF	SMH 4555	79.5	83.3	62.5	82.3	62.5	193.3	174.3
	CP 999	75.7	84.0	65.3	83.7	65.3	202.7	191.1
	CP 111	54.3	83.3	63.9	83.0	63.9	187.0	164.8
	DKC 7074 (C)	56.5	84.4	63.9	83.7	63.9	196.0	162.7

Location mean	65.9	83.5	64.2	82.8	64.2	188.4	170.7
C.D.(5%) AiBj-AiBk	11.6	1.5	5.2	1.4	5.2	18.2	19.8
C.D.(5%) AiBk-AjBk	16.7	1.5	6.0	1.9	6.0	20.0	18.9
F(5%)	S	NS	NS	NS	NS	NS	NS

100% RDF	65.0	83.2	64.9	82.3	64.9	177.6	168.1
125% RDF	66.1	83.5	63.9	82.8	63.9	192.8	170.9
150% RDF	66.5	83.8	63.9	83.2	63.9	194.8	173.2

C.D. (5%) Ai-Aj	14.5	0.7	4.0	1.5	4.0	12.5	8.2
C.V. (%) Error A	10.2	0.7	5.5	1.6	5.5	5.9	4.2
F (5%)	NS	NS	NS	NS	NS	S	NS

SMH 4555	70.9	83.0	64.4	82.1	64.4	187.9	172.3
CP 999	73.5	83.6	64.4	83.2	64.4	197.0	188.8
CP 111	55.9	83.3	64.8	82.5	64.8	179.2	162.3
DKC 7074 (C)	63.2	84.1	63.4	83.2	63.4	189.4	159.4

C.D. (5%) Bi-Bj	6.7	0.9	3.0	0.8	3.0	10.5	11.4
C.V. (%) Error B	7.8	1.0	4.8	1.0	4.8	5.6	6.8
F (5%)	S	NS	NS	S	NS	S	S

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# A-37

Fertility levels	Genotypes	Days to 50% tasseling			Days to 50% silking		
		Delhi	Ludhiana	Pantnagar	Delhi	Ludhiana	Pantnagar
100% RDF	SMH 4555	59.5	60.0	48.3	63.0	62.0	50.3
	CP 999	62.0	61.0	49.0	65.0	63.0	51.0
	CP 111	58.5	59.0	48.3	62.0	61.0	50.3
	DKC 7074 (C)	59.5	58.0	49.0	63.5	60.0	51.3
125% RDF	SMH 4555	60.0	59.7	48.0	64.5	61.3	50.0
	CP 999	62.0	60.7	49.0	65.5	62.7	51.3
	CP 111	59.5	58.7	48.3	63.0	60.7	50.3
	DKC 7074 (C)	57.0	57.7	49.0	60.5	59.7	51.0
150% RDF	SMH 4555	59.0	59.3	48.0	62.5	61.3	50.0
	CP 999	61.0	60.3	49.0	65.0	62.3	51.0
	CP 111	59.0	58.0	48.0	62.5	60.0	50.3
	DKC 7074 (C)	58.0	57.3	49.3	62.5	59.3	51.3

Location mean	59.6	59.1	48.6	63.3	61.1	50.7
C.D.(5%) AiBj-AiBk	1.7	1.9	0.6	1.9	2.0	0.7
C.D.(5%) AiBk-AjBk	1.8	2.2	0.6	2.3	2.4	0.9
F(5%)	NS	NS	NS	S	NS	NS

100% RDF	59.9	59.5	48.7	63.4	61.5	50.8
125% RDF	59.6	59.2	48.6	63.4	61.1	50.7
150% RDF	59.3	58.8	48.6	63.1	60.8	50.7

C.D. (5%) Ai-Aj	1.2	1.6	0.4	1.8	1.7	0.6
C.V. (%) Error A	0.9	2.4	0.7	1.3	2.4	1.1
F (5%)	NS	NS	NS	NS	NS	NS

SMH 4555	59.5	59.7	48.1	63.3	61.6	50.1
CP 999	61.7	60.7	49.0	65.2	62.7	51.1
CP 111	59.0	58.6	48.2	62.5	60.6	50.3
DKC 7074 (C)	58.2	57.7	49.1	62.2	59.7	51.2

C.D. (5%) Bi-Bj	1.0	1.1	0.3	1.1	1.1	0.4
C.V. (%) Error B	1.3	1.8	0.7	1.3	1.9	0.8
F (5%)	S	S	S	S	S	S

Cont...

# A-38

Fertility levels	Genotypes	100-seed weight (g)		Net returns (Rs./ha)		B:C ratio		Barren plant/plot
		Delhi	Pantnagar	Ludhiana	Pantnagar	Ludhiana	Pantnagar	Ludhiana
100% RDF	SMH 4555	26.2	24.3	76747	95634	1.75	2.07	2.00
	CP 999	24.4	22.7	104524	81138	2.38	1.75	1.67
	CP 111	24.4	22.9	84963	75803	1.94	1.64	2.00
	DKC 7074 (C)	26.1	22.0	94914	71067	2.16	1.54	1.67
125% RDF	SMH 4555	27.6	24.8	96581	99090	2.15	2.06	2.00
	CP 999	26.7	23.5	124924	91962	2.78	1.91	1.33
	CP 111	24.1	23.1	107674	84558	2.40	1.76	1.33
	DKC 7074 (C)	25.5	22.3	115875	78255	2.58	1.63	1.67
150% RDF	SMH 4555	27.4	25.0	102760	101269	2.24	2.03	1.00
	CP 999	22.7	23.7	131678	91814	2.87	1.84	1.33
	CP 111	24.1	23.6	112941	90222	2.46	1.81	1.33
	DKC 7074 (C)	23.7	22.7	121644	80820	2.65	1.62	1.00

Location mean	25.2	23.4	106268.7	86802.6	2.36	1.80	1.53
C.D.(5%) AiBj-AiBk	0.8	1.7	19349.9	28216.4	0.43	0.58	0.83
C.D.(5%) AiBk-AjBk	1.1	2.2	25078.0	27043.8	0.56	0.56	1.03
F(5%)	S	NS	NS	NS	NS	NS	NS

100% RDF	25.3	23.0	90287	80911	2.06	1.75	1.83
125% RDF	25.9	23.4	111263	88466	2.48	1.84	1.58
150% RDF	24.4	23.7	117256	91031	2.55	1.82	1.17

C.D. (5%) Ai-Aj	0.9	1.7	18983.5	11900.3	0.42	0.26	0.76
C.V. (%) Error A	1.7	6.4	15.8	12.1	15.8	12.5	43.6
F (5%)	S	NS	S	NS	NS	NS	NS

SMH 4555	27.0	24.7	92030	98664	2.05	2.05	1.67
CP 999	24.6	23.3	120375	88305	2.68	1.83	1.44
CP 111	24.2	23.2	101859	83528	2.26	1.73	1.56
DKC 7074 (C)	25.1	22.3	110811	76714	2.46	1.59	1.44

C.D. (5%) Bi-Bj	0.4	1.0	11171.6	16290.8	0.25	0.33	0.48
C.V. (%) Error B	1.3	4.3	10.6	18.9	10.6	18.7	31.5
F (5%)	S	S	S	NS	S	NS	NS

**Table 8: Performance of pre release genotypes of early maturity under varying nutrient levels in Central West Zone (CWZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			CWZ (mean)	Stover yield (kg/ha)		
		Ambikapur	Banswara	Chhindwara		Ambikapur	Banswara	Chhindwara
100% RDF	SMH 4555	5440	3631	5732	<b>4934</b>	6528	5665	9107
	AH 8323	5996	3306	6571	<b>5291</b>	7195	5157	8320
	JH 32487	5295	3529	6396	<b>5074</b>	6354	5506	9455
	DKC 7074 (C)	4270	4235	7026	<b>5177</b>	5124	6675	9071
125% RDF	SMH 4555	5672	4314	5699	<b>5228</b>	6806	6729	8089
	AH 8323	6283	3663	6564	<b>5503</b>	7540	5714	7287
	JH 32487	5413	3725	6473	<b>5204</b>	6496	5812	11662
	DKC 7074 (C)	4424	4720	7296	<b>5480</b>	5309	7363	9341
150% RDF	SMH 4555	5801	4431	6050	<b>5427</b>	6961	6894	9237
	AH 8323	6422	3667	6793	<b>5627</b>	7706	5720	8357
	JH 32487	5611	3922	6659	<b>5397</b>	6734	6118	11302
	DKC 7074 (C)	4619	4824	7275	<b>5573</b>	5543	7525	9320

Location mean	5437.2	3997.3	6544.5	5326.3	6524.6	6239.7	9212.4
C.D.(5%) AiBj-AiBk	716.0	592.1	632.1	646.7	859.2	899.5	1749.2
C.D.(5%) AiBk-AjBk	708.4	650.3	806.9	721.8	850.0	983.1	2564.7
F(5%)	NS	NS	NS	-	NS	NS	NS

100% RDF	5250	3675	6431	<b>5119</b>	6300	5751	8988
125% RDF	5448	4105	6508	<b>5354</b>	6538	6405	9095
150% RDF	5613	4211	6694	<b>5506</b>	6736	6564	9554

C.D. (5%) Ai-Aj	351.4	408.9	603.3	454.5	421.6	613.2	2099.3
C.V. (%) Error A	5.7	9.0	8.1	7.6	5.7	8.7	20.1
F (5%)	NS	S	NS	NS	NS	S	NS

SMH 4555	5638	4125	5827	<b>5197</b>	6765	6429	8811
AH 8323	6234	3545	6643	<b>5474</b>	7480	5530	7988
JH 32487	5440	3725	6510	<b>5225</b>	6528	5812	10806
DKC 7074 (C)	4438	4593	7199	<b>5410</b>	5325	7188	9244

C.D. (5%) Bi-Bj	413.4	341.8	365.0	373.4	496.1	519.3	1009.9
C.V. (%) Error B	7.7	8.6	5.6	7.3	7.7	8.4	11.1
F (5%)	S	S	S	NS	S	S	S

Cont...

# A-40

Fertility levels	Genotypes	Cob yield (kg/ha)	Plants ('000/ha)			Cobs ('000/ha)	
		Banswara	Ambikapur	Banswara	Chhindwara	Banswara	Chhindwara
100% RDF	SMH 4555	4429	80.6	65.7	78.4	65.7	75.3
	AH 8323	4032	79.8	65.3	79.7	65.3	80.7
	JH 32487	4304	80.6	64.7	80.7	64.7	80.0
	DKC 7074 (C)	5165	78.7	66.0	81.0	66.0	82.0
125% RDF	SMH 4555	5261	80.4	65.8	79.2	67.3	80.2
	AH 8323	4467	81.6	64.3	81.0	65.7	82.0
	JH 32487	4543	79.9	64.0	83.8	64.0	82.0
	DKC 7074 (C)	5756	80.0	65.7	82.4	68.0	83.4
150% RDF	SMH 4555	5404	78.6	66.0	80.3	66.3	81.3
	AH 8323	4472	79.6	65.7	82.1	65.7	83.1
	JH 32487	4782	80.8	65.4	83.3	65.4	85.3
	DKC 7074 (C)	5882	81.7	66.1	83.3	68.0	84.3

Location mean	4874.7	80.2	65.4	81.3	66.0	81.6
C.D.(5%) AiBj-AiBk	722.0	4.2	1.5	5.1	1.8	8.7
C.D.(5%) AiBk-AjBk	793.0	4.1	1.9	4.7	2.6	7.7
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	4482	79.9	65.4	79.9	65.4	79.5
125% RDF	5007	80.5	64.9	81.6	66.3	81.9
150% RDF	5135	80.2	65.8	82.2	66.4	83.5

C.D. (5%) Ai-Aj	498.6	1.8	1.4	1.8	2.0	1.5
C.V. (%) Error A	9.0	2.0	1.9	2.0	2.7	1.6
F (5%)	S	NS	NS	NS	NS	S

SMH 4555	5031	79.9	65.8	79.3	66.4	78.9
AH 8323	4323	80.3	65.1	80.9	65.6	81.9
JH 32487	4543	80.4	64.7	82.6	64.7	82.4
DKC 7074 (C)	5601	80.1	65.9	82.2	67.3	83.2

C.D. (5%) Bi-Bj	416.9	2.4	0.9	2.9	1.1	5.0
C.V. (%) Error B	8.6	3.1	1.3	3.6	1.6	6.2
F (5%)	S	NS	S	NS	S	NS

Cont...



# A-41

Fertility levels	Genotypes	Plant height (cm)		Days to 50% tasseling			Days to 50% silking		
		Banswara	Chhindwara	Ambikapur	Banswara	Chhindwara	Ambikapur	Banswara	Chhindwara
100% RDF	SMH 4555	231.7	170.8	57.1	48.3	59.6	55.7	51.0	65.8
	AH 8323	215.0	181.1	56.0	47.3	61.6	56.0	49.0	66.8
	JH 32487	236.7	173.3	55.4	48.0	66.6	55.4	51.0	69.8
	DKC 7074 (C)	237.0	159.6	56.3	46.0	56.5	53.9	49.0	65.0
125% RDF	SMH 4555	237.7	173.9	52.3	48.0	61.6	55.3	51.0	66.8
	AH 8323	231.7	179.3	51.7	46.0	63.6	56.5	49.0	67.8
	JH 32487	241.7	181.9	53.7	47.0	64.6	55.4	51.0	68.8
	DKC 7074 (C)	243.3	164.6	53.0	45.3	68.5	56.3	49.0	73.4
150% RDF	SMH 4555	240.0	177.3	51.9	48.0	61.1	56.0	51.0	65.8
	AH 8323	235.0	185.1	52.9	45.7	61.6	54.6	48.7	67.8
	JH 32487	245.0	178.6	53.4	47.0	63.6	55.9	49.7	67.8
	DKC 7074 (C)	246.0	160.5	52.1	45.3	70.5	57.1	47.7	75.4

Location mean	236.7	173.8	53.8	46.8	63.3	55.7	49.8	68.4
C.D.(5%) AiBj-AiBk	8.0	9.3	2.8	1.4	2.3	2.7	1.3	2.1
C.D.(5%) AiBk-AjBk	10.5	12.3	2.5	2.0	2.3	2.7	1.3	2.2
F(5%)	NS	NS	NS	NS	S	NS	NS	S

100% RDF	230.1	171.2	56.2	47.4	61.1	55.3	50.0	66.9
125% RDF	238.6	174.9	52.7	46.6	64.6	55.9	50.0	69.2
150% RDF	241.5	175.4	52.6	46.5	64.2	55.9	49.3	69.2

C.D. (5%) Ai-Aj	8.0	9.5	0.7	1.7	1.3	1.4	0.6	1.3
C.V. (%) Error A	3.0	4.8	1.2	3.1	1.8	2.2	1.0	1.6
F (5%)	S	NS	S	NS	S	NS	S	S

SMH 4555	236.4	174.0	53.8	48.1	60.8	55.7	51.0	66.1
AH 8323	227.2	181.9	53.6	46.3	62.3	55.7	48.9	67.5
JH 32487	241.1	177.9	54.2	47.3	65.0	55.6	50.6	68.8
DKC 7074 (C)	242.1	161.6	53.8	45.6	65.2	55.8	48.6	71.2

C.D. (5%) Bi-Bj	4.6	5.4	1.6	0.8	1.3	1.6	0.8	1.2
C.V. (%) Error B	2.0	3.1	3.0	1.7	2.1	2.9	1.5	1.8
F (5%)	S	S	NS	S	S	NS	S	S

Cont...

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C ratio		
		Ambikapur	Banswara	Chhindwara	Ambikapur	Banswara	Chhindwara
100% RDF	SMH 4555	54511	34784	66777	1.26	0.85	2.61
	AH 8323	64513	27981	84225	1.49	0.68	2.73
	JH 32487	51895	32653	92069	1.20	0.79	2.18
	DKC 7074 (C)	33439	47406	86322	0.77	1.15	2.71
125% RDF	SMH 4555	58131	47517	76837	1.32	1.11	2.68
	AH 8323	69135	33911	92812	1.57	0.80	2.84
	JH 32487	53481	35223	89854	1.22	0.83	2.42
	DKC 7074 (C)	35673	56008	78446	0.81	1.31	2.75
150% RDF	SMH 4555	59795	48448	73733	1.34	1.10	2.65
	AH 8323	70967	32465	89270	1.59	0.74	2.80
	JH 32487	56381	37793	94272	1.26	0.86	2.71
	DKC 7074 (C)	38525	56644	86605	0.86	1.28	2.85

Location mean	53870.5	40902.7	84268.6	1.22	0.96	2.66
C.D.(5%) AiBj-AiBk	12887.9	12373.9	26911.8	0.29	0.29	0.35
C.D.(5%) AiBk-AjBk	12750.6	13590.5	23648.3	0.29	0.32	0.34
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	51090	35706	82349	1.18	0.87	2.56
125% RDF	54105	43165	84487	1.23	1.01	2.67
150% RDF	56417	43837	85970	1.26	0.99	2.75

C.D. (5%) Ai-Aj	6324.7	8545.8	4129.4	0.14	0.21	0.16
C.V. (%) Error A	10.4	18.4	4.3	10.3	19.2	5.3
F (5%)	NS	NS	NS	NS	NS	NS

SMH 4555	57479	43583	72449	1.31	1.02	2.65
AH 8323	68205	31453	88769	1.55	0.74	2.79
JH 32487	53919	35223	92065	1.23	0.83	2.44
DKC 7074 (C)	35879	53353	83791	0.82	1.25	2.77

C.D. (5%) Bi-Bj	7440.9	7144.1	15537.5	0.17	0.17	0.20
C.V. (%) Error B	13.9	17.6	18.6	14.0	17.8	7.6
F (5%)	S	S	NS	S	S	S

Cont...

# A-43

Fertility levels	Genotypes	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
		Chhindwara			
100% RDF	SMH 4555	12.9	11.5	12.3	42.2
	AH 8323	13.5	12.8	13.1	42.6
	JH 32487	13.7	13.4	18.0	42.4
	DKC 7074 (C)	14.8	14.0	14.6	39.9
125% RDF	SMH 4555	13.7	12.8	13.3	46.2
	AH 8323	13.1	13.3	14.3	40.1
	JH 32487	14.6	14.7	15.9	42.0
	DKC 7074 (C)	14.3	13.8	13.5	40.8
150% RDF	SMH 4555	14.3	14.2	13.6	43.6
	AH 8323	12.8	13.5	14.7	43.9
	JH 32487	13.0	13.8	17.3	41.6
	DKC 7074 (C)	14.9	13.8	14.1	41.6

Location mean	13.8	13.4	14.6	42.2
C.D.(5%) AiBj-AiBk	0.8	0.7	2.8	4.1
C.D.(5%) AiBk-AjBk	1.0	1.1	2.9	4.1
F(5%)	S	S	NS	NS

100% RDF	13.7	12.9	14.5	41.8
125% RDF	13.9	13.6	14.3	42.3
150% RDF	13.7	13.8	14.9	42.6

C.D. (5%) Ai-Aj	0.7	0.9	1.5	2.1
C.V. (%) Error A	4.4	5.9	9.4	4.5
F (5%)	NS	NS	NS	NS

SMH 4555	13.6	12.8	13.1	44.0
AH 8323	13.1	13.2	14.1	42.2
JH 32487	13.8	13.9	17.1	42.0
DKC 7074 (C)	14.6	13.8	14.1	40.8

C.D. (5%) Bi-Bj	0.5	0.4	1.6	2.3
C.V. (%) Error B	3.6	3.1	11.2	5.6
F (5%)	S	S	S	NS

**Table 9: Performance of pre release genotypes of QPM under varying nutrient levels in Northern Hill Zone (NHZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)			NHZ (mean)	Stover yield (kg/ha)		
		Almora	Bajaura	Imphal		Almora	Bajaura	Imphal
100% RDF	IQPMH 2102	4413	9156	6357	<b>6642</b>	9931	12792	12343
	IQPMH 2105	5644	8326	6574	<b>6848</b>	11736	12481	11978
	HQPM 4 (C)	-	2472	6476	<b>4474</b>	-	3684	12231
	FQPLH20	3299	5818	6108	<b>5075</b>	3333	8056	10874
	FWQH1	3726	6769	6592	<b>5695</b>	5764	9220	12400
	VIVEK QPM 9 (C)	5755	5285	6000	<b>5680</b>	4444	7391	10376
	VMH 45 (C)	6700	7811	6586	<b>7032</b>	8611	9509	13121
	HQPM 1 (C)	4122	7217	6962	<b>6100</b>	6528	12667	13628
125% RDF	IQPMH 2102	5396	9826	7831	<b>7684</b>	10417	13769	13705
	IQPMH 2105	6605	9147	7794	<b>7849</b>	12014	13516	13929
	HQPM 4 (C)	-	3627	7169	<b>5398</b>	-	4719	13295
	FQPLH20	3789	6065	6079	<b>5311</b>	3611	8229	12425
	FWQH1	4131	7182	7155	<b>6156</b>	7778	9673	13166
	VIVEK QPM 9 (C)	5682	5876	7619	<b>6393</b>	3819	8022	12980
	VMH 45 (C)	7808	9257	6576	<b>7881</b>	8958	10619	12550
	HQPM 1 (C)	4623	8751	7824	<b>7066</b>	8542	14613	14823
150% RDF	IQPMH 2102	6332	10285	6931	<b>7849</b>	11181	14315	13500
	IQPMH 2105	6287	9540	7211	<b>7679</b>	11667	14121	13428
	HQPM 4 (C)	-	3148	7589	<b>5368</b>	-	4040	13875
	FQPLH20	3621	6282	7356	<b>5753</b>	3542	8518	13215
	FWQH1	5121	7382	6982	<b>6495</b>	7778	11140	13208
	VIVEK QPM 9 (C)	5760	5898	6792	<b>6150</b>	4236	8874	12428
	VMH 45 (C)	9134	9642	6950	<b>8575</b>	9028	11908	12673
	HQPM 1 (C)	5383	9685	7874	<b>7647</b>	7986	17111	14048

Location mean	5396.6	7268.6	6974.4	6546.5	7662.0	10374.4	12924.9
C.D.(5%) AiBj-AiBk	1883.7	1006.5	976.7	1289.0	1656.8	1477.9	2040.7
C.D.(5%) AiBk-AjBk	2142.3	1149.7	1398.3	1563.5	1757.6	1790.9	2334.1
F(5%)	NS	NS	NS	-	NS	NS	NS

100% RDF	4808	6607	6457	<b>5957</b>	7192	9475	12119
125% RDF	5433	7466	7256	<b>6719</b>	7877	10395	13359
150% RDF	5948	7733	7210	<b>6964</b>	7917	11253	13297

C.D. (5%) Ai-Aj	1280.8	679.9	1082.0	1014.2	885.8	1170.5	1384.0
C.V. (%) Error A	27.7	11.7	19.4	19.6	13.5	14.1	13.4
F (5%)	NS	S	NS	NS	NS	S	NS

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# A-45

Fertility levels	Genotypes	Grain yield (kg/ha)			NHZ (mean)	Stover yield (kg/ha)		
		Almora	Bajaura	Imphal		Almora	Bajaura	Imphal
	IQPMH 2102	5380	9756	7039	<b>7392</b>	10509	13625	13183
	IQPMH 2105	6178	9004	7193	<b>7459</b>	11806	13373	13112
	HQPM 4 (C)	-	3082	7078	<b>5080</b>	-	4147	13134
	FQPLH20	3570	6055	6514	<b>5380</b>	3495	8268	12171
	FWQH1	4326	7111	6909	<b>6115</b>	7106	10011	12925
	VIVEK QPM 9 (C)	5732	5686	6804	<b>6074</b>	4167	8096	11928
	VMH 45 (C)	7881	8903	6704	<b>7829</b>	8866	10678	12781
	HQPM 1 (C)	4709	8551	7553	<b>6938</b>	7685	14797	14166

C.D. (5%) Bi-Bj	1087.5	581.1	563.9	744.2	956.5	853.3	1178.2
C.V. (%) Error B	21.1	8.4	8.5	12.7	13.1	8.6	9.6
F (5%)	S	S	S	S	S	S	S

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	IQPMH 2102	73.6	83.0	53.8	73.6	82.0	56.1
	IQPMH 2105	76.4	83.0	55.9	76.4	76.0	58.4
	HQPM 4 (C)	-	20.0	55.2	-	23.0	56.8
	FQPLH20	34.7	79.7	51.8	34.7	75.0	52.6
	FWQH1	69.4	81.0	52.0	69.4	78.3	53.9
	VIVEK QPM 9 (C)	63.9	82.3	52.6	63.9	80.0	53.4
	VMH 45 (C)	77.8	80.7	51.8	77.8	75.3	53.8
	HQPM 1 (C)	41.0	80.3	58.7	41.0	70.7	60.0
125% RDF	IQPMH 2102	75.0	83.0	54.9	75.0	82.7	56.5
	IQPMH 2105	81.9	83.0	55.5	81.9	76.7	57.2
	HQPM 4 (C)	-	28.0	55.9	-	28.0	57.7
	FQPLH20	36.1	78.7	52.2	36.1	75.0	54.3
	FWQH1	59.0	79.0	48.7	56.9	77.7	52.6
	VIVEK QPM 9 (C)	60.4	82.7	51.6	60.4	81.0	54.5
	VMH 45 (C)	74.3	81.0	49.4	74.3	78.7	52.0
	HQPM 1 (C)	45.1	81.0	54.7	45.1	77.3	61.0
150% RDF	IQPMH 2102	80.6	82.7	54.7	79.2	84.3	57.0
	IQPMH 2105	77.1	82.7	53.4	75.7	80.0	55.7
	HQPM 4 (C)	-	16.7	53.0	-	27.0	54.9
	FQPLH20	32.6	79.0	52.1	32.6	76.7	55.5
	FWQH1	69.4	81.3	51.8	69.4	78.7	54.9
	VIVEK QPM 9 (C)	60.4	82.7	49.8	60.4	82.7	53.9
	VMH 45 (C)	78.5	81.7	52.0	78.5	79.3	53.6
	HQPM 1 (C)	46.5	82.0	54.9	46.5	79.3	56.1

# A-46

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
Location mean		62.6	74.0	53.2	62.3	71.9	55.5
C.D.(5%) AiBj-AiBk		13.1	5.5	6.4	13.4	7.4	6.4
C.D.(5%) AiBk-AjBk		15.0	5.5	6.5	14.9	7.5	6.8
F(5%)		NS	NS	NS	NS	NS	NS
100% RDF		62.4	73.8	54.0	62.4	70.0	55.6
125% RDF		61.7	74.5	52.9	61.4	72.1	55.7
150% RDF		63.6	73.6	52.7	63.2	73.5	55.2
C.D. (5%) Ai-Aj		9.2	2.1	2.7	8.5	3.0	3.4
C.V. (%) Error A		17.1	3.5	6.4	15.8	5.3	7.6
F (5%)		NS	NS	NS	NS	NS	NS
IQPMH 2102		76.4	82.9	54.5	75.9	83.0	56.6
IQPMH 2105		78.5	82.9	54.9	78.0	77.6	57.1
HQPM 4 (C)		-	21.6	54.7	-	26.0	56.5
FQPLH20		34.5	79.1	52.1	34.5	75.6	54.2
FWQH1		66.0	80.4	50.9	65.3	78.2	53.8
VIVEK QPM 9 (C)		61.6	82.6	51.3	61.6	81.2	53.9
VMH 45 (C)		76.9	81.1	51.1	76.9	77.8	53.1
HQPM 1 (C)		44.2	81.1	56.1	44.2	75.8	59.0
C.D. (5%) Bi-Bj		7.5	3.1	3.7	7.7	4.3	3.7
C.V. (%) Error B		12.6	4.5	7.3	13.0	6.3	7.0
F (5%)		S	S	S	S	S	S
Fertility levels	Genotypes	Plant height (cm)			100-seed weight (g)		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	IQPMH 2102	232.7	176.4	163.7	22.5	28.3	35.7
	IQPMH 2105	268.6	196.7	166.3	19.9	22.7	35.6
	HQPM 4 (C)	0.0	159.4	170.3	0.0	29.3	35.7
	FQPLH20	221.9	186.2	143.7	25.2	23.3	33.0
	FWQH1	192.1	142.4	159.0	28.3	36.0	32.9
	VIVEK QPM 9 (C)	216.3	157.9	160.0	23.4	24.3	34.1
	VMH 45 (C)	219.3	150.2	148.0	30.0	35.3	34.5
	HQPM 1 (C)	239.6	167.8	172.3	24.6	28.7	36.1
125% RDF	IQPMH 2102	247.9	178.5	170.3	23.2	28.7	35.5
	IQPMH 2105	259.9	197.7	166.0	21.0	24.0	35.1
	HQPM 4 (C)	0.0	162.9	162.0	0.0	30.7	34.9
	FQPLH20	236.2	186.4	146.7	24.4	25.0	34.5
	FWQH1	206.2	142.6	180.3	31.6	37.3	34.2
	VIVEK QPM 9 (C)	223.9	162.8	179.0	25.1	24.7	34.9
	VMH 45 (C)	224.5	157.3	155.3	32.9	35.3	34.9

# A-47

Fertility levels	Genotypes	Plant height (cm)			100-seed weight (g)		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
	HQPM 1 (C)	248.6	171.0	169.7	25.6	29.0	35.4
150% RDF	IQPMH 2102	257.9	186.9	182.3	23.7	28.7	35.2
	IQPMH 2105	272.5	206.5	174.7	20.2	24.7	34.3
	HQPM 4 (C)	0.0	174.0	168.3	0.0	30.7	34.7
	FQPLH20	232.9	197.7	160.7	25.6	25.0	34.2
	FWQH1	212.2	151.6	176.0	30.9	37.0	33.0
	VIVEK QPM 9 (C)	236.9	169.9	194.3	25.0	25.3	33.8
	VMH 45 (C)	227.9	161.3	162.7	34.0	36.0	33.0
	HQPM 1 (C)	256.1	176.5	180.7	25.7	29.0	35.3

Location mean	235.0	171.7	167.2	25.8	29.1	34.6
C.D.(5%) AiBj-AiBk	17.1	10.7	20.9	2.4	2.3	1.9
C.D.(5%) AiBk-AjBk	19.7	14.1	22.6	2.4	2.5	2.1
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	227.2	167.1	160.4	24.9	28.5	34.7
125% RDF	235.3	169.9	166.2	26.2	29.3	34.9
150% RDF	242.4	178.1	175.0	26.4	29.5	34.2

C.D. (5%) Ai-Aj	12.0	10.2	11.8	1.0	1.3	1.3
C.V. (%) Error A	6.0	7.4	8.8	4.4	5.5	4.6
F (5%)	NS	NS	NS	S	NS	NS

IQPMH 2102	246.2	180.6	172.1	23.1	28.6	35.5
IQPMH 2105	267.0	200.3	169.0	20.4	23.8	35.0
HQPM 4 (C)	0.0	165.4	166.9	0.0	30.2	35.1
FQPLH20	230.3	190.1	150.3	25.0	24.4	33.9
FWQH1	203.5	145.5	171.8	30.3	36.8	33.4
VIVEK QPM 9 (C)	225.7	163.5	177.8	24.5	24.8	34.3
VMH 45 (C)	223.9	156.3	155.3	32.3	35.6	34.1
HQPM 1 (C)	248.1	171.8	174.2	25.3	28.9	35.6

C.D. (5%) Bi-Bj	9.9	6.2	12.1	1.4	1.3	1.1
C.V. (%) Error B	4.4	3.8	7.6	5.7	4.8	3.3
F (5%)	S	S	S	S	S	S

Cont...

Fertility levels	Genotypes	Days to 50% tasseling			Days to 50% silking		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	IQPMH 2102	55.0	61.0	52.3	57.0	63.7	54.7
	IQPMH 2105	58.0	64.0	53.0	60.0	66.3	56.0
	HQPM 4 (C)	0.0	62.0	53.0	0.0	64.3	56.0
	FQPLH20	46.3	52.3	46.7	48.3	54.3	49.0
	FWQH1	54.3	57.0	51.3	56.3	59.0	53.7
	VIVEK QPM 9 (C)	45.0	50.3	47.3	47.3	52.3	50.0
	VMH 45 (C)	53.3	55.3	51.7	55.3	57.7	53.7
	HQPM 1 (C)	56.3	64.0	52.0	58.3	66.3	54.7
125% RDF	IQPMH 2102	54.7	58.3	52.3	56.7	60.3	55.0
	IQPMH 2105	57.3	63.7	53.0	59.3	65.7	55.3
	HQPM 4 (C)	0.0	62.7	50.3	0.0	64.7	53.0
	FQPLH20	46.3	50.3	52.3	48.3	52.7	54.3
	FWQH1	51.0	56.7	48.7	53.0	58.7	51.3
	VIVEK QPM 9 (C)	44.0	50.3	50.3	46.0	52.7	52.3
	VMH 45 (C)	47.7	53.7	53.0	49.7	55.7	55.0
	HQPM 1 (C)	55.7	62.7	52.7	57.7	65.0	54.7
150% RDF	IQPMH 2102	54.3	57.3	52.0	56.0	59.7	54.7
	IQPMH 2105	56.0	62.7	53.0	58.0	64.7	55.3
	HQPM 4 (C)	0.0	61.3	53.0	0.0	63.3	55.0
	FQPLH20	46.0	51.0	46.7	48.0	53.0	49.0
	FWQH1	52.0	56.0	48.7	54.0	58.0	51.0
	VIVEK QPM 9 (C)	43.7	49.7	49.3	45.7	51.7	51.7
	VMH 45 (C)	47.7	54.0	47.0	49.7	56.0	49.3
	HQPM 1 (C)	56.0	61.3	53.0	58.0	63.7	55.3
Location mean		51.5	57.4	50.9	53.5	59.6	53.3
C.D.(5%) AiBj-AiBk		1.8	1.5	2.5	1.8	1.5	2.3
C.D.(5%) AiBk-AjBk		1.8	1.6	2.5	1.7	1.7	2.4
F(5%)		S	NS	S	S	NS	S
100% RDF		52.6	58.3	50.9	54.7	60.5	53.5
125% RDF		51.0	57.3	51.6	53.0	59.4	53.9
150% RDF		50.8	56.7	50.3	52.8	58.8	52.7
C.D. (5%) Ai-Aj		0.5	0.8	1.1	0.5	1.0	0.9
C.V. (%) Error A		1.2	1.8	2.6	1.2	2.1	2.2
F (5%)		S	S	NS	S	S	NS

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# A-49

Fertility levels	Genotypes	Days to 50% tasseling			Days to 50% silking		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
	IQPMH 2102	54.7	58.9	52.2	56.6	61.2	54.8
	IQPMH 2105	57.1	63.4	53.0	59.1	65.6	55.6
	HQPM 4 (C)	0.0	62.0	52.1	0.0	64.1	54.7
	FQPLH20	46.2	51.2	48.6	48.2	53.3	50.8
	FWQH1	52.4	56.6	49.6	54.4	58.6	52.0
	VIVEK QPM 9 (C)	44.2	50.1	49.0	46.3	52.2	51.3
	VMH 45 (C)	49.6	54.3	50.6	51.6	56.4	52.7
	HQPM 1 (C)	56.0	62.7	52.6	58.0	65.0	54.9

C.D. (5%) Bi-Bj	1.0	0.9	1.4	1.0	0.9	1.3
C.V. (%) Error B	2.1	1.6	3.0	2.0	1.5	2.7
F (5%)	S	S	S	S	S	S

Fertility levels	Genotypes	Net returns (Rs./ha)		B:C Ratio		Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
		Bajaura	Imphal	Bajaura	Imphal	Imphal			
100% RDF	IQPMH 2102	124023	90742	2.32	2.88	17.5	14.6	15.0	30.8
	IQPMH 2105	105980	95088	2.13	2.97	18.1	14.2	15.0	35.8
	HQPM 4 (C)	-34557	93183	0.63	2.93	15.9	14.4	14.8	33.1
	FQPLH20	44461	84812	1.47	2.76	17.1	13.7	13.4	32.9
	FWQH1	66761	95677	1.71	2.98	17.0	13.7	14.6	31.9
	VIVEK QPM 9 (C)	31932	82299	1.34	2.70	15.5	13.9	13.8	32.7
	VMH 45 (C)	89219	95909	1.95	2.99	16.2	13.3	13.6	30.9
	HQPM 1 (C)	83069	104029	1.89	3.15	17.8	14.7	15.3	29.8
125% RDF	IQPMH 2102	137690	119793	2.43	3.36	18.8	15.3	15.6	40.7
	IQPMH 2105	122933	119150	2.28	3.35	18.3	15.2	15.5	39.3
	HQPM 4 (C)	-10582	105771	0.89	3.09	18.6	15.0	14.9	38.5
	FQPLH20	47638	82549	1.50	2.63	17.0	14.2	14.1	35.7
	FWQH1	73974	105397	1.77	3.08	17.2	14.5	14.6	34.7
	VIVEK QPM 9 (C)	43260	115018	1.45	3.27	16.6	14.8	14.5	36.1
	VMH 45 (C)	119449	93004	2.24	2.83	16.5	14.0	13.6	30.3
	HQPM 1 (C)	116805	120207	2.21	3.37	18.8	15.7	15.8	42.3
150% RDF	IQPMH 2102	146078	98552	2.48	2.86	16.9	15.3	15.5	36.9
	IQPMH 2105	130040	104379	2.32	2.97	18.3	15.0	15.0	34.9
	HQPM 4 (C)	-24363	112498	0.75	3.12	18.4	14.6	15.0	36.7
	FQPLH20	50423	107292	1.51	3.02	17.8	14.2	13.9	31.7
	FWQH1	78760	99480	1.80	2.88	17.4	14.4	14.0	33.7
	VIVEK QPM 9 (C)	43069	95113	1.44	2.79	17.3	14.5	14.6	33.6
	VMH 45 (C)	127761	98545	2.30	2.86	16.9	14.1	14.0	31.1
	HQPM 1 (C)	139057	118536	2.41	3.23	19.4	15.3	15.6	40.7

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# A-50

Fertility levels	Genotypes	Net returns (Rs./ha)		B:C Ratio		Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
		Bajaura	Imphal	Bajaura	Imphal	Imphal			
Location mean		77203.4	101542.6	1.80	3.00	17.5	14.5	14.7	34.8
C.D.(5%) AiBj-AiBk		22024.4	20713.9	0.23	0.41	1.6	1.0	1.1	5.7
C.D.(5%) AiBk-AjBk		24252.5	29920.5	0.25	0.59	1.8	1.1	1.1	6.0
F(5%)		NS	NS	NS	NS	NS	NS	NS	NS

100% RDF	63861	92717	1.68	2.92	16.9	14.1	14.5	32.2
125% RDF	81396	107611	1.85	3.12	17.7	14.8	14.8	37.2
150% RDF	86353	104299	1.88	2.97	17.8	14.7	14.7	34.9

C.D. (5%) Ai-Aj	13206.0	23295.3	0.14	0.46	1.0	0.6	0.4	2.7
C.V. (%) Error A	21.3	28.6	9.5	19.1	7.1	5.1	3.1	9.7
F (5%)	S	NS	S	NS	NS	S	NS	S

IQPMH 2102	135931	103029	2.41	3.03	17.7	15.1	15.4	36.1
IQPMH 2105	119651	106206	2.24	3.10	18.2	14.8	15.2	36.7
HQPM 4 (C)	-23167	103817	0.76	3.05	17.6	14.7	14.9	36.1
FQPLH20	47507	91551	1.49	2.80	17.3	14.0	13.8	33.4
FWQH1	73165	100185	1.76	2.98	17.2	14.2	14.4	33.4
VIVEK QPM 9 (C)	39420	97477	1.41	2.92	16.5	14.4	14.3	34.1
VMH 45 (C)	112143	95819	2.16	2.89	16.5	13.8	13.7	30.8
HQPM 1 (C)	112977	114257	2.17	3.25	18.7	15.2	15.5	37.6

C.D. (5%) Bi-Bj	12715.8	11959.2	0.13	0.24	0.9	0.6	0.6	3.3
C.V. (%) Error B	17.3	12.4	7.7	8.3	5.5	4.2	4.4	10.0
F (5%)	S	S	S	S	S	S	S	S

**Table 10: Performance of pre release genotypes of QPM under varying nutrient levels in North West Plain Zone (NWPZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)		NWPZ (mean)	Stover yield (kg/ha)		Plants ('000/ha)	
		Delhi	Pantnagar		Delhi	Pantnagar	Delhi	Pantnagar
100% RDF	IQPMH 2109	5460	8546	<b>7003</b>	9440	14444	77.8	62.5
	HQPM-5 (C)	4965	5286	<b>5126</b>	3835	5833	49.5	65.3
	AQWH 4	3495	5623	<b>4559</b>	3330	6250	67.2	63.9
	HM 4 (C)	5400	5165	<b>5283</b>	5665	7778	70.0	63.9
	ALPQH 1	4045	4947	<b>4496</b>	4220	5972	41.1	62.5
	HQPM 1 (C)	3670	6308	<b>4989</b>	5405	9028	55.6	62.5
	APTQH 1	4405	5133	<b>4769</b>	7145	9444	62.8	63.9
	APQH 4	5305	7749	<b>6527</b>	6620	9167	61.1	63.9
	HQPM 4 (C)	3595	5849	<b>4722</b>	5055	7083	45.0	65.3
125% RDF	IQPMH 2109	6280	8920	<b>7600</b>	9745	15556	67.2	66.7
	HQPM-5 (C)	4955	5788	<b>5371</b>	6020	6528	48.9	63.9
	AQWH 4	4950	5802	<b>5376</b>	4465	6528	63.3	62.5
	HM 4 (C)	6970	5447	<b>6209</b>	6605	8333	74.1	62.5
	ALPQH 1	5200	5414	<b>5307</b>	6355	6389	55.0	63.9
	HQPM 1 (C)	4300	6665	<b>5482</b>	7205	9444	60.5	66.7
	APTQH 1	6250	5288	<b>5769</b>	9885	9861	82.2	65.3
	APQH 4	5495	8072	<b>6783</b>	8135	10556	84.9	63.9
	HQPM 4 (C)	3515	6300	<b>4908</b>	4520	7639	35.0	62.5
150% RDF	IQPMH 2109	7085	9058	<b>8072</b>	10505	16250	74.5	66.7
	HQPM-5 (C)	5055	6060	<b>5557</b>	4925	6944	47.9	62.5
	AQWH 4	5690	5951	<b>5821</b>	5245	6806	64.0	63.9
	HM 4 (C)	6610	5569	<b>6090</b>	6375	8611	72.3	66.7
	ALPQH 1	5420	5567	<b>5494</b>	6430	6528	52.8	63.9
	HQPM 1 (C)	5210	6750	<b>5980</b>	8795	9583	71.2	66.7
	APTQH 1	4980	5361	<b>5170</b>	8025	10556	81.7	63.9
	APQH 4	5985	8325	<b>7155</b>	8740	11389	76.2	63.9
	HQPM 4 (C)	3460	6420	<b>4940</b>	4585	8194	32.9	63.9
Location mean		5101.9	6346.8	5724.3	6565.7	8914.6	62.0	64.2
C.D.(5%) AiBj-AiBk		1211.4	1548.0	1379.7	1650.4	2132.6	11.7	6.1
C.D.(5%) AiBk-AjBk		1292.1	1577.1	1434.6	1781.7	2123.5	13.5	6.0
F(5%)		NS	NS	-	NS	NS	S	NS
100% RDF		4482	6067	<b>5275</b>	5635	8333	58.9	63.7
125% RDF		5324	6411	<b>5867</b>	6993	8981	63.4	64.2
150% RDF		5499	6562	<b>6031</b>	7069	9429	63.7	64.7
C.D. (5%) Ai-Aj		697.2	619.3	658.3	1000.4	708.7	8.8	1.8
C.V. (%) Error A		9.5	12.9	11.2	10.6	10.5	9.9	3.6
F (5%)		S	NS	S	S	S	NS	NS

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# A-52

Fertility levels	Genotypes	Grain yield (kg/ha)		NWPZ (mean)	Stover yield (kg/ha)		Plants ('000/ha)	
		Delhi	Pantnagar		Delhi	Pantnagar	Delhi	Pantnagar
	IQPMH 2109	6275	8841	<b>7558</b>	9897	15417	73.2	65.3
	HQPM-5 (C)	4992	5711	<b>5351</b>	4927	6435	48.7	63.9
	AQWH 4	4712	5792	<b>5252</b>	4347	6528	64.8	63.4
	HM 4 (C)	6327	5394	<b>5860</b>	6215	8241	72.1	64.4
	ALPQH 1	4888	5309	<b>5099</b>	5668	6296	49.6	63.4
	HQPM 1 (C)	4393	6574	<b>5484</b>	7135	9352	62.4	65.3
	APTQH 1	5212	5261	<b>5236</b>	8352	9954	75.5	64.4
	APQH 4	5595	8048	<b>6822</b>	7832	10370	74.1	63.9
	HQPM 4 (C)	3523	6190	<b>4856</b>	4720	7639	37.6	63.9
	C.D. (5%) Bi-Bj	699.4	893.8	796.6	952.8	1231.3	6.8	3.5
	C.V. (%) Error B	11.5	14.8	13.2	12.2	14.6	9.2	5.8
	F (5%)	S	S	S	S	S	S	NS

Fertility levels	Genotypes	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling		Days to 50% silking	
		Pantnagar	Pantnagar	Delhi	Pantnagar	Delhi	Pantnagar
100% RDF	IQPMH 2109	62.5	207.1	58.5	48.7	61.5	50.7
	HQPM-5 (C)	65.3	161.9	59.5	50.3	63.5	52.7
	AQWH 4	63.9	147.5	59.5	45.7	63.0	47.7
	HM 4 (C)	63.9	147.8	60.5	46.3	63.5	48.3
	ALPQH 1	62.5	170.9	61.0	50.3	64.0	52.7
	HQPM 1 (C)	62.5	142.1	61.0	49.3	65.0	51.3
	APTQH 1	63.9	163.5	60.5	48.7	64.0	50.7
	APQH 4	63.9	161.5	58.0	47.0	61.5	49.3
	HQPM 4 (C)	65.3	171.5	59.5	49.3	62.5	51.3
125% RDF	IQPMH 2109	66.7	216.5	58.0	49.0	62.0	51.0
	HQPM-5 (C)	63.9	167.6	59.0	50.3	62.5	52.3
	AQWH 4	62.5	154.7	59.0	45.0	62.5	47.3
	HM 4 (C)	62.5	154.0	59.0	46.0	63.0	48.3
	ALPQH 1	63.9	174.9	59.0	50.3	63.0	52.3
	HQPM 1 (C)	66.7	155.4	59.5	49.0	63.0	51.0
	APTQH 1	65.3	165.7	59.0	49.0	62.0	51.3
	APQH 4	63.9	164.6	55.5	47.0	59.5	49.3
	HQPM 4 (C)	62.5	175.4	59.0	49.7	63.0	51.7
150% RDF	IQPMH 2109	66.7	218.7	57.5	48.7	60.5	50.7
	HQPM-5 (C)	62.5	169.0	58.0	50.0	61.0	52.0
	AQWH 4	63.9	157.3	58.5	45.3	62.5	47.7
	HM 4 (C)	66.7	155.7	60.5	46.3	64.0	48.3
	ALPQH 1	63.9	177.5	58.0	50.3	61.5	52.3
	HQPM 1 (C)	66.7	156.3	59.0	49.3	62.5	51.3
	APTQH 1	63.9	167.5	58.5	49.0	62.5	51.3
	APQH 4	63.9	165.5	56.0	47.0	60.5	49.0
	HQPM 4 (C)	63.9	177.9	59.5	49.3	63.5	51.3

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Fertility levels	Genotypes	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling		Days to 50% silking	
		Pantnagar	Pantnagar	Delhi	Pantnagar	Delhi	Pantnagar
Location mean		64.2	168.4	58.9	48.4	62.5	50.5
C.D.(5%) AiBj-AiBk		6.1	15.5	1.6	0.9	2.1	1.0
C.D.(5%) AiBk-AjBk		6.0	16.0	3.0	0.9	2.9	1.0
F(5%)		NS	NS	NS	NS	NS	NS
100% RDF		63.7	163.7	59.8	48.4	63.2	50.5
125% RDF		64.2	169.9	58.6	48.4	62.3	50.5
150% RDF		64.7	171.7	58.4	48.4	62.1	50.4
C.D. (5%) Ai-Aj		1.8	6.7	2.8	0.4	2.3	0.5
C.V. (%) Error A		3.6	5.2	3.4	1.0	2.6	1.2
F (5%)		NS	NS	NS	NS	NS	NS
IQPMH 2109		65.3	214.1	58.0	48.8	61.3	50.8
HQPM-5 (C)		63.9	166.1	58.8	50.2	62.3	52.3
AQWH 4		63.4	153.2	59.0	45.3	62.7	47.6
HM 4 (C)		64.4	152.5	60.0	46.2	63.5	48.3
ALPQH 1		63.4	174.4	59.3	50.3	62.8	52.4
HQPM 1 (C)		65.3	151.3	59.8	49.2	63.5	51.2
APTQH 1		64.4	165.6	59.3	48.9	62.8	51.1
APQH 4		63.9	163.8	56.5	47.0	60.5	49.2
HQPM 4 (C)		63.9	174.9	59.3	49.4	63.0	51.4
C.D. (5%) Bi-Bj		3.5	8.9	0.9	0.5	1.2	0.6
C.V. (%) Error B		5.8	5.6	1.3	1.1	1.7	1.2
F (5%)		NS	S	S	S	S	S

Fertility levels	Genotypes	100-seed weight (g)		Net returns (Rs./ha)	B:C ratio
		Delhi	Pantnagar	Pantnagar	Pantnagar
100% RDF	IQPMH 2109	29.8	25.1	132331	2.86
	HQPM-5 (C)	28.4	23.9	64213	1.39
	AQWH 4	21.9	19.1	71258	1.54
	HM 4 (C)	27.4	23.5	61685	1.33
	ALPQH 1	30.5	23.8	57117	1.23
	HQPM 1 (C)	25.5	23.4	85563	1.85
	APTQH 1	26.0	24.2	61016	1.32
	APQH 4	28.1	24.7	115674	2.50
	HQPM 4 (C)	26.7	24.5	75972	1.64
125% RDF	IQPMH 2109	32.4	25.5	138336	2.88
	HQPM-5 (C)	28.3	24.0	72870	1.52
	AQWH 4	22.5	19.6	73176	1.52
	HM 4 (C)	28.5	24.8	65754	1.37
	ALPQH 1	27.4	23.9	65056	1.35
	HQPM 1 (C)	26.0	23.7	91199	1.90
	APTQH 1	25.0	24.7	62434	1.30
	APQH 4	28.2	25.2	120603	2.51
	HQPM 4 (C)	28.5	25.1	83581	1.74

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Fertility levels	Genotypes	100-seed weight (g)		Net returns (Rs./ha)	B:C ratio
		Delhi	Pantnagar	Pantnagar	Pantnagar
150% RDF	IQPMH 2109	30.9	25.8	139389	2.79
	HQPM-5 (C)	28.1	24.1	76718	1.54
	AQWH 4	20.6	19.8	74453	1.49
	HM 4 (C)	28.2	25.0	66464	1.33
	ALPQH 1	28.5	24.2	66421	1.33
	HQPM 1 (C)	27.8	23.8	91142	1.83
	APTQH 1	23.0	24.7	62108	1.24
	APQH 4	30.3	25.3	124062	2.48
	HQPM 4 (C)	28.7	25.3	84237	1.69

Location mean	27.3	23.9	84549.3	1.76
C.D.(5%) AiBj-AiBk	0.5	1.4	32354.2	0.67
C.D.(5%) AiBk-AjBk	0.7	1.5	32961.6	0.68
F(5%)	S	NS	NS	NS

100% RDF	27.1	23.6	80536	1.74
125% RDF	27.4	24.1	85890	1.79
150% RDF	27.3	24.2	87222	1.75

C.D. (5%) Ai-Aj	0.5	0.6	12943.9	0.26
C.V. (%) Error A	1.4	3.6	20.3	19.7
F (5%)	NS	NS	NS	NS

IQPMH 2109	31.0	25.4	136685	2.84
HQPM-5 (C)	28.3	24.0	71267	1.48
AQWH 4	21.7	19.5	72962	1.52
HM 4 (C)	28.0	24.4	64634	1.34
ALPQH 1	28.8	24.0	62865	1.31
HQPM 1 (C)	26.4	23.6	89301	1.86
APTQH 1	24.7	24.5	61853	1.29
APQH 4	28.9	25.0	120113	2.50
HQPM 4 (C)	28.0	25.0	81263	1.69

C.D. (5%) Bi-Bj	0.3	0.8	18679.7	0.39
C.V. (%) Error B	1.0	3.7	23.3	23.3
F (5%)	S	S	S	S

**Table 11: Performance of pre release genotypes of QPM under varying nutrient levels in North East Plain Zone (NEPZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)		NEPZ (mean)	Stover yield (kg/ha)		Cob yield (kg/ha)		Stone yield (kg/ha)
		Bhubneswar	Dholi		Bhubneswar	Dholi	Bhubneswar	Dholi	
100% RDF	IQPMH 2109	6362	4890	<b>5626</b>	14179	8551	7817	6284	1394
	IQPMH 2108	5948	5195	<b>5572</b>	13170	9037	7222	6656	1461
	HQPM-5 (C)	4658	4514	<b>4586</b>	10412	9121	5754	6086	1572
	ALQH 9	3630	5382	<b>4506</b>	8114	9237	4484	6912	1530
	HM 9 (C)	4502	5418	<b>4960</b>	10098	10085	5595	6835	1416
	ALPQH 1	4933	4753	<b>4843</b>	10886	9359	5952	6088	1335
	HQPM 1 (C)	4245	5641	<b>4943</b>	9483	9235	5238	6903	1262
	APTQH 1	3972	5864	<b>4918</b>	8853	9353	4881	7378	1514
	APQH 4	3858	5218	<b>4538</b>	8541	9492	4683	6593	1374
125% RDF	HQPM 4 (C)	4497	4841	<b>4669</b>	10053	9046	5556	6115	1275
	IQPMH 2109	6872	5008	<b>5940</b>	16123	9329	8444	6485	1476
	IQPMH 2108	6053	5418	<b>5736</b>	14110	9181	7351	6838	1420
	HQPM-5 (C)	4638	4791	<b>4714</b>	10914	9278	5730	6191	1400
	ALQH 9	3509	5188	<b>4348</b>	8257	8329	4335	6565	1377
	HM 9 (C)	4578	5257	<b>4917</b>	10811	9211	5692	6698	1441
	ALPQH 1	5386	4769	<b>5078</b>	12495	9793	6484	6235	1466
	HQPM 1 (C)	4368	5488	<b>4928</b>	10273	9234	5391	6884	1396
	APTQH 1	4419	5520	<b>4970</b>	10366	9495	5429	6967	1447
150% RDF	APQH 4	4038	5435	<b>4737</b>	9410	9963	4901	6904	1469
	HQPM 4 (C)	4620	5484	<b>5052</b>	10626	9853	5708	6950	1466
	IQPMH 2109	7057	5141	<b>6099</b>	16555	9404	8671	6486	1345
	IQPMH 2108	6301	5284	<b>5793</b>	14689	9687	7653	6710	1426
	HQPM-5 (C)	3662	4790	<b>4226</b>	8616	9365	4524	6269	1479
	ALQH 9	3632	5239	<b>4435</b>	8546	9771	4486	6610	1371
	HM 9 (C)	4701	5273	<b>4987</b>	11099	9482	5843	6685	1412
	ALPQH 1	5707	4876	<b>5291</b>	13230	9447	6861	6342	1466
	HQPM 1 (C)	4612	5453	<b>5033</b>	10847	9945	5692	6932	1479
Location mean	APTQH 1	4785	5479	<b>5132</b>	11227	9865	5881	6954	1475
	APQH 4	4287	5510	<b>4898</b>	9988	9423	5202	6975	1465
	HQPM 4 (C)	4732	5514	<b>5123</b>	11846	9943	5847	6945	1431
	Location mean	4818.7	5221.1	5019.9	11127.1	9417.1	5910.3	6649.2	1428.1
	C.D.(5%) AiBj-AiBk	1108.7	776.8	942.8	2570.5	1905.1	1386.7	851.8	171.9
	C.D.(5%) AiBk-AjBk	1126.8	846.9	986.8	2634.2	2054.6	1406.9	912.7	174.5
	F(5%)	NS	NS	-	NS	NS	NS	NS	NS
	100% RDF	4661	5172	<b>4916</b>	10379	9252	5718	6585	1413
	125% RDF	4848	5236	<b>5042</b>	11338	9367	5947	6672	1436
	150% RDF	4947	5256	<b>5102</b>	11664	9633	6066	6691	1435

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Fertility levels	Genotypes	Grain yield (kg/ha)		NEPZ (mean)	Stover yield (kg/ha)		Cob yield (kg/ha)		Stone yield (kg/ha)
		Bhubneswar	Dholi		Bhubneswar	Dholi	Bhubneswar	Dholi	
C.D. (5%)	Ai-Aj	419.2	431.6	425.4	1033.0	1011.1	517.4	439.1	64.4
C.V. (%)	Error A	12.1	11.5	11.8	13.0	15.0	12.2	9.2	6.3
F (5%)		NS	NS	NS	NS	NS	NS	NS	NS
	IQPMH 2109	6764	5013	<b>5888</b>	15619	9094	8311	6418	1405
	IQPMH 2108	6101	5299	<b>5700</b>	13990	9302	7409	6735	1435
	HQPM-5 (C)	4319	4698	<b>4509</b>	9981	9255	5336	6182	1484
	ALQH 9	3590	5269	<b>4430</b>	8305	9112	4435	6696	1426
	HM 9 (C)	4594	5316	<b>4955</b>	10669	9593	5710	6739	1423
	ALPQH 1	5342	4799	<b>5071</b>	12203	9533	6433	6222	1422
	HQPM 1 (C)	4408	5527	<b>4968</b>	10201	9471	5440	6906	1379
	APTQH 1	4392	5621	<b>5006</b>	10148	9571	5397	7100	1479
	APQH 4	4061	5388	<b>4724</b>	9313	9626	4929	6824	1436
	HQPM 4 (C)	4616	5279	<b>4948</b>	10842	9614	5704	6670	1391
C.D. (5%)	Bi-Bj	640.1	448.5	544.3	1484.1	1099.9	800.6	491.8	99.3
C.V. (%)	Error B	14.0	9.1	11.6	14.1	12.3	14.3	7.8	7.3
F (5%)		S	S	S	S	NS	S	S	NS

Fertility levels	Genotypes	Plants ('000/ha)		Cobs ('000/ha)	Plant height (cm)	Ear height (cm)	Days to 50% tasseling	Days to 50% silking	
		Bhubneswar	Dholi					Bhubneswar	Dholi
100% RDF	IQPMH 2109	79.7	79.0	71.0	193.3	92.6	62.7	55.5	65.0
	IQPMH 2108	78.2	77.7	72.0	197.7	89.6	62.7	56.6	65.7
	HQPM-5 (C)	78.9	76.0	69.8	182.7	85.8	62.0	54.5	65.0
	ALQH 9	80.4	80.0	71.9	205.0	93.3	62.0	56.2	65.0
	HM 9 (C)	77.1	79.0	71.1	197.7	89.1	62.3	56.2	64.0
	ALPQH 1	78.9	76.0	70.3	189.3	93.6	62.0	53.5	64.7
	HQPM 1 (C)	79.7	78.3	70.8	219.0	103.0	64.3	46.9	66.0
	APTQH 1	78.2	79.0	71.1	208.0	89.3	64.3	54.8	66.7
	APQH 4	77.8	82.7	74.5	215.0	97.1	63.0	55.2	64.3
	HQPM 4 (C)	78.9	82.0	73.9	206.0	100.2	63.3	55.2	66.0
125% RDF	IQPMH 2109	80.8	80.0	72.1	190.7	89.5	64.0	55.2	66.0
	IQPMH 2108	78.2	79.0	72.1	201.0	90.9	63.0	55.9	64.7
	HQPM-5 (C)	77.8	77.0	70.3	184.3	91.5	63.0	56.2	66.0
	ALQH 9	80.0	78.0	71.1	208.3	97.7	62.0	52.1	64.0
	HM 9 (C)	78.1	79.0	71.1	201.7	95.8	62.0	47.9	64.7
	ALPQH 1	77.8	76.3	70.2	194.0	96.2	63.0	56.2	65.3
	HQPM 1 (C)	78.9	78.7	71.2	219.7	101.3	64.0	56.2	66.7
	APTQH 1	78.2	80.0	72.1	212.3	102.3	62.0	53.5	64.0
	APQH 4	78.9	80.7	72.6	218.3	102.8	63.0	46.9	65.0
	HQPM 4 (C)	80.4	80.0	72.4	205.0	93.8	62.0	54.8	64.3

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Fertility levels	Genotypes	Plants ('000/ha)		Cobs ('000/ha)	Plant height (cm)	Ear height (cm)	Days to 50% tasseling	Days to 50% silking	
		Bhubneswar	Dholi	Dholi	Dholi	Dholi	Dholi	Bhubneswar	Dholi
150% RDF	IQPMH 2109	78.2	78.0	72.5	193.3	87.8	63.0	55.5	65.7
	IQPMH 2108	77.8	77.7	72.5	202.3	95.0	63.0	56.6	65.3
	HQPM-5 (C)	78.9	79.0	70.8	191.0	86.6	62.0	54.5	65.0
	ALQH 9	78.9	80.0	72.0	209.7	102.3	61.0	56.2	63.3
	HM 9 (C)	79.7	79.0	71.1	203.0	95.1	63.0	56.2	65.3
	ALPQH 1	78.2	78.0	71.0	198.3	95.1	63.0	53.5	65.3
	HQPM 1 (C)	78.9	78.3	72.5	223.7	101.1	64.0	46.9	65.7
	APTQH 1	80.4	78.0	72.2	214.0	100.2	63.0	54.8	65.3
	APQH 4	77.1	82.7	74.4	220.0	107.1	64.0	56.2	67.3
	HQPM 4 (C)	78.9	82.0	73.9	210.7	101.0	63.0	53.5	64.3
Location mean		78.8	79.0	71.8	203.8	95.6	62.9	54.1	65.2
C.D.(5%) AiBj-AiBk		3.7	7.0	6.7	32.0	16.1	2.6	1.3	2.7
C.D.(5%) AiBk-AjBk		3.6	6.9	6.5	30.6	15.6	2.7	1.3	3.0
F(5%)		NS	NS	NS	NS	NS	NS	S	NS
100% RDF		78.8	79.0	71.6	201.4	93.4	62.9	54.5	65.2
125% RDF		78.9	78.9	71.5	203.5	96.2	62.8	53.5	65.1
150% RDF		78.7	79.3	72.3	206.6	97.1	62.9	54.4	65.3
C.D. (5%) Ai-Aj		0.9	1.9	1.4	4.0	3.3	1.1	0.5	1.5
C.V. (%) Error A		1.5	3.3	2.6	2.7	4.8	2.5	1.2	3.3
F (5%)		NS	NS	NS	NS	NS	NS	S	NS
IQPMH 2109		79.6	79.0	71.9	192.4	90.0	63.2	55.4	65.6
IQPMH 2108		78.1	78.1	72.2	200.3	91.8	62.9	56.3	65.2
HQPM-5 (C)		78.6	77.3	70.3	186.0	87.9	62.3	55.1	65.3
ALQH 9		79.8	79.3	71.7	207.7	97.8	61.7	54.8	64.1
HM 9 (C)		78.3	79.0	71.1	200.8	93.4	62.4	53.5	64.7
ALPQH 1		78.3	76.8	70.5	193.9	95.0	62.7	54.4	65.1
HQPM 1 (C)		79.2	78.4	71.5	220.8	101.8	64.1	50.0	66.1
APTQH 1		78.9	79.0	71.8	211.4	97.3	63.1	54.4	65.3
APQH 4		77.9	82.0	73.8	217.8	102.3	63.3	52.8	65.6
HQPM 4 (C)		79.4	81.3	73.4	207.2	98.3	62.8	54.5	64.9
C.D. (5%) Bi-Bj		2.1	4.0	3.9	18.5	9.3	1.5	0.7	1.6
C.V. (%) Error B		2.9	5.4	5.7	9.6	10.3	2.6	1.4	2.5
F (5%)		NS	NS	NS	S	S	NS	S	NS

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Fertility levels	Genotypes	Days to 50% pollen shed	Days to maturity	Net returns (Rs./ha)		B:C ratio		Cob length (cm)
		Bhubneswar	Dholi	Bhubneswar	Dholi	Bhubneswar	Dholi	Dholi
100% RDF	IQPMH 2109	53.0	117.3	87594	90609	1.90	2.23	21.3
	IQPMH 2108	54.1	116.3	78912	98377	1.72	2.42	19.8
	HQPM-5 (C)	52.0	118.0	51814	86477	1.13	2.12	19.2
	ALQH 9	53.7	118.3	30232	103734	0.66	2.55	20.4
	HM 9 (C)	53.7	117.0	48548	102118	1.06	2.51	19.3
	ALPQH 1	51.0	118.0	57596	86519	1.25	2.12	19.0
	HQPM 1 (C)	44.4	117.7	43139	103553	0.94	2.55	20.0
	APTQH 1	52.3	117.3	37407	113480	0.81	2.79	19.0
	APQH 4	52.7	116.7	35019	97060	0.76	2.38	21.3
	HQPM 4 (C)	52.7	117.0	48445	87083	1.05	2.14	19.2
125% RDF	IQPMH 2109	52.7	115.3	97319	93371	2.07	2.21	21.8
	IQPMH 2108	53.4	117.3	80113	100762	1.70	2.39	20.3
	HQPM-5 (C)	53.7	113.0	50396	87233	1.07	2.07	19.7
	ALQH 9	49.6	116.7	26679	95043	0.57	2.25	20.9
	HM 9 (C)	45.4	117.3	49132	97829	1.05	2.32	19.8
	ALPQH 1	53.7	114.3	66114	88153	1.41	2.09	19.5
	HQPM 1 (C)	53.7	116.0	44735	101717	0.95	2.41	20.5
	APTQH 1	51.0	117.3	45796	103458	0.97	2.45	19.8
	APQH 4	44.4	118.3	37804	102135	0.80	2.42	21.8
	HQPM 4 (C)	52.3	117.7	50014	103096	1.06	2.44	20.0
150% RDF	IQPMH 2109	53.0	120.7	100188	91967	2.09	2.11	21.1
	IQPMH 2108	54.1	120.7	84331	96649	1.76	2.22	21.0
	HQPM-5 (C)	52.0	118.7	28894	87425	0.60	2.01	19.7
	ALQH 9	53.7	119.7	28275	94559	0.59	2.17	22.3
	HM 9 (C)	53.7	120.7	50713	96126	1.06	2.21	20.2
	ALPQH 1	51.0	118.7	71848	88957	1.50	2.04	19.8
	HQPM 1 (C)	44.4	119.7	48854	101288	1.02	2.33	17.3
	APTQH 1	52.3	121.3	52479	101748	1.09	2.33	20.0
	APQH 4	53.7	119.3	42017	102187	0.88	2.34	19.4
	HQPM 4 (C)	51.0	121.3	51375	101553	1.07	2.33	18.9
Location mean		51.6	117.9	54192.7	96808.9	1.15	2.30	20.1
C.D.(5%) AiBj-AiBk		1.3	3.9	23283.4	17802.8	0.50	0.43	3.2
C.D.(5%) AiBk-AjBk		1.3	3.8	23662.2	19075.1	0.51	0.46	3.4
F(5%)		S	NS	NS	NS	NS	NS	NS
100% RDF		52.0	117.4	51871	96901	1.13	2.38	19.8
125% RDF		51.0	116.3	54810	97280	1.17	2.31	20.4
150% RDF		51.9	120.1	55897	96246	1.16	2.21	20.0
C.D. (5%) Ai-Aj		0.5	0.7	8802.5	9176.7	0.19	0.22	1.5
C.V. (%) Error A		1.3	0.9	22.7	13.2	22.86	13.3	10.5
F (5%)		S	S	NS	NS	NS	NS	NS

Cont...

# A-59

Fertility levels	Genotypes	Days to 50% pollen shed	Days to maturity	Net returns (Rs./ha)		B:C ratio		Cob length (cm)
		Bhubneswar	Dholi	Bhubneswar	Dholi	Bhubneswar	Dholi	Dholi
	IQPMH 2109	52.9	117.8	95034	91982.3	2.02	2.18	21.4
	IQPMH 2108	53.8	118.1	81119	98596	1.73	2.34	20.4
	HQPM-5 (C)	52.6	116.6	43701	87045	0.93	2.07	19.5
	ALQH 9	52.3	118.2	28395	97778	0.60	2.32	21.2
	HM 9 (C)	51.0	118.3	49464	98691	1.05	2.35	19.7
	ALPQH 1	51.9	117.0	65186	87876	1.39	2.09	19.4
	HQPM 1 (C)	47.5	117.8	45576	102186	0.97	2.43	19.2
	APTQH 1	51.9	118.7	45227	106229	0.96	2.52	19.6
	APQH 4	50.3	118.1	38280	100461	0.81	2.38	20.8
	HQPM 4 (C)	52.0	118.7	49945	97244	1.06	2.30	19.4
	C.D. (5%) Bi-Bj	0.7	2.3	13442.7	10278.5	0.29	0.25	1.9
	C.V. (%) Error B	1.5	2.0	26.2	11.2	26.3	11.4	9.8
	F (5%)	S	NS	S	S	S	S	NS

**Table 12: Performance of pre release genotypes of QPM under varying nutrient levels in Peninsular Zone (PZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)		PZ (mean)	Stover yield (kg/ha)		Plants ('000/ha)	
		Hyderabad	Peddapuram		Hyderabad	Peddapuram	Hyderabad	Peddapuram
100% RDF	ALPQH 1	5512	4895	<b>5204</b>	7037	6471	76.9	74.1
	HQPM 1(C)	5237	5432	<b>5334</b>	6852	6631	78.4	77.8
	APTQH 1	5788	5040	<b>5414</b>	7222	6337	76.2	74.1
	APQH 4	5512	5075	<b>5294</b>	7222	7018	78.1	75.6
	HQPM 4 (C)	6064	6079	<b>6071</b>	7963	7728	77.8	79.8
125% RDF	ALPQH 1	5788	5844	<b>5816</b>	7407	7153	77.2	74.1
	HQPM 1(C)	5512	6179	<b>5846</b>	7222	7957	76.9	79.6
	APTQH 1	6339	5599	<b>5969</b>	7778	7150	75.9	72.1
	APQH 4	6064	6696	<b>6380</b>	7593	8189	76.9	75.3
	HQPM 4 (C)	6339	6896	<b>6618</b>	7963	8567	74.4	80.5
150% RDF	ALPQH 1	6064	6553	<b>6308</b>	7593	8159	77.8	74.8
	HQPM 1(C)	5512	6808	<b>6160</b>	7222	8462	77.8	76.2
	APTQH 1	6615	5574	<b>6095</b>	7963	7686	76.5	78.6
	APQH 4	6064	7098	<b>6581</b>	7963	8403	78.4	76.2
	HQPM 4 (C)	6615	7236	<b>6925</b>	8333	8759	76.2	80.1
Location mean		5935.1	6066.9	6001.0	7555.6	7644.6	77.0	76.6
C.D.(5%) AiBj-AiBk		1564.9	760.5	1162.7	1620.8	866.0	5.8	5.4
C.D.(5%) AiBk-AjBk		1589.4	885.8	1237.6	1486.7	986.9	6.3	5.1
F(5%)		NS	NS	-	NS	NS	NS	NS
100% RDF		5623	5304	<b>5463</b>	7259	6837	77.5	76.3
125% RDF		6009	6243	<b>6126</b>	7593	7803	76.2	76.3
150% RDF		6174	6654	<b>6414</b>	7815	8294	77.3	77.2
C.D. (5%) Ai-Aj		775.3	581.3	678.3	340.6	626.9	3.7	1.6
C.V. (%) Error A		12.9	9.5	11.2	4.4	8.1	4.8	2.1
F (5%)		NS	S	S	S	S	NS	NS
ALPQH 1		5788	5764	<b>5776</b>	7346	7261	77.3	74.3
HQPM 1(C)		5421	6140	<b>5780</b>	7099	7683	77.7	77.9
APTQH 1		6247	5404	<b>5826</b>	7654	7058	76.2	74.9
APQH 4		5880	6289	<b>6085</b>	7593	7870	77.8	75.7
HQPM 4 (C)		6339	6737	<b>6538</b>	8086	8351	76.1	80.2
C.D. (5%) Bi-Bj		903.5	439.1	671.3	935.8	500.0	3.3	3.1
C.V. (%) Error B		15.6	7.4	11.5	12.7	6.7	4.4	4.2
F (5%)		NS	S	S	NS	S	NS	S

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# A-61

Fertility levels	Genotypes	Cobs ('000/ha)		Plant height (cm)		Days to 50% tasseling	
		Hyderabad	Peddapuram	Hyderabad	Peddapuram	Hyderabad	Peddapuram
100% RDF	ALPQH 1	76.3	71.4	169.1	156.3	59.7	60.7
	HQPM 1(C)	77.8	76.3	161.9	157.3	59.0	57.3
	APTQH 1	75.6	74.1	172.9	154.4	59.3	58.0
	APQH 4	77.5	73.6	170.0	160.1	58.7	56.0
	HQPM 4 (C)	77.2	76.8	171.6	165.4	58.3	58.0
125% RDF	ALPQH 1	76.6	71.7	174.1	166.6	58.7	57.7
	HQPM 1(C)	76.2	77.0	172.4	168.3	59.7	56.0
	APTQH 1	75.4	70.9	177.7	165.0	58.7	55.7
	APQH 4	76.1	73.9	178.3	172.7	58.7	52.0
	HQPM 4 (C)	73.8	77.6	177.9	175.6	59.0	56.3
150% RDF	ALPQH 1	77.3	73.1	178.7	172.9	59.7	57.0
	HQPM 1(C)	77.2	75.1	176.0	173.1	58.3	56.7
	APTQH 1	75.9	77.0	179.6	169.8	59.3	56.0
	APQH 4	77.9	74.7	178.3	186.6	59.7	54.0
	HQPM 4 (C)	75.7	75.6	180.0	187.1	59.0	57.3
Location mean		76.4	74.6	174.6	168.7	59.0	56.6
C.D.(5%) AiBj-AiBk		5.8	5.5	8.7	6.5	1.5	2.1
C.D.(5%) AiBk-AjBk		6.3	5.3	12.3	9.7	1.4	2.9
F(5%)		NS	NS	NS	NS	NS	NS
100% RDF		76.9	74.5	169.1	158.7	59.0	58.0
125% RDF		75.6	74.2	176.1	169.6	58.9	55.5
150% RDF		76.8	75.1	178.5	177.9	59.2	56.2
C.D. (5%) Ai-Aj		3.6	2.2	9.8	7.9	0.3	2.2
C.V. (%) Error A		4.7	2.9	5.5	4.6	0.5	3.9
F (5%)		NS	NS	NS	S	NS	NS
ALPQH 1		76.7	72.1	174.0	165.2	59.3	58.4
HQPM 1(C)		77.0	76.1	170.1	166.3	59.0	56.7
APTQH 1		75.6	74.0	176.7	163.1	59.1	56.6
APQH 4		77.2	74.1	175.5	173.1	59.0	54.0
HQPM 4 (C)		75.6	76.7	176.5	176.0	58.8	57.2
C.D. (5%) Bi-Bj		3.4	3.1	5.0	3.7	0.9	1.2
C.V. (%) Error B		4.5	4.3	2.9	2.3	1.5	2.2
F (5%)		NS	S	NS	S	NS	S

Cont...

# A-62

Fertility levels	Genotypes	Days to 50% silking		100-seed weight (g)		Net returns (Rs./ha)	
		Hyderabad	Peddapuram	Hyderabad	Peddapuram	Hyderabad	Peddapuram
100% RDF	ALPQH 1	63.0	63.0	26.5	25.2	56141	37761
	HQPM 1(C)	62.7	59.7	25.6	25.7	50195	48994
	APTQH 1	62.7	60.7	28.2	24.3	62087	40796
	APQH 4	62.3	58.0	26.8	26.0	56326	41523
	HQPM 4 (C)	62.0	60.7	28.1	26.7	68588	62514
125% RDF	ALPQH 1	62.3	60.7	26.9	26.2	59490	55549
	HQPM 1(C)	63.3	59.0	26.6	27.0	53544	62541
	APTQH 1	62.7	57.7	28.6	25.9	71381	50414
	APQH 4	62.3	54.7	28.3	27.5	65435	73353
	HQPM 4 (C)	63.0	58.7	29.1	28.5	71566	77533
150% RDF	ALPQH 1	63.3	59.3	28.1	26.4	63195	68296
	HQPM 1(C)	62.7	58.7	26.6	27.3	51304	73624
	APTQH 1	63.0	58.0	29.2	26.3	75087	47834
	APQH 4	63.7	56.3	28.8	28.9	63566	79674
	HQPM 4 (C)	62.7	60.7	30.6	29.6	75457	82564
Location mean		62.8	59.0	27.9	26.8	62890.8	60198.0
C.D.(5%) AiBj-AiBk		1.8	2.3	3.8	1.4	32754.2	15893.8
C.D.(5%) AiBk-AjBk		1.7	3.4	4.1	1.6	33176.6	18513.8
F(5%)		NS	NS	NS	NS	NS	NS
100% RDF		62.5	60.4	27.0	25.6	58667	46318
125% RDF		62.7	58.1	27.9	27.0	64283	63878
150% RDF		63.1	58.6	28.7	27.7	65722	70398
C.D. (5%) Ai-Aj		0.7	2.7	2.2	1.0	16028.7	12148.6
C.V. (%) Error A		1.0	4.6	7.8	3.5	25.1	19.9
F (5%)		NS	NS	NS	S	NS	S
ALPQH 1		62.9	61.0	27.1	25.9	59609	53869
HQPM 1(C)		62.9	59.1	26.3	26.7	51681	61720
APTQH 1		62.8	58.8	28.7	25.5	69518	46348
APQH 4		62.8	56.3	28.0	27.5	61776	64850
HQPM 4 (C)		62.6	60.0	29.3	28.3	71870	74204
C.D. (5%) Bi-Bj		1.0	1.3	2.2	0.8	18910.6	9176.3
C.V. (%) Error B		1.7	2.3	8.2	3.1	30.9	15.7
F (5%)		NS	S	NS	S	NS	S

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# A-63

Fertility levels	Genotypes	B:C ratio		Cob length (cm)		Cob girth (cm)	
		Hyderabad	Peddapuram	Hyderabad	Peddapuram	Hyderabad	Peddapuram
100% RDF	ALPQH 1	1.85	1.59	15.0	13.6	13.3	12.9
	HQPM 1(C)	1.76	1.76	15.0	16.0	13.2	13.1
	APTQH 1	1.94	1.63	15.6	13.8	13.7	12.5
	APQH 4	1.85	1.64	15.4	16.2	13.4	13.4
	HQPM 4 (C)	2.04	1.97	15.8	16.4	14.2	13.8
125% RDF	ALPQH 1	1.86	1.83	15.6	14.5	13.5	13.8
	HQPM 1(C)	1.78	1.94	15.3	16.2	13.2	13.9
	APTQH 1	2.04	1.76	16.2	14.8	13.9	13.3
	APQH 4	1.95	2.10	15.7	16.8	13.7	14.0
	HQPM 4 (C)	2.04	2.16	16.4	17.8	14.7	14.1
150% RDF	ALPQH 1	1.89	1.99	16.2	16.1	13.7	14.0
	HQPM 1(C)	1.72	2.07	16.0	16.6	13.8	14.3
	APTQH 1	2.06	1.70	16.5	15.3	14.4	13.6
	APQH 4	1.89	2.16	16.2	17.3	13.9	14.4
	HQPM 4 (C)	2.06	2.20	17.3	18.0	14.8	14.9
Location mean		1.91	1.90	15.9	16.0	13.8	13.7
C.D.(5%) AiBj-AiBk		0.47	0.24	1.9	1.1	1.3	0.5
C.D.(5%) AiBk-AjBk		0.48	0.28	2.0	1.2	1.3	0.8
F(5%)		NS	NS	NS	NS	NS	NS
100% RDF		1.89	1.72	15.4	15.2	13.6	13.2
125% RDF		1.93	1.96	15.8	16.0	13.8	13.8
150% RDF		1.92	2.03	16.4	16.6	14.1	14.2
C.D. (5%) Ai-Aj		0.24	0.18	1.2	0.8	0.5	0.6
C.V. (%) Error A		12.3	9.5	7.2	4.6	3.5	4.4
F (5%)		NS	S	NS	S	NS	S
ALPQH 1		1.87	1.80	15.6	14.8	13.5	13.6
HQPM 1(C)		1.75	1.92	15.5	16.3	13.4	13.8
APTQH 1		2.01	1.70	16.1	14.7	14.0	13.1
APQH 4		1.90	1.97	15.7	16.8	13.6	13.9
HQPM 4 (C)		2.05	2.11	16.5	17.4	14.6	14.3
C.D. (5%) Bi-Bj		0.27	0.14	1.1	0.6	0.7	0.3
C.V. (%) Error B		14.7	7.6	6.9	4.0	5.6	2.3
F (5%)		NS	S	NS	S	S	S

Cont...

# A-64

Fertility levels	Genotypes	Grain rows/cob		Grains/row	
		Hyderabad	Peddapuram	Hyderabad	Peddapuram
100% RDF	ALPQH 1	14.0	12.9	33.6	29.8
	HQPM 1(C)	13.9	13.1	32.8	30.3
	APTQH 1	14.6	12.3	34.1	28.7
	APQH 4	14.3	13.2	33.9	32.1
	HQPM 4 (C)	14.6	14.0	34.7	32.9
125% RDF	ALPQH 1	14.0	13.7	33.9	31.4
	HQPM 1(C)	14.0	13.7	33.4	32.4
	APTQH 1	14.6	13.6	34.2	30.5
	APQH 4	14.5	14.1	34.0	33.1
	HQPM 4 (C)	14.9	14.4	35.5	33.8
150% RDF	ALPQH 1	14.0	14.0	34.1	32.6
	HQPM 1(C)	14.0	14.0	33.6	33.6
	APTQH 1	14.8	13.6	35.7	31.0
	APQH 4	14.6	14.1	34.1	34.3
	HQPM 4 (C)	15.2	14.5	36.2	36.0
Location mean		14.4	13.7	34.3	32.2
C.D.(5%) AiBj-AiBk		0.9	1.1	3.7	1.8
C.D.(5%) AiBk-AjBk		1.1	1.1	4.3	2.0
F(5%)		NS	NS	NS	NS
100% RDF		14.3	13.1	33.8	30.8
125% RDF		14.4	13.9	34.2	32.3
150% RDF		14.5	14.1	34.8	33.5
C.D. (5%) Ai-Aj		0.7	0.5	2.9	1.3
C.V. (%) Error A		5.0	3.5	8.3	4.0
F (5%)		NS	S	NS	S
ALPQH 1		14.0	13.6	33.9	31.3
HQPM 1(C)		14.0	13.6	33.3	32.1
APTQH 1		14.7	13.2	34.7	30.1
APQH 4		14.4	13.8	34.0	33.2
HQPM 4 (C)		14.9	14.3	35.5	34.2
C.D. (5%) Bi-Bj		0.5	0.6	2.1	1.0
C.V. (%) Error B		3.6	4.8	6.4	3.3
F (5%)		S	S	NS	S



**Table 13: Performance of pre release genotypes of QPM under varying nutrient levels in Central West Zone (CWZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)		CWZ (mean)	Stover yield (kg/ha)		Plants ('000/ha)	
		Godhara	Udaipur		Godhara	Udaipur	Godhara	Udaipur
100% RDF	ALPQH 1	5143	3565	<b>4354</b>	9206	4465	44.1	52.6
	HQPM 1 (C)	6698	3468	<b>5083</b>	12032	4422	59.0	51.2
	APTQH 1	7238	3100	<b>5169</b>	13460	4200	74.9	50.8
	APQH 4	6190	3125	<b>4658</b>	10825	4365	70.2	50.9
	HQPM 4 (C)	4984	3355	<b>4170</b>	9143	3898	42.5	51.6
	IQPMH 2012	7556	3398	<b>5477</b>	11968	4358	75.2	51.0
	HQPM 5 (C)	4921	3412	<b>4166</b>	9270	4400	50.2	50.5
125% RDF	ALPQH 1	5810	3994	<b>4902</b>	10508	5001	67.0	50.5
	HQPM 1 (C)	6794	3884	<b>5339</b>	11206	4953	77.1	51.4
	APTQH 1	6127	3472	<b>4800</b>	10190	4705	69.2	52.5
	APQH 4	6571	3500	<b>5036</b>	11143	4856	67.6	51.2
	HQPM 4 (C)	5873	3758	<b>4815</b>	8794	4366	53.7	50.8
	IQPMH 2012	7810	3806	<b>5808</b>	10667	4881	74.3	50.9
	HQPM 5 (C)	5778	3821	<b>4800</b>	9365	4928	50.8	52.5
150% RDF	ALPQH 1	4032	4073	<b>4052</b>	7016	5101	38.4	51.2
	HQPM 1 (C)	6127	3962	<b>5044</b>	11016	5052	63.2	50.8
	APTQH 1	5429	3541	<b>4485</b>	11302	4798	66.7	50.9
	APQH 4	6889	3570	<b>5229</b>	12667	4987	73.0	52.5
	HQPM 4 (C)	5111	3833	<b>4472</b>	8032	4453	41.6	50.8
	IQPMH 2012	6889	3882	<b>5385</b>	10508	4979	74.3	51.2
	HQPM 5 (C)	3238	3898	<b>3568</b>	6857	5026	36.8	50.5
Location mean		5962.2	3638.9	4800.5	10246.4	4675.8	60.5	51.3
C.D.(5%) AiBj-AiBk		1623.6	375.1	999.3	2753.8	457.8	18.5	2.4
C.D.(5%) AiBk-AjBk		1710.1	417.9	1064.0	2624.0	533.0	17.8	2.6
F(5%)		NS	NS	-	NS	NS	NS	NS
100% RDF		6104	3346	<b>4725</b>	10844	4301	59.5	51.2
125% RDF		6395	3748	<b>5071</b>	10268	4813	65.7	51.4
150% RDF		5388	3823	<b>4605</b>	9628	4914	56.3	51.1
C.D. (5%) Ai-Aj		842.0	239.6	540.8	643.6	332.4	5.3	1.3
C.V. (%) Error A		16.5	7.7	12.1	7.3	8.3	10.2	3.0
F (5%)		NS	S	S	S	S	S	NS
ALPQH 1		4995	3877	<b>4436</b>	8910	4856	49.8	51.4
HQPM 1 (C)		6540	3771	<b>5156</b>	11418	4809	66.5	51.1
APTQH 1		6265	3371	<b>4818</b>	11651	4568	70.3	51.4
APQH 4		6550	3398	<b>4974</b>	11545	4736	70.3	51.5
HQPM 4 (C)		5323	3648	<b>4486</b>	8656	4239	45.9	51.1
IQPMH 2012		7418	3695	<b>5557</b>	11048	4739	74.6	51.0
HQPM 5 (C)		4646	3710	<b>4178</b>	8497	4785	45.9	51.2
C.D. (5%) Bi-Bj		937.4	216.5	577.0	1589.9	264.3	10.7	1.4
C.V. (%) Error B		16.4	6.2	11.3	16.2	5.9	18.4	2.8
F (5%)		S	S	S	S	S	S	NS

Cont...

# A-66

Fertility levels	Genotypes	Cobs ('000/ha)		Plant height (cm)		Days to 50% tasseling		Days to 50% silking	
		Godhara	Udaipur	Godhara	Udaipur	Godhara	Udaipur	Godhara	Udaipur
100% RDF	ALPQH 1	43.5	54.0	194.0	146.6	43.7	55.7	49.3	59.0
	HQPM 1 (C)	52.4	54.0	205.0	142.1	43.3	54.0	48.7	58.7
	APTQH 1	61.0	54.7	209.0	118.3	44.0	55.3	49.3	58.0
	APQH 4	57.8	55.1	209.3	124.0	43.0	54.3	48.3	58.0
	HQPM 4 (C)	37.1	55.0	208.3	132.7	44.0	54.3	49.7	58.3
	IQPMH 2012	70.2	56.5	214.0	144.0	43.0	53.7	48.7	55.3
	HQPM 5 (C)	37.1	55.1	204.7	152.0	44.0	54.7	49.7	54.0
125% RDF	ALPQH 1	51.7	55.6	207.7	155.0	43.3	54.7	48.3	54.7
	HQPM 1 (C)	63.5	56.8	206.0	152.0	45.3	51.3	50.0	58.3
	APTQH 1	51.1	54.3	205.3	128.0	44.7	55.7	49.3	58.7
	APQH 4	55.9	53.6	207.3	134.0	43.0	54.0	48.3	57.7
	HQPM 4 (C)	48.3	54.7	212.0	142.0	44.7	55.3	50.3	58.0
	IQPMH 2012	70.8	55.1	206.7	154.0	45.0	54.3	50.7	58.3
	HQPM 5 (C)	46.0	54.6	210.7	162.0	44.7	54.3	50.3	55.3
150% RDF	ALPQH 1	33.0	56.3	200.7	165.0	44.3	53.7	50.0	54.0
	HQPM 1 (C)	55.2	55.1	206.0	162.0	44.3	54.7	49.7	54.7
	APTQH 1	48.9	55.6	204.3	138.0	45.0	54.7	50.0	58.3
	APQH 4	56.2	56.8	206.7	144.0	44.0	51.3	49.0	55.3
	HQPM 4 (C)	31.4	56.8	208.3	152.0	44.0	54.7	49.0	54.0
	IQPMH 2012	71.7	54.3	207.3	164.0	43.7	51.3	49.3	54.7
	HQPM 5 (C)	28.3	53.6	201.7	172.0	44.3	55.7	49.7	64.4
Location mean		51.0	55.1	206.4	146.8	44.1	54.2	49.4	57.0
C.D.(5%) AiBj-AiBk		16.1	2.9	11.3	8.6	1.5	2.0	1.3	1.7
C.D.(5%) AiBk-AjBk		15.2	3.6	11.9	10.6	1.8	2.1	1.7	1.8
F(5%)		NS	NS	NS	NS	NS	S	NS	S
100% RDF		51.3	54.9	206.3	137.1	43.6	54.6	49.1	57.3
125% RDF		55.3	55.0	208.0	146.7	44.4	54.2	49.6	57.3
150% RDF		46.4	55.5	205.0	156.7	44.2	53.7	49.5	56.5
C.D. (5%) Ai-Aj		3.2	2.4	5.7	7.2	1.2	1.1	1.2	0.9
C.V. (%) Error A		7.2	5.1	3.2	5.7	3.3	2.4	2.8	1.8
F (5%)		S	NS	NS	S	NS	NS	NS	NS
ALPQH 1		42.8	55.3	200.8	155.5	43.8	54.7	49.2	55.9
HQPM 1 (C)		57.0	55.3	205.7	152.0	44.3	53.3	49.4	57.2
APTQH 1		53.7	54.9	206.2	128.1	44.6	55.2	49.6	58.3
APQH 4		56.6	55.2	207.8	134.0	43.3	53.2	48.6	57.0
HQPM 4 (C)		38.9	55.5	209.6	142.2	44.2	54.8	49.7	56.8
IQPMH 2012		70.9	55.3	209.3	154.0	43.9	53.1	49.6	56.1
HQPM 5 (C)		37.1	54.4	205.7	162.0	44.3	54.9	49.9	57.9
C.D. (5%) Bi-Bj		9.3	1.7	6.5	4.9	0.9	1.2	0.8	1.0
C.V. (%) Error B		19.1	3.2	3.3	3.5	2.1	2.2	1.6	1.8
F (5%)		S	NS	NS	S	NS	S	S	S

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**A-67**

Fertility levels	Genotypes	100-seed weight (gm)		Net Profit (Rs./ha)		B:C ratio		Shelling (%)
		Godhara	Udaipur	Godhara	Udaipur	Godhara	Udaipur	Udaipur
100% RDF	ALPQH 1	32.3	22.5	95603	52130	4.16	1.57	78.3
	HQPM 1 (C)	34.7	21.8	133778	50102	5.42	1.51	77.7
	APTQH 1	34.0	20.0	148143	42184	5.89	1.27	78.5
	APQH 4	33.7	19.6	120603	43284	4.98	1.30	78.0
	HQPM 4 (C)	35.0	19.9	92270	45958	4.05	1.38	78.3
	IQPMH 2012	32.7	20.5	150762	48513	5.98	1.46	79.0
	HQPM 5 (C)	37.7	20.8	91317	48941	4.02	1.47	79.1
125% RDF	ALPQH 1	33.3	25.2	110710	60970	4.49	1.76	79.8
	HQPM 1 (C)	31.3	24.4	132139	58678	5.16	1.69	80.8
	APTQH 1	32.0	22.4	116266	49815	4.66	1.44	78.0
	APQH 4	39.3	22.0	127536	50919	5.02	1.47	77.9
	HQPM 4 (C)	36.0	22.2	107694	54041	4.39	1.56	78.5
	IQPMH 2012	32.3	23.0	151107	56900	5.76	1.64	78.0
	HQPM 5 (C)	38.3	23.3	107218	57378	4.38	1.66	79.4
150% RDF	ALPQH 1	34.0	25.7	65685	61440	3.02	1.70	79.7
	HQPM 1 (C)	31.3	24.9	117589	59121	4.62	1.64	78.7
	APTQH 1	31.7	22.8	104335	50078	4.21	1.39	79.8
	APQH 4	33.0	22.4	136954	51336	5.22	1.42	80.8
	HQPM 4 (C)	35.3	22.6	89812	54392	3.76	1.51	79.8
	IQPMH 2012	32.7	23.4	131558	57309	5.05	1.59	79.8
	HQPM 5 (C)	35.3	23.8	49415	57796	2.52	1.60	79.0
Location mean		34.1	22.5	113356.8	52918.3	4.61	1.52	79.0
C.D.(5%) AiBj-AiBk		2.1	1.0	37491.6	7878.1	1.19	0.23	2.6
C.D.(5%) AiBk-AjBk		2.3	1.1	38976.2	8365.0	1.24	0.24	2.8
F(5%)		S	NS	NS	NS	NS	NS	NS
100% RDF		34.3	20.7	118925	47301	4.93	1.42	78.4
125% RDF		34.7	23.2	121810	55529	4.84	1.60	78.9
150% RDF		33.3	23.7	99335	55925	4.06	1.55	79.6
C.D. (5%) Ai-Aj		1.2	0.6	18315.9	4227.6	0.58	0.12	1.4
C.V. (%) Error A		4.1	3.2	18.9	9.3	14.8	9.4	2.1
F (5%)		NS	S	NS	S	S	S	NS
ALPQH 1		33.2	24.5	90666	58180	3.89	1.68	79.3
HQPM 1 (C)		32.4	23.7	127835	55967	5.07	1.61	79.0
APTQH 1		32.6	21.8	122915	47359	4.92	1.36	78.8
APQH 4		35.3	21.3	128364	48513	5.07	1.40	78.9
HQPM 4 (C)		35.4	21.6	96592	51464	4.07	1.48	78.9
IQPMH 2012		32.6	22.3	144476	54240	5.60	1.56	78.9
HQPM 5 (C)		37.1	22.6	82650	54705	3.64	1.58	79.2
C.D. (5%) Bi-Bj		1.2	0.6	21645.8	4548.4	0.69	0.13	1.5
C.V. (%) Error B		3.8	2.6	20.0	9.0	15.6	9.1	2.0
F (5%)		S	S	S	S	S	S	NS

**Cont...**

Fertility levels	Genotypes	Insect (FAW) damage (%)	Disease MLB (1-9)	Disease TLB (1-9)	Grain uptake (kg/ha)		
					N	P	K
					Godhara		
100% RDF	ALPQH 1	2.67	2.00	2.33	63.1	12.4	16.9
	HQPM 1 (C)	4.67	1.33	1.33	61.4	12.0	16.4
	APTQH 1	6.00	2.67	1.67	50.9	10.3	14.5
	APQH 4	5.33	2.67	2.67	51.4	10.3	14.6
	HQPM 4 (C)	3.33	1.33	1.67	55.6	11.0	15.5
	IQPMH 2012	5.33	2.33	1.33	59.0	11.2	15.7
	HQPM 5 (C)	4.67	2.67	3.00	59.5	11.8	16.1
125% RDF	ALPQH 1	4.67	2.67	1.67	76.2	14.3	19.9
	HQPM 1 (C)	4.67	1.67	1.67	74.1	13.8	18.8
	APTQH 1	3.33	2.00	2.67	61.6	11.9	16.6
	APQH 4	4.00	2.67	2.00	62.2	11.9	16.8
	HQPM 4 (C)	2.67	1.67	2.00	67.3	12.7	17.9
	IQPMH 2012	3.33	2.33	3.00	71.3	12.9	18.1
	HQPM 5 (C)	5.33	2.00	1.33	72.0	13.6	18.5
150% RDF	ALPQH 1	5.33	2.67	2.00	79.4	15.0	20.5
	HQPM 1 (C)	4.67	3.33	2.00	77.0	14.4	19.6
	APTQH 1	3.33	1.67	1.67	64.1	12.3	17.3
	APQH 4	4.67	2.33	2.00	64.7	12.4	17.5
	HQPM 4 (C)	4.00	3.00	2.33	69.9	13.2	18.6
	IQPMH 2012	6.00	1.67	1.33	74.2	13.4	18.8
	HQPM 5 (C)	3.33	2.00	1.67	75.0	14.1	19.3
Location mean		4.35	2.22	1.97	66.2	12.6	17.5
C.D.(5%) AiBj-AiBk		3.33	1.45	1.39	8.5	1.5	1.9
C.D.(5%) AiBk-AjBk		3.33	1.46	1.51	9.6	1.8	2.0
F(5%)		NS	NS	NS	NS	NS	NS
100% RDF		4.57	2.14	2.00	57.3	11.3	15.7
125% RDF		4.00	2.14	2.05	69.2	13.0	18.1
150% RDF		4.48	2.38	1.86	72.0	13.5	18.8
C.D. (5%) Ai-Aj		1.31	0.59	0.80	5.7	1.1	1.0
C.V. (%) Error A		35.2	30.8	47.5	10.0	9.9	6.8
F (5%)		NS	NS	NS	S	S	S
ALPQH 1		4.22	2.44	2.00	72.9	13.9	19.1
HQPM 1 (C)		4.67	2.11	1.67	70.8	13.4	18.3
APTQH 1		4.22	2.11	2.00	58.9	11.5	16.1
APQH 4		4.67	2.56	2.22	59.4	11.5	16.3
HQPM 4 (C)		3.33	2.00	2.00	64.3	12.3	17.3
IQPMH 2012		4.89	2.11	1.89	68.2	12.5	17.6
HQPM 5 (C)		4.44	2.22	2.00	68.8	13.2	18.0
C.D. (5%) Bi-Bj		1.92	0.84	0.81	4.9	0.9	1.1
C.V. (%) Error B		46.2	39.5	42.8	7.7	7.4	6.6
F (5%)		NS	NS	NS	S	S	S

# A-69

**Table 14: Performance of pre release genotypes of OPV maturity under varying nutrient levels in Northern Hill Zone (NHZ).**

Fertility levels	Genotypes	Grain yield (kg/ha)		NHZ (mean)	Stover yield (kg/ha)		Plants ('000/ha)	
		Bajaura	Imphal		Bajaura	Imphal	Bajaura	Imphal
100% RDF	ADC 3	6221	5053	<b>5637</b>	11141	10052	74.7	53.8
	Vijay (C)	4385	7006	<b>5696</b>	10770	13497	83.0	60.6
125% RDF	ADC 3	7406	5682	<b>6544</b>	12798	11660	76.0	57.6
	Vijay (C)	5285	6148	<b>5717</b>	11476	12755	80.7	60.2
150% RDF	ADC 3	7887	5226	<b>6557</b>	12935	10881	74.7	55.3
	Vijay (C)	5970	7079	<b>6524</b>	11094	14237	82.3	59.3

Location mean	6192.3	6032.3	6112.3	11702.2	12180.2	78.6	57.8
C.D.(5%) AiBj-AiBk	1058.0	1362.9	1210.5	1652.1	3326.1	2.8	6.7
C.D.(5%) AiBk-AjBk	1152.3	1368.0	1260.1	1823.8	2478.6	3.9	6.9
F(5%)	NS	NS	-	NS	NS	NS	NS

100% RDF	5303	6030	<b>5666</b>	10955	11774	78.8	57.2
125% RDF	6345	5915	<b>6130</b>	12137	12207	78.3	58.9
150% RDF	6929	6152	<b>6540</b>	12015	12559	78.5	57.3

C.D. (5%) Ai-Aj	879.4	974.7	927.0	1405.1	787.4	3.3	5.1
C.V. (%) Error A	8.9	10.1	9.5	7.5	4.0	2.6	5.5
F (5%)	S	NS	S	NS	NS	NS	NS

ADC 3	7171	5320	<b>6246</b>	12291	10864	75.1	55.6
Vijay (C)	5213	6744	<b>5979</b>	11113	13496	82.0	60.0

C.D. (5%) Bi-Bj	610.8	786.9	698.9	953.9	1920.4	1.6	3.9
C.V. (%) Error B	8.6	11.3	9.9	7.1	13.7	1.8	5.8
F (5%)	S	S	NS	S	S	S	S

Cont...

# A-70

Fertility levels	Genotypes	Cobs ('000/ha)		Plant height (cm)		Days to 50% tasseling		Days to 50% silking	
		Bajaura	Imphal	Bajaura	Imphal	Bajaura	Imphal	Bajaura	Imphal
100% RDF	ADC 3	74.0	57.2	187.1	244.0	59.7	51.3	62.0	53.7
	Vijay (C)	82.3	64.2	200.6	281.7	56.3	55.3	59.0	57.3
125% RDF	ADC 3	75.0	58.0	189.0	237.3	58.0	52.7	60.3	55.0
	Vijay (C)	81.0	62.5	203.3	263.3	56.7	55.3	59.3	41.0
150% RDF	ADC 3	74.3	57.3	192.7	245.7	57.0	51.0	59.3	53.7
	Vijay (C)	81.3	64.0	212.2	280.7	55.3	56.0	58.0	58.0

Location mean	78.0	60.5	197.5	258.8	57.2	53.6	59.7	53.1
C.D.(5%) AiBj-AiBk	2.4	9.9	18.9	25.6	1.8	2.4	1.7	24.1
C.D.(5%) AiBk-AjBk	3.7	8.7	20.5	25.4	1.4	4.2	1.4	24.7
F(5%)	NS	NS	NS	NS	NS	NS	NS	NS

100% RDF	78.2	60.7	193.9	262.8	58.0	53.3	60.5	55.5
125% RDF	78.0	60.2	196.2	250.3	57.3	54.0	59.8	48.0
150% RDF	77.8	60.7	202.5	263.2	56.2	53.5	58.7	55.8

C.D. (5%) Ai-Aj	3.3	5.2	15.5	18.0	0.7	3.9	0.7	18.0
C.V. (%) Error A	2.7	5.4	4.9	4.3	0.7	4.5	0.7	21.1
F (5%)	NS	NS	NS	NS	S	NS	S	NS

ADC 3	74.4	57.5	189.6	242.3	58.2	51.7	60.6	54.1
Vijay (C)	81.6	63.6	205.4	275.2	56.1	55.6	58.8	52.1

C.D. (5%) Bi-Bj	1.4	5.7	10.9	14.8	1.1	1.4	1.0	13.9
C.V. (%) Error B	1.5	8.2	4.8	4.9	1.6	2.2	1.4	22.7
F (5%)	S	S	S	S	S	S	S	NS

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**A-71**

Fertility levels	Genotypes	100-seed weight (g)		Net returns (Rs./ha)		B:C Ratio		Cob length (cm)	Gob girth (cm)	Grain rows/cob	Grains/row
		Bajaura	Imphal	Bajaura	Imphal	Bajaura	Imphal	Imphal			
100% RDF	ADC 3	26.3	33.1	59086	63275	1.63	2.34	16.1	13.1	12.7	30.3
	Vijay (C)	24.7	31.3	19802	105816	1.21	3.23	18.9	15.2	14.8	39.3
125% RDF	ADC 3	31.3	33.7	84935	74792	1.88	2.50	16.3	13.2	13.1	37.3
	Vijay (C)	24.7	30.7	37744	85093	1.39	2.71	18.9	15.1	14.7	43.0
150% RDF	ADC 3	31.3	33.4	92962	62542	1.94	2.20	17.4	13.7	12.9	32.3
	Vijay (C)	25.3	32.0	49015	102949	1.50	2.98	18.5	14.8	14.6	38.3

[illegible]

100% RDF	25.5	32.2	39444	84545	1.42	2.79	17.5	14.1	13.7	34.8
125% RDF	28.0	32.2	61340	79942	1.64	2.61	17.6	14.2	13.9	40.2
150% RDF	28.3	32.7	70988	82745	1.72	2.59	18.0	14.3	13.8	35.3

C.D. (5%) Ai-Aj	2.6	1.1	17006.8	20196.7	0.17	0.43	2.3	2.7	1.6	2.8
C.V. (%) Error A	5.9	2.2	18.5	15.3	6.9	10.0	7.9	11.7	7.4	4.7
F (5%)	NS	NS	S	NS	S	NS	NS	NS	NS	S

ADC 3	29.7	33.4	78994	66870	1.82	2.35	16.6	13.3	12.9	33.3
Vijay (C)	24.9	31.3	35520	97952	1.37	2.97	18.8	15.0	14.7	40.2

[illegible]

**Table 15: Performance of pre release genotypes of sweet corn under varying nutrient levels in North West Plain Zone (NWPZ).**

Fertility levels	Genotypes	Green cob yield (kg/ha)		NWPZ (mean)	Green fodder yield (kg/ha)		Plants ('000/ha)		Cobs ('000/ha)	
		Karnal	Ludhiana		Karnal	Ludhiana	Karnal	Ludhiana	Karnal	Ludhiana
100% RDF	APSKH 1	15467	12465	<b>13966</b>	19542	18698	63.5	81.9	62.2	79.5
	ASK 4 (C)	5479	7708	<b>6594</b>	6800	11563	19.8	49.3	18.8	46.2
125% RDF	APSKH 1	15840	14826	<b>15333</b>	20141	24019	61.5	82.3	60.4	79.9
	ASK 4 (C)	5671	10174	<b>7922</b>	7099	15769	23.3	46.9	22.2	43.8
150% RDF	APSKH 1	16068	15243	<b>15655</b>	20363	25151	62.5	83.0	61.5	80.9
	ASK 4 (C)	5774	10972	<b>8373</b>	7544	17446	21.5	47.2	20.8	44.8

Location mean	10716.3	11898.1	11307.2	13581.5	18774.2	42.0	65.1	41.0	62.5
C.D.(5%) AiBj-AiBk	117.5	2802.1	1459.8	161.3	3708.0	3.9	2.9	3.8	4.0
C.D.(5%) AiBk-AjBk	126.5	2626.3	1376.4	166.3	3458.6	3.8	3.4	3.8	4.2
F(5%)	S	NS	-	S	NS	NS	NS	NS	NS

100% RDF	10473	10087	<b>10280</b>	13171	15130	41.7	65.6	40.5	62.8
125% RDF	10755	12500	<b>11628</b>	13620	19894	42.4	64.6	41.3	61.8
150% RDF	10921	13108	<b>12014</b>	13954	21298	42.0	65.1	41.1	62.8

C.D. (5%) Ai-Aj	95.6	1731.4	913.5	121.5	2265.5	2.6	2.7	2.7	3.2
C.V. (%) Error A	0.6	9.1	4.8	0.6	7.5	3.9	2.6	4.2	3.2
F (5%)	S	S	S	S	S	NS	NS	NS	NS

APSKH 1	15791	14178	<b>14985</b>	20015	22623	62.5	82.4	61.3	80.1
ASK 4 (C)	5641	9618	<b>7630</b>	7148	14926	21.5	47.8	20.6	44.9

C.D. (5%) Bi-Bj	67.9	1617.8	842.8	93.1	2140.8	2.2	1.7	2.2	2.3
C.V. (%) Error B	0.5	11.8	6.2	0.6	9.9	4.6	2.2	4.6	3.2
F (5%)	S	S	S	S	S	S	S	S	S

Cont...



# A-73

Fertility levels	Genotypes	Plant height (cm)		Days to 50% tasseling		Days to 50% silking		Net returns (Rs./ha)		B:C ratio	
		Karnal	Ludhiana	Karnal	Ludhiana	Karnal	Ludhiana	Karnal	Ludhiana	Karnal	Ludhiana
100% RDF	APSKH 1	194.7	190.0	48.0	58.0	50.0	61.0	123657	63082	2.85	1.35
	ASK 4 (C)	201.0	189.3	50.3	57.3	52.3	60.3	5299	21221	1.08	0.46
125% RDF	APSKH 1	201.7	199.0	47.7	57.7	49.7	60.0	126246	84295	2.83	1.74
	ASK 4 (C)	205.3	190.0	50.0	56.7	52.0	59.0	5744	41826	1.09	0.87
150% RDF	APSKH 1	204.7	200.0	47.3	57.3	49.3	59.3	127118	86867	2.80	1.74
	ASK 4 (C)	208.7	196.3	49.3	56.3	51.3	58.3	5139	47725	1.07	0.95

Location mean	202.7	194.1	48.8	57.2	50.8	59.7	65533.7	57502.4	1.95	1.19
C.D.(5%) AiBj-AiBk	1.3	25.8	1.3	2.1	1.3	2.1	1392.7	23966.1	0.02	0.49
C.D.(5%) AiBk-AjBk	1.0	22.1	1.1	3.1	1.1	3.5	1498.5	22374.4	0.02	0.46
F(5%)	S	NS	NS	NS	NS	NS	S	NS	S	NS

100% RDF	197.8	189.7	49.2	57.7	51.2	60.7	64478	42151	1.96	0.90
125% RDF	203.5	194.5	48.8	57.2	50.8	59.5	65995	63060	1.96	1.31
150% RDF	206.7	198.2	48.3	56.8	50.3	58.8	66128	67296	1.94	1.35

C.D. (5%) Ai-Aj	0.5	12.5	0.6	2.7	0.6	3.1	1133.4	14674.4	0.02	0.31
C.V. (%) Error A	0.1	4.0	0.8	3.0	0.7	3.3	1.1	15.9	0.5	16.1
F (5%)	S	NS	S	NS	S	NS	S	S	S	S

APSKH 1	200.3	196.3	47.7	57.7	49.7	60.1	125674	78081	2.83	1.61
ASK 4 (C)	205.0	191.9	49.9	56.8	51.9	59.2	5394	36924	1.08	0.76

C.D. (5%) Bi-Bj	0.8	14.9	0.8	1.2	0.8	1.2	804.1	13836.8	0.01	0.28
C.V. (%) Error B	0.3	6.7	1.4	1.8	1.3	1.7	1.1	20.9	0.4	20.6
F (5%)	S	NS	S	NS	S	NS	S	S	S	S

**Table 16: Performance of pre release genotypes of sweet corn under varying nutrient levels in North East Plain Zone (NEPZ).**

Fertility levels	Genotypes	Green cob yield (kg/ha)		NEPZ (mean)	Green fodder yield (kg/ha)		Plants ('000/ha)	
		Kalyani	Ranchi		Kalyani	Ranchi	Kalyani	Ranchi
100% RDF	APSKH 1	9869	13062	<b>11465</b>	11603	21272	80.0	68.6
	ASKH 4 (C)	7627	12600	<b>10113</b>	9567	21650	77.0	68.1
125% RDF	APSKH 1	11574	15143	<b>13359</b>	13332	23101	81.0	67.9
	ASKH 4 (C)	8922	14581	<b>11752</b>	11000	23515	77.7	68.1
150% RDF	APSKH 1	11580	16200	<b>13890</b>	13434	24019	82.7	68.3
	ASKH 4 (C)	10080	15438	<b>12759</b>	11981	24575	80.0	69.0

Location mean	9941.9	14504.0	12223.0	11819.6	23021.8	79.7	68.3
C.D.(5%) AiBj-AiBk	2029.1	2365.7	2197.4	1891.4	2009.6	2.8	5.9
C.D.(5%) AiBk-AjBk	1525.5	2524.4	2025.0	1412.3	4100.6	2.1	6.2
F(5%)	NS	NS	S	NS	NS	NS	NS

100% RDF	8748	12831	<b>10789</b>	10585	21461	78.5	68.3
125% RDF	10248	14862	<b>12555</b>	12166	23308	79.3	68.0
150% RDF	10830	15819	<b>13324</b>	12708	24297	81.4	68.7

C.D. (5%) Ai-Aj	521.5	1893.2	1207.3	456.6	3848.0	0.7	4.7
C.V. (%) Error A	3.3	10.7	7.0	2.4	13.7	0.6	5.6
F (5%)	S	S	S	S	NS	S	NS

APSKH 1	11008	14802	<b>12905</b>	12790	22797	81.2	68.3
ASKH 4 (C)	8876	14206	<b>11541</b>	10849	23246	78.2	68.4

C.D. (5%) Bi-Bj	1171.5	1365.9	1268.7	1092.0	1160.2	1.6	3.4
C.V. (%) Error B	10.2	10.2	10.2	8.0	5.5	1.8	5.4
F (5%)	S	NS	-	S	NS	S	NS

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# A-75

Fertility levels	Genotypes	Cobs ('000/ha)		Plant height (cm)		Days to 50% tasseling	
		Kalyani	Ranchi	Kalyani	Ranchi	Kalyani	Ranchi
100% RDF	APSKH 1	79.7	66.9	214.0	182.4	51.7	51.3
	ASKH 4 (C)	76.7	66.7	173.3	191.6	51.3	51.3
125% RDF	APSKH 1	80.7	67.6	235.7	189.0	51.0	50.5
	ASKH 4 (C)	77.7	67.9	190.3	203.2	51.0	50.5
150% RDF	APSKH 1	82.7	68.3	253.7	201.2	51.0	49.8
	ASKH 4 (C)	79.7	68.8	203.7	203.2	51.0	50.8

Location mean	79.5	67.7	211.8	195.1	51.2	50.7
C.D.(5%) AiBj-AiBk	3.6	4.7	25.2	19.1	1.9	2.1
C.D.(5%) AiBk-AjBk	2.7	6.1	30.4	18.2	2.6	1.5
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	78.2	66.8	193.7	187.0	51.5	51.3
125% RDF	79.2	67.7	213.0	196.1	51.0	50.5
150% RDF	81.2	68.6	228.7	202.2	51.0	50.3

C.D. (5%) Ai-Aj	0.7	5.1	24.7	12.3	2.2	0.5
C.V. (%) Error A	0.5	6.2	7.3	5.1	2.7	0.8
F (5%)	S	NS	S	NS	NS	S

APSKH 1	81.0	67.6	234.4	190.9	51.2	50.5
ASKH 4 (C)	78.0	67.8	189.1	199.3	51.1	50.8

C.D. (5%) Bi-Bj	2.1	2.7	14.6	11.0	1.1	1.2
C.V. (%) Error B	2.3	4.3	6.0	6.1	1.8	2.5
F (5%)	S	NS	S	NS	NS	NS

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## A-76

Fertility levels	Genotypes	Days to 50% silking		Net returns (Rs./ha)		B:C ratio	
		Kalyani	Ranchi	Kalyani	Ranchi	Kalyani	Ranchi
100% RDF	APSKH 1	54.3	55.8	453655	155432	8.20	2.69
	ASKH 4 (C)	53.3	56.0	337468	148117	6.36	2.56
125% RDF	APSKH 1	53.0	55.0	540381	187162	9.31	3.13
	ASKH 4 (C)	53.0	54.8	403117	178254	7.20	2.98
150% RDF	APSKH 1	53.3	53.5	537852	202328	8.91	3.28
	ASKH 4 (C)	53.0	54.5	459945	190249	7.76	3.08

Location mean	53.3	54.9	455403.0	176923.9	7.96	2.96
C.D.(5%) AiBj-AiBk	2.1	2.5	105200.3	38104.0	1.65	0.64
C.D.(5%) AiBk-AjBk	2.5	1.8	79062.7	40823.1	1.24	0.68
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	53.8	55.9	395562	151775	7.28	2.63
125% RDF	53.0	54.9	471749	182708	8.26	3.06
150% RDF	53.2	54.0	498898	196289	8.34	3.18

C.D. (5%) Ai-Aj	2.1	0.4	26955.9	30710.3	0.42	0.51
C.V. (%) Error A	2.4	0.6	3.7	14.2	3.3	14.2
F (5%)	NS	S	S	S	S	NS

APSKH 1	53.6	54.8	510629	181641	8.81	3.03
ASKH 4 (C)	53.1	55.1	400177	172207	7.11	2.88

C.D. (5%) Bi-Bj	1.2	1.4	60737.4	21999.3	0.95	0.37
C.V. (%) Error B	1.9	2.8	11.6	13.5	10.4	13.5
F (5%)	NS	NS	S	NS	S	NS

**Table 17: Performance of pre release genotypes of sweet corn under varying nutrient levels in Peninsular Zone (PZ).**

Fertility levels	Genotypes	Green cob yield (kg/ha)			PZ (mean)	Green fodder yield (kg/ha)		
		Coimbatore	Dharwad	Hyderabad		Coimbatore	Dharwad	Hyderabad
100% RDF	APSKH 1	10325	12680	10446	<b>11150</b>	15677	16661	11517
	ASKH 4 (C)	5332	11609	10668	<b>9203</b>	6824	15877	11843
125% RDF	APSKH 1	12251	12509	10642	<b>11801</b>	14396	16087	11748
	ASKH 4 (C)	4621	12897	11296	<b>9604</b>	5367	18687	12471
150% RDF	APSKH 1	12877	12207	10642	<b>11909</b>	14505	17821	11972
	ASKH 4 (C)	6936	12820	12494	<b>10750</b>	8474	18053	13650

Location mean	8723.7	12453.6	11031.3	10736.2	10873.7	17197.7	12200.1
C.D.(5%) AiBj-AiBk	3572.5	2295.8	995.5	2288.0	4706.2	3232.8	633.4
C.D.(5%) AiBk-AjBk	4776.8	2283.2	2010.0	3023.3	6055.1	2675.0	1871.5
F(5%)	NS	NS	NS	-	NS	NS	S

100% RDF	7829	12144	10557	<b>10177</b>	11251	16269	11680
125% RDF	8436	12703	10969	<b>10703</b>	9881	17387	12110
150% RDF	9907	12513	11568	<b>11329</b>	11489	17937	12811

C.D. (5%) Ai-Aj	4057.8	1611.9	1884.8	2518.1	5063.5	1396.9	1818.1
C.V. (%) Error A	38.0	8.1	10.7	18.9	38.1	5.1	9.3
F (5%)	NS	NS	NS	NS	NS	NS	NS

APSKH 1	11818	12465	10577	<b>11620</b>	14859	16856	11746
ASKH 4 (C)	5630	12442	11486	<b>9852</b>	6888	17539	12655

C.D. (5%) Bi-Bj	2062.6	1325.5	574.8	1321.0	2717.1	1866.4	365.7
C.V. (%) Error B	25.6	9.2	4.5	13.1	27.1	9.4	2.6
F (5%)	S	NS	S	S	S	NS	S

Cont...

# A-78

Fertility levels	Genotypes	Plants ('000/ha)			Cobs ('000/ha)			Plant height (cm)		
		Coimbatore	Dharwad	Hyderabad	Coimbatore	Dharwad	Hyderabad	Coimbatore	Dharwad	Hyderabad
100% RDF	APSKH 1	53.9	53.4	75.7	55.8	53.3	74.3	134.5	199.4	138.0
	ASKH 4 (C)	22.7	53.3	73.9	25.5	52.9	73.3	139.6	205.4	143.6
125% RDF	APSKH 1	57.8	53.7	74.4	64.5	53.6	73.5	143.9	192.5	140.9
	ASKH 4 (C)	18.5	53.6	75.6	21.8	53.2	75.0	137.5	198.5	145.0
150% RDF	APSKH 1	55.7	53.9	72.8	56.3	53.1	72.0	148.3	201.2	139.4
	ASKH 4 (C)	35.7	53.7	75.8	46.0	53.2	74.6	152.3	202.5	148.1

Location mean	40.7	53.6	74.7	45.0	53.2	73.8	142.7	199.9	142.5
C.D.(5%) AiBj-AiBk	17.1	1.0	3.9	17.1	1.6	3.2	19.5	32.8	12.8
C.D.(5%) AiBk-AjBk	22.7	0.8	4.7	20.1	1.2	4.8	19.7	25.5	11.5
F(5%)	NS	NS	NS	S	NS	NS	NS	NS	NS

100% RDF	38.3	53.4	74.8	40.6	53.1	73.8	137.0	202.4	140.8
125% RDF	38.2	53.7	75.0	43.1	53.4	74.3	140.7	195.5	143.0
150% RDF	45.7	53.8	74.3	51.1	53.2	73.3	150.3	201.8	143.7

C.D. (5%) Ai-Aj	19.2	0.5	3.7	16.2	0.4	4.2	14.1	10.7	7.1
C.V. (%) Error A	38.6	0.6	3.1	29.4	0.5	3.6	8.1	3.3	3.1
F (5%)	NS	NS	NS	NS	NS	NS	NS	NS	NS

APSKH 1	55.8	53.7	74.3	58.8	53.3	73.3	142.3	197.7	139.5
ASKH 4 (C)	25.6	53.5	75.1	31.1	53.1	74.3	143.1	202.1	145.6

C.D. (5%) Bi-Bj	9.9	0.6	2.3	9.8	1.0	1.8	11.3	19.0	7.4
C.V. (%) Error B	26.2	0.9	2.6	23.7	1.5	2.1	8.6	8.2	4.5
F (5%)	S	NS	NS	S	NS	NS	NS	NS	NS

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# A-79

Fertility levels	Genotypes	Days to 50% tasseling			Days to 50% silking			100-seed weight (g)	FAW incidence (%)
		Coimbatore	Dharwad	Hyderabad	Coimbatore	Dharwad	Hyderabad	Hyderabad	Dharwad
100% RDF	APSKH 1	49.5	49.7	60.0	51.5	54.0	63.0	36.5	3.33
	ASKH 4 (C)	50.0	49.3	61.0	52.0	54.0	63.7	38.6	2.67
125% RDF	APSKH 1	48.0	45.0	61.0	49.5	49.7	64.0	37.8	4.00
	ASKH 4 (C)	50.8	45.7	60.0	52.8	50.3	63.0	42.9	3.67
150% RDF	APSKH 1	47.5	48.7	60.7	49.5	54.7	63.7	38.1	3.33
	ASKH 4 (C)	51.0	48.7	61.0	53.0	54.7	64.0	44.5	3.00

Location mean	49.5	47.8	60.6	51.4	52.9	63.6	39.8	3.33
C.D.(5%) AiBj-AiBk	2.1	1.8	2.7	2.0	2.2	2.5	9.8	2.31
C.D.(5%) AiBk-AjBk	1.7	4.3	2.9	1.6	4.0	2.8	8.9	2.59
F(5%)	NS	NS	NS	NS	NS	NS	NS	NS

100% RDF	49.8	49.5	60.5	51.8	54.0	63.3	37.6	3.00
125% RDF	49.4	45.3	60.5	51.1	50.0	63.5	40.4	3.83
150% RDF	49.3	48.7	60.8	51.3	54.7	63.8	41.3	3.17

C.D. (5%) Ai-Aj	0.7	4.1	2.1	0.7	3.7	2.2	5.7	2.02
C.V. (%) Error A	1.2	5.4	2.2	1.1	4.4	2.2	8.9	37.7
F (5%)	NS	NS	NS	NS	S	NS	NS	NS

APSKH 1	48.3	47.8	60.6	50.2	52.8	63.6	37.5	3.56
ASKH 4 (C)	50.6	47.9	60.7	52.6	53.0	63.6	42.0	3.11

C.D. (5%) Bi-Bj	1.2	1.0	1.6	1.2	1.3	1.5	5.6	1.33
C.V. (%) Error B	2.6	1.8	2.3	2.5	2.1	2.0	12.3	34.6
F (5%)	S	NS	NS	S	NS	NS	NS	NS

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# A-80

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C ratio		
		Coimbatore	Dharwad	Hyderabad	Coimbatore	Dharwad	Hyderabad
100% RDF	APSKH 1	191800	251854	133627	3.2	4.87	2.54
	ASKH 4 (C)	40550	225064	138399	1.5	4.45	2.59
125% RDF	APSKH 1	233420	245427	134996	3.6	4.65	2.51
	ASKH 4 (C)	19670	255117	148798	1.2	4.79	2.66
150% RDF	APSKH 1	190000	235723	133246	3.1	4.39	2.46
	ASKH 4 (C)	138750	251050	171961	2.5	4.61	2.88

Location mean	135698.3	244039.0	143504.2	2.5	4.63	2.61
C.D.(5%) AiBj-AiBk	85268.9	57394.8	20396.8	0.9	0.86	0.23
C.D.(5%) AiBk-AjBk	100742.5	57079.0	42019.9	1.1	0.84	0.47
F(5%)	S	NS	NS	S	NS	NS

100% RDF	116175	238459	136013	2.3	4.66	2.57
125% RDF	126545	250272	141897	2.4	4.72	2.58
150% RDF	164375	243386	152603	2.8	4.50	2.67

C.D. (5%) Ai-Aj	80798.4	40297.0	39507.8	0.9	0.58	0.44
C.V. (%) Error A	48.7	10.3	17.2	29.9	7.9	10.5
F (5%)	NS	NS	NS	NS	NS	NS

APSKH 1	205073	244335	133956	3.3	4.64	2.50
ASKH 4 (C)	66323	243743	153052	1.7	4.62	2.71

C.D. (5%) Bi-Bj	49230.0	33136.9	11776.1	0.5	0.50	0.13
C.V. (%) Error B	39.3	11.8	7.1	23.5	9.3	4.4
F (5%)	S	NS	S	S	NS	S

Cont...



# A-81

Fertility levels	Genotypes	Cob length (cm)		Cob girth (cm)		Grain rows/cob	Grains/row	TSS (%)	
		Coimbatore	Hyderabad	Coimbatore	Hyderabad	Hyderabad	Hyderabad	Coimbatore	Dharwad
100% RDF	APSKH 1	20.2	16.3	14.3	14.1	12.1	28.2	13.8	11.9
	ASKH 4 (C)	19.7	17.1	14.4	14.9	14.5	33.1	13.9	15.0
125% RDF	APSKH 1	19.7	16.6	14.5	14.7	12.9	32.5	14.8	11.8
	ASKH 4 (C)	20.9	17.3	14.8	15.0	14.9	36.7	14.5	12.1
150% RDF	APSKH 1	19.8	16.8	14.6	14.8	13.6	32.5	14.5	12.3
	ASKH 4 (C)	20.2	17.4	14.3	15.1	15.1	38.7	15.4	14.7

Location mean	20.1	16.9	14.5	14.8	13.8	33.6	14.5	12.9
C.D.(5%) AiBj-AiBk	1.9	1.6	0.9	1.8	1.8	5.3	1.4	0.4
C.D.(5%) AiBk-AjBk	2.1	1.8	0.7	1.8	3.1	7.6	1.8	0.9
F(5%)	NS	NS	NS	NS	NS	NS	NS	S

100% RDF	19.9	16.7	14.4	14.5	13.3	30.6	13.8	13.4
125% RDF	20.3	17.0	14.7	14.8	13.9	34.6	14.7	11.9
150% RDF	20.0	17.1	14.5	15.0	14.3	35.6	14.9	13.5

C.D. (5%) Ai-Aj	1.6	1.4	0.3	1.3	2.9	6.6	1.5	0.8
C.V. (%) Error A	6.5	5.1	1.8	5.7	12.9	12.2	8.7	4.0
F (5%)	NS	NS	NS	NS	NS	NS	NS	S

APSKH 1	19.9	16.6	14.5	14.5	12.9	31.1	14.4	12.0
ASKH 4 (C)	20.3	17.3	14.5	15.0	14.8	36.1	14.6	13.9

C.D. (5%) Bi-Bj	1.1	0.9	0.5	1.0	1.0	3.0	0.8	0.3
C.V. (%) Error B	5.9	4.8	3.9	6.0	6.4	7.8	6.2	1.7
F (5%)	NS	NS	NS	NS	S	S	NS	S

**Table 18: Performance of pre release genotypes of sweet corn under varying nutrient levels in Central West Zone (CWZ).**

Fertility levels	Genotypes	Green cob yield (kg/ha)		CWZ (mean)	Green fodder yield (kg/ha)		Plants ('000/ha)		Cobs ('000/ha)
		Ambikapur	Banswara		Ambikapur	Banswara	Ambikapur	Banswara	
100% RDF	APSKH 1	12345	10669	<b>11507</b>	18398	15620	79.9	64.0	67.3
	ASKH 4 (C)	15079	9265	<b>12172</b>	22512	11400	78.7	60.7	63.4
125% RDF	APSKH 1	15221	11311	<b>13266</b>	22297	16234	78.0	65.0	68.4
	ASKH 4 (C)	18166	10551	<b>14358</b>	24241	12503	80.7	63.0	66.5
150% RDF	APSKH 1	17029	11796	<b>14412</b>	24903	16844	77.9	65.3	69.1
	ASKH 4 (C)	18162	10730	<b>14446</b>	26584	12619	78.9	63.3	66.4

Location mean	16000.2	10720.4	13360.3	23155.8	14203.3	79.0	63.6	66.9
C.D.(5%) AiBj-AiBk	3702.7	1754.1	2728.4	6581.0	2471.9	3.2	3.1	3.2
C.D.(5%) AiBk-AjBk	4305.7	2200.6	3253.2	5716.9	3070.5	4.1	3.0	3.2
F(5%)	NS	NS	-	NS	NS	NS	NS	NS

100% RDF	13712	9967	<b>11840</b>	20455	13510	79.3	62.3	65.3
125% RDF	16694	10931	<b>13812</b>	23269	14368	79.3	64.0	67.5
150% RDF	17595	11263	<b>14429</b>	25743	14732	78.4	64.3	67.7

C.D. (5%) Ai-Aj	3428.6	1822.5	2625.6	3337.6	2531.2	3.5	2.1	2.2
C.V. (%) Error A	13.4	10.6	12.0	9.0	11.1	2.8	2.1	2.1
F (5%)	NS	NS	NS	S	NS	NS	NS	NS

APSKH 1	14865	11259	<b>13062</b>	21866	16233	78.6	64.8	68.3
ASKH 4 (C)	17136	10182	<b>13659</b>	24446	12174	79.4	62.3	65.4

C.D. (5%) Bi-Bj	2137.8	1012.7	1575.2	3799.6	1427.2	1.8	1.8	1.9
C.V. (%) Error B	11.6	8.2	9.9	14.2	8.7	2.0	2.4	2.4
F (5%)	S	S	NS	NS	S	NS	S	S

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# A-83

Fertility levels	Genotypes	Plant height (cm)	Days to 50% tasseling		Days to 50% silking		Net returns (Rs./ha)		B:C ratio	
		Banswara	Ambikapur	Banswara	Ambikapur	Banswara	Ambikapur	Banswara	Ambikapur	Banswara
100% RDF	APSKH 1	222.3	52.8	53.5	52.3	56.3	211478	162267	5.97	1.72
	ASKH 4 (C)	218.0	51.4	52.9	54.7	55.7	266172	134195	7.52	1.58
125% RDF	APSKH 1	233.3	52.4	54.5	51.0	57.3	268461	173583	7.47	1.80
	ASKH 4 (C)	231.7	53.1	54.0	53.7	56.8	327361	158380	9.10	1.66
150% RDF	APSKH 1	235.3	53.5	55.4	54.3	58.2	303950	181746	8.30	1.78
	ASKH 4 (C)	232.3	52.2	53.7	53.0	56.5	326610	160439	8.92	1.73

Location mean	228.8	52.6	54.0	53.2	56.8	284005.4	161768.2	7.88	1.71
C.D.(5%) AiBj-AiBk	5.9	3.6	0.9	4.1	0.9	74054.0	35081.8	2.04	0.51
C.D.(5%) AiBk-AjBk	9.4	3.8	1.7	4.6	1.7	86114.7	44011.9	2.40	0.68
F(5%)	NS	NS	NS	NS	NS	NS	NS	NS	NS

100% RDF	220.2	52.1	53.2	53.5	56.0	238825	148231	6.74	1.65
125% RDF	232.5	52.7	54.3	52.4	57.1	297911	165981	8.28	1.73
150% RDF	233.8	52.8	54.5	53.7	57.3	315280	171092	8.61	1.75

C.D. (5%) Ai-Aj	8.5	2.8	1.6	3.5	1.6	68571.5	36450.6	1.92	0.57
C.V. (%) Error A	2.3	3.3	1.9	4.2	1.8	15.1	14.1	15.2	21.0
F (5%)	S	NS	NS	NS	NS	NS	NS	NS	NS

APSKH 1	230.3	52.9	54.5	52.6	57.3	261297	172532	7.25	1.77
ASKH 4 (C)	227.3	52.2	53.5	53.8	56.3	306714	151005	8.51	1.65

C.D. (5%) Bi-Bj	3.4	2.1	0.5	2.4	0.5	42755.1	20254.5	1.18	0.30
C.V. (%) Error B	1.3	3.5	0.8	3.9	0.8	13.1	10.9	13.0	15.0
F (5%)	NS	NS	S	NS	S	S	S	S	NS

**Table 19: Performance of pre release genotypes of baby corn under varying nutrient levels in Northern Hill Zone (NHZ).**

Fertility levels	Genotypes	Baby corn yield with husk (kg/ha)			NHZ (mean)	Baby corn yield without husk (kg/ha)			NHZ (mean)
		Almora	Bajaura	Imphal		Almora	Bajaura	Imphal	
100% RDF	JH 32048	11507	7942	9644	<b>9698</b>	1873	1362	3611	<b>2282</b>
	CMVL Baby corn-2 (C)	11207	4869	7939	<b>8005</b>	1874	722	2021	<b>1539</b>
	IBH 11-227	10808	9647	8838	<b>9764</b>	1676	1810	2837	<b>2108</b>
	IMHB 1539 (C)	8626	6738	4729	<b>6698</b>	1453	1282	1458	<b>1397</b>
	IMHSB19KB-2	10160	7658	6751	<b>8190</b>	1860	1290	2244	<b>1798</b>
125% RDF	JH 32048	11882	8348	7508	<b>9246</b>	2012	1381	2728	<b>2040</b>
	CMVL Baby corn-2 (C)	11339	5785	5747	<b>7624</b>	1619	881	1985	<b>1495</b>
	IBH 11-227	11210	9647	6786	<b>9214</b>	1756	1839	1926	<b>1840</b>
	IMHB 1539 (C)	9704	6921	4933	<b>7186</b>	1708	1390	1532	<b>1543</b>
	IMHSB19KB-2	13606	8088	6843	<b>9512</b>	2253	1298	2670	<b>2074</b>
150% RDF	JH 32048	13138	9004	8155	<b>10099</b>	2179	1452	2875	<b>2169</b>
	CMVL Baby corn-2 (C)	12456	6895	6867	<b>8739</b>	1755	1057	2381	<b>1731</b>
	IBH 11-227	11536	9725	7818	<b>9693</b>	1884	1913	2497	<b>2098</b>
	IMHB 1539 (C)	10655	8613	6533	<b>8601</b>	1769	1637	3000	<b>2135</b>
	IMHSB19KB-2	13996	9842	6440	<b>10093</b>	2385	1845	2058	<b>2096</b>

Location mean	11455.4	7981.4	7035.5	8824.1	1870.4	1410.5	2388.2	1889.7
C.D.(5%) AiBj-AiBk	2410.6	1364.4	1483.2	1752.8	362.3	291.0	722.3	458.5
C.D.(5%) AiBk-AjBk	2424.3	1258.2	2215.4	1966.0	343.9	311.8	960.3	538.7
F(5%)	NS	NS	S	-	NS	NS	S	-

100% RDF	10462	7371	7580	<b>8471</b>	1747	1293	2434	<b>1825</b>
125% RDF	11548	7758	6364	<b>8557</b>	1870	1358	2168	<b>1799</b>
150% RDF	12356	8816	7163	<b>9445</b>	1995	1581	2562	<b>2046</b>

C.D. (5%) Ai-Aj	1141.3	316.5	1803.8	1087.2	119.0	176.3	724.6	340.0
C.V. (%) Error A	9.8	3.9	25.3	13.0	6.3	12.3	29.9	16.2
F (5%)	S	S	NS	NS	S	S	NS	-

JH 32048	12176	8431	8436	<b>9681</b>	2022	1398	3071	<b>2164</b>
CMVL Baby corn-2 (C)	11667	5850	6851	<b>8123</b>	1749	886	2129	<b>1588</b>
IBH 11-227	11185	9673	7814	<b>9557</b>	1772	1854	2420	<b>2015</b>
IMHB 1539 (C)	9662	7424	5399	<b>7495</b>	1643	1436	1996	<b>1692</b>
IMHSB19KB-2	12587	8529	6678	<b>9265</b>	2166	1478	2324	<b>1989</b>

C.D. (5%) Bi-Bj	1391.8	787.8	856.3	1012.0	209.2	168.0	417.0	264.7
C.V. (%) Error B	12.5	10.1	12.5	11.7	11.5	12.2	17.9	13.9
F (5%)	S	S	S	S	S	S	S	-

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# A-85

Fertility levels	Genotypes	Green fodder yield (kg/ha)			Plants ('000/ha)		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	JH 32048	35062	19583	27642	111.1	116.7	90.0
	CMVL Baby corn-2 (C)	35432	20083	21535	111.1	123.7	84.0
	IBH 11-227	31852	21917	24068	111.1	122.7	88.6
	IMHB 1539 (C)	25062	18000	17471	111.1	124.3	81.9
	IMHSB19KB-2	36420	24000	22724	111.1	123.7	84.9
125% RDF	JH 32048	32716	20066	29465	111.1	118.0	89.8
	CMVL Baby corn-2 (C)	34444	19417	24281	111.1	122.7	81.8
	IBH 11-227	38148	22833	23686	111.1	125.0	83.4
	IMHB 1539 (C)	37407	19350	21329	110.4	125.0	80.9
	IMHSB19KB-2	41975	25000	24490	111.1	122.0	85.1
150% RDF	JH 32048	37284	20166	29368	111.1	117.0	89.3
	CMVL Baby corn-2 (C)	38395	20667	24385	110.4	121.3	84.4
	IBH 11-227	39136	22417	24333	111.1	124.3	85.4
	IMHB 1539 (C)	37778	19500	23671	111.1	123.7	81.8
	IMHSB19KB-2	40123	25000	24757	111.1	122.0	84.5

Location mean	36082.3	21199.9	24213.6	111.0	122.1	85.1
C.D.(5%) AiBj-AiBk	8311.7	1764.4	2776.3	0.7	3.2	8.2
C.D.(5%) AiBk-AjBk	10224.7	2099.8	2722.5	0.8	3.4	8.3
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	32765	20717	22688	111.1	122.2	85.9
125% RDF	36938	21333	24650	111.0	122.5	84.2
150% RDF	38543	21550	25303	111.0	121.7	85.1

C.D. (5%) Ai-Aj	7177.3	1417.8	1150.3	0.5	1.9	3.9
C.V. (%) Error A	19.6	6.6	4.7	0.4	1.6	4.5
F (5%)	NS	NS	S	NS	NS	NS

JH 32048	35021	19939	28825	111.1	117.2	89.7
CMVL Baby corn-2 (C)	36091	20056	23400	110.9	122.6	83.4
IBH 11-227	36379	22389	24029	111.1	124.0	85.8
IMHB 1539 (C)	33416	18950	20824	110.9	124.3	81.6
IMHSB19KB-2	39506	24667	23990	111.1	122.6	84.8

C.D. (5%) Bi-Bj	4798.7	1018.7	1602.9	0.4	1.8	4.7
C.V. (%) Error B	13.7	4.9	6.8	0.4	1.5	5.7
F (5%)	NS	S	S	NS	S	S

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# A-86

Fertility levels	Genotypes	Plant height (cm)			No of pickings		
		Almora	Bajaura	Imphal	Almora	Bajaura	Imphal
100% RDF	JH 32048	198.5	150.1	178.7	9.7	4.33	5.00
	CMVL Baby corn-2 (C)	186.6	152.5	162.3	14.0	5.00	5.00
	IBH 11-227	211.5	169.9	163.5	11.7	5.00	4.33
	IMHB 1539 (C)	200.6	167.9	145.9	11.7	5.33	3.33
	IMHSB19KB-2	269.2	192.7	168.6	9.3	4.00	4.67
125% RDF	JH 32048	186.8	152.9	170.2	10.0	4.67	5.00
	CMVL Baby corn-2 (C)	193.9	152.0	161.2	13.7	5.00	4.00
	IBH 11-227	218.8	171.7	158.3	11.3	5.33	4.33
	IMHB 1539 (C)	219.0	170.2	153.7	12.3	5.00	3.33
	IMHSB19KB-2	264.0	191.5	162.7	11.0	4.00	3.67
150% RDF	JH 32048	194.2	154.8	190.0	11.7	5.00	5.00
	CMVL Baby corn-2 (C)	198.1	154.5	173.8	13.7	5.33	3.33
	IBH 11-227	214.9	171.8	177.7	11.7	5.33	5.00
	IMHB 1539 (C)	207.9	175.8	165.9	12.7	6.00	3.67
	IMHSB19KB-2	261.3	199.6	169.2	11.7	4.33	4.33

Location mean	215.0	168.5	166.8	11.7	4.91	4.27
C.D.(5%) AiBj-AiBk	14.8	8.7	18.7	1.4	1.00	1.02
C.D.(5%) AiBk-AjBk	22.2	14.3	18.2	1.5	1.34	1.11
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	213.3	166.6	163.8	11.3	4.73	4.47
125% RDF	216.5	167.7	161.2	11.7	4.80	4.07
150% RDF	215.3	171.3	175.3	12.3	5.20	4.27

C.D. (5%) Ai-Aj	18.1	12.2	7.4	0.8	1.01	0.64
C.V. (%) Error A	8.3	7.1	4.4	7.0	20.2	14.8
F (5%)	NS	NS	S	NS	NS	NS

JH 32048	193.2	152.6	179.6	10.4	4.67	5.00
CMVL Baby corn-2 (C)	192.9	153.0	165.8	13.8	5.11	4.11
IBH 11-227	215.1	171.1	166.5	11.6	5.22	4.56
IMHB 1539 (C)	209.2	171.3	155.2	12.2	5.44	3.44
IMHSB19KB-2	264.8	194.6	166.8	10.7	4.11	4.22

C.D. (5%) Bi-Bj	8.6	5.0	10.8	0.8	0.58	0.6
C.V. (%) Error B	4.1	3.0	6.7	6.9	12.1	14.2
F (5%)	S	S	S	S	S	S

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# A-87

Fertility levels	Genotypes	Days to first picking		Net returns (Rs./ha)		B:C ratio	
		Bajaura	Imphal	Bajaura	Imphal	Bajaura	Imphal
100% RDF	JH 32048	57.0	51.3	67424	191892	1.76	4.66
	CMVL Baby corn-2 (C)	49.0	52.7	3924	90397	1.04	2.72
	IBH 11-227	55.3	52.3	114591	141863	2.30	3.71
	IMHB 1539 (C)	54.3	56.0	57841	52530	1.65	2.00
	IMHSB19KB-2	58.0	52.7	64674	104958	1.73	3.00
125% RDF	JH 32048	56.3	51.3	67367	138184	1.74	3.42
	CMVL Baby corn-2 (C)	49.0	54.3	16717	88448	1.18	2.61
	IBH 11-227	54.3	52.7	115967	84298	2.28	2.53
	IMHB 1539 (C)	55.3	56.0	67567	58288	1.74	2.06
	IMHSB19KB-2	58.0	53.7	64050	129761	1.71	3.36
150% RDF	JH 32048	55.3	53.0	72094	144538	1.77	3.52
	CMVL Baby corn-2 (C)	49.0	52.7	33094	109874	1.35	2.92
	IBH 11-227	54.3	54.0	120511	116799	2.29	3.04
	IMHB 1539 (C)	53.0	56.3	89928	146306	1.96	3.55
	IMHSB19KB-2	57.0	54.3	116261	90894	2.25	2.58

Location mean	54.4	53.6	71467.3	112601.9	1.79	3.05
C.D.(5%) AiBj-AiBk	2.2	3.8	29138.5	43043.6	0.32	0.78
C.D.(5%) AiBk-AjBk	3.4	3.7	31329.1	57537.6	0.35	1.02
F(5%)	NS	NS	NS	S	NS	S

100% RDF	54.7	53.0	61691	116328	1.70	3.22
125% RDF	54.6	53.6	66334	99796	1.73	2.80
150% RDF	53.7	54.1	86378	121682	1.93	3.12

C.D. (5%) Ai-Aj	2.8	1.6	17858.4	43606.9	0.19	0.77
C.V. (%) Error A	5.2	3.0	24.7	38.2	10.7	24.9
F (5%)	NS	NS	S	NS	NS	NS

JH 32048	56.2	51.9	68961	158204	1.76	3.87
CMVL Baby corn-2 (C)	49.0	53.2	17912	96240	1.19	2.75
IBH 11-227	54.7	53.0	117023	114320	2.29	3.09
IMHB 1539 (C)	54.2	56.1	71778	85708	1.79	2.54
IMHSB19KB-2	57.7	53.6	81662	108538	1.89	2.98

C.D. (5%) Bi-Bj	1.3	2.2	16823.1	24851.2	0.19	0.45
C.V. (%) Error B	2.4	4.2	24.2	22.7	10.8	15.1
F (5%)	S	S	S	S	S	S

**Table 20: Performance of pre release genotypes of baby corn under varying nutrient levels in North West Plain Zone (NWPZ).**

Fertility levels	Genotypes	Baby corn yield with husk (kg/ha)			NWPZ (mean)	Baby corn yield without husk (kg/ha)			NWPZ (mean)
		Karnal	Ludhiana	Pantnagar		Karnal	Ludhiana	Pantnagar	
100% RDF	JH 32434	7278	7670	3514	<b>6154</b>	2570	1883	778	<b>1744</b>
	CMVL 2 (C)	7020	5302	5278	<b>5867</b>	2382	1201	1181	<b>1588</b>
	ABHS4-1 (C)	7194	7444	5625	<b>6754</b>	2481	1801	1208	<b>1830</b>
	ABSHS 27	6916	4583	4361	<b>5287</b>	2203	1119	993	<b>1438</b>
	AH 7023 (C)	7144	6576	3625	<b>5782</b>	2441	1508	875	<b>1608</b>
125% RDF	JH 32434	7452	9729	4292	<b>7158</b>	2757	2379	1132	<b>2089</b>
	CMVL 2 (C)	7248	6993	7181	<b>7140</b>	2473	1691	1681	<b>1948</b>
	ABHS4-1 (C)	7349	8804	6181	<b>7445</b>	2549	2220	1444	<b>2071</b>
	ABSHS 27	7027	6153	5972	<b>6384</b>	2306	1504	1292	<b>1701</b>
	AH 7023 (C)	7279	8306	4583	<b>6723</b>	2488	1872	1153	<b>1838</b>
150% RDF	JH 32434	7666	10236	4514	<b>7472</b>	2910	2464	1208	<b>2194</b>
	CMVL 2 (C)	7435	7535	7972	<b>7647</b>	2566	1769	1938	<b>2091</b>
	ABHS4-1 (C)	7573	9253	6625	<b>7817</b>	2829	2308	1632	<b>2257</b>
	ABSHS 27	7132	6540	6306	<b>6659</b>	2413	1571	1424	<b>1802</b>
	AH 7023 (C)	7530	8295	4931	<b>6918</b>	2810	1988	1243	<b>2014</b>

Location mean	7282.8	7561.3	5397.2	6747.1	2545.2	1818.6	1278.7	1880.8
C.D.(5%) AiBj-AiBk	94.7	1161.2	682.4	646.1	92.6	256.0	237.5	195.4
C.D.(5%) AiBk-AjBk	107.1	1126.8	795.7	676.5	115.5	260.7	263.9	213.4
F(5%)	NS	NS	S	-	S	NS	NS	-

100% RDF	7110	6315	4481	<b>5969</b>	2416	1502	1007	<b>1642</b>
125% RDF	7271	7997	5642	<b>6970</b>	2515	1933	1340	<b>1929</b>
150% RDF	7467	8372	6069	<b>7303</b>	2706	2020	1489	<b>2071</b>

C.D. (5%) Ai-Aj	67.2	450.7	522.8	346.9	82.2	128.4	160.7	123.8
C.V. (%) Error A	0.9	5.9	9.6	5.4	3.2	7.0	12.4	7.5
F (5%)	S	S	S	S	S	S	S	-

JH 32434	7465	9212	4106	<b>6928</b>	2746	2242	1039	<b>2009</b>
CMVL 2 (C)	7234	6610	6810	<b>6885</b>	2474	1554	1600	<b>1876</b>
ABHS4-1 (C)	7372	8501	6144	<b>7339</b>	2620	2110	1428	<b>2053</b>
ABSHS 27	7025	5759	5546	<b>6110</b>	2307	1398	1236	<b>1647</b>
AH 7023 (C)	7318	7726	4380	<b>6474</b>	2579	1789	1090	<b>1820</b>

C.D. (5%) Bi-Bj	54.7	670.4	394.0	373.0	53.5	147.8	137.1	112.8
C.V. (%) Error B	0.8	9.1	7.5	5.8	2.2	8.4	11.0	7.2
F (5%)	S	S	S	S	S	S	S	-

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# A-89

Fertility levels	Genotypes	Green fodder yield (kg/ha)			Plants ('000/ha)			Cobs ('000/ha)
		Karnal	Ludhiana	Pantnagar	Karnal	Ludhiana	Pantnagar	Ludhiana
100% RDF	JH 32434	40804	25417	30310	106.3	80.6	135.0	195.8
	CMVL 2 (C)	41811	25694	30221	106.6	79.5	133.7	178.1
	ABHS4-1 (C)	39801	23715	24759	106.9	79.9	131.2	185.9
	ABSHS 27	42264	25799	33050	107.3	79.2	135.0	170.4
	AH 7023 (C)	40493	22951	26587	107.6	79.5	133.7	188.8
125% RDF	JH 32434	43020	28993	35237	106.9	81.3	132.5	201.3
	CMVL 2 (C)	44081	29722	31996	106.6	79.9	128.6	183.4
	ABHS4-1 (C)	41962	27326	26878	107.3	80.9	132.5	191.8
	ABSHS 27	44559	29722	35316	106.9	79.9	133.7	178.4
	AH 7023 (C)	42691	28056	29230	106.9	80.6	136.3	193.2
150% RDF	JH 32434	44947	29688	35622	106.6	81.3	132.5	204.2
	CMVL 2 (C)	46056	28785	32407	107.3	80.2	132.5	186.9
	ABHS4-1 (C)	43842	27049	28678	107.3	81.3	136.3	196.6
	ABSHS 27	46555	29410	36394	107.6	79.9	136.3	181.0
	AH 7023 (C)	44604	27708	30005	108.7	81.6	136.3	199.7

Location mean	43166.0	27335.6	31112.7	107.1	80.3	133.7	189.0
C.D.(5%) AiBj-AiBk	715.8	2879.4	4178.5	2.7	2.2	7.3	7.8
C.D.(5%) AiBk-AjBk	828.9	3346.7	4552.0	3.2	3.7	6.8	11.0
F(5%)	NS	NS	NS	NS	NS	NS	NS

100% RDF	41035	24715	28986	106.9	79.7	133.7	183.8
125% RDF	43263	28764	31731	106.9	80.5	132.7	189.6
150% RDF	45201	28528	32621	107.5	80.8	134.8	193.7

C.D. (5%) Ai-Aj	539.4	2189.3	2668.0	2.1	3.2	1.9	8.6
C.V. (%) Error A	1.2	7.9	8.5	1.9	4.0	1.4	4.5
F (5%)	S	S	S	NS	NS	NS	NS

JH 32434	42924	28032	33723	106.6	81.0	133.3	200.4
CMVL 2 (C)	43983	28067	31541	106.8	79.9	131.6	182.8
ABHS4-1 (C)	41869	26030	26772	107.2	80.7	133.3	191.4
ABSHS 27	44459	28310	34920	107.3	79.6	135.0	176.6
AH 7023 (C)	42596	26238	28607	107.8	80.6	135.5	193.9

C.D. (5%) Bi-Bj	413.3	1662.5	2412.4	1.5	1.3	4.2	4.5
C.V. (%) Error B	1.0	6.3	8.0	1.5	1.6	3.3	2.5
F (5%)	S	S	S	NS	NS	NS	S

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# A-90

Fertility levels	Genotypes	Plant height (cm)			Days to first picking			Barren plants/plot
		Karnal	Ludhiana	Pantnagar	Karnal	Ludhiana	Pantnagar	Ludhiana
100% RDF	JH 32434	160.0	168.0	131.2	54.0	59.0	49.3	2.00
	CMVL 2 (C)	153.3	169.7	132.2	50.7	56.0	49.3	3.00
	ABHS4-1 (C)	152.0	164.3	144.7	53.7	58.3	49.0	2.67
	ABSHS 27	150.7	180.7	149.6	52.7	57.7	49.0	3.00
	AH 7023 (C)	150.7	171.3	128.6	52.3	57.0	49.3	2.67
125% RDF	JH 32434	162.7	178.0	137.2	55.3	58.3	49.0	1.67
	CMVL 2 (C)	155.7	178.0	142.7	52.7	55.7	48.7	2.67
	ABHS4-1 (C)	155.3	171.3	147.6	54.7	57.7	49.3	2.33
	ABSHS 27	154.3	184.3	155.3	54.0	57.0	49.0	2.67
	AH 7023 (C)	153.7	177.7	135.7	54.0	57.0	49.0	2.33
150% RDF	JH 32434	165.3	183.7	138.9	57.0	58.0	49.0	1.33
	CMVL 2 (C)	159.7	185.0	143.5	54.0	54.7	49.3	2.67
	ABHS4-1 (C)	159.3	171.0	148.9	56.3	57.7	48.7	2.00
	ABSHS 27	157.3	185.3	158.7	55.7	56.7	49.0	2.67
	AH 7023 (C)	156.7	177.3	137.5	55.0	56.3	49.3	2.00

Location mean	156.4	176.4	142.2	54.1	57.1	49.1	2.38
C.D.(5%) AiBj-AiBk	7.4	15.7	8.4	2.1	2.1	1.0	1.44
C.D.(5%) AiBk-AjBk	6.7	15.5	8.6	2.3	2.3	1.0	1.37
F(5%)	NS	NS	NS	NS	NS	NS	NS

100% RDF	153.3	170.8	137.3	52.7	57.6	49.2	2.67
125% RDF	156.3	177.9	143.7	54.1	57.1	49.0	2.33
150% RDF	159.7	180.5	145.5	55.6	56.7	49.1	2.13

C.D. (5%) Ai-Aj	0.9	6.7	4.3	1.4	1.4	0.5	0.48
C.V. (%) Error A	0.6	3.7	3.0	2.6	2.4	1.0	19.8
F (5%)	S	S	S	S	NS	NS	NS

JH 32434	162.7	176.6	135.8	55.4	58.4	49.1	1.67
CMVL 2 (C)	156.2	177.6	139.5	52.4	55.4	49.1	2.78
ABHS4-1 (C)	155.6	168.9	147.0	54.9	57.9	49.0	2.33
ABSHS 27	154.1	183.4	154.6	54.1	57.1	49.0	2.78
AH 7023 (C)	153.7	175.4	133.9	53.8	56.8	49.2	2.33

C.D. (5%) Bi-Bj	4.3	9.1	4.8	1.2	1.2	0.6	0.83
C.V. (%) Error B	2.8	5.3	3.5	2.3	2.2	1.2	35.9
F (5%)	S	S	S	S	S	NS	NS

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# A-91

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C ratio		
		Karnal	Ludhiana	Pantnagar	Karnal	Ludhiana	Pantnagar
100% RDF	JH 32434	68508	45617	15568	2.05	1.18	0.33
	CMVL 2 (C)	59119	29374	47790	1.91	0.76	1.02
	ABHS4-1 (C)	64071	41996	50013	1.99	1.09	1.07
	ABSHS 27	50196	24468	32790	1.77	0.63	0.70
	AH 7023 (C)	62061	35003	23346	1.95	0.91	0.50
125% RDF	JH 32434	75999	63345	41979	2.14	1.60	0.86
	CMVL 2 (C)	61825	45068	85867	1.92	1.14	1.77
	ABHS4-1 (C)	65597	54868	66979	1.98	1.39	1.38
	ABSHS 27	53517	39185	54756	1.80	0.99	1.13
	AH 7023 (C)	62556	52255	43645	1.94	1.32	0.90
150% RDF	JH 32434	81760	66751	46155	2.19	1.65	0.91
	CMVL 2 (C)	64645	46758	104488	1.94	1.15	2.07
	ABHS4-1 (C)	77755	56706	80044	2.13	1.40	1.58
	ABSHS 27	57001	40545	63377	1.83	1.00	1.25
	AH 7023 (C)	76775	50790	48932	2.12	1.25	0.97

Location mean	65425.8	46181.8	53715.3	1.98	1.16	1.10
C.D.(5%) AiBj-AiBk	4616.2	8795.5	19003.8	0.07	0.22	0.38
C.D.(5%) AiBk-AjBk	5755.4	8952.5	21115.9	0.10	0.23	0.43
F(5%)	S	NS	NS	S	NS	NS

100% RDF	60791.0	35292	33902	1.94	0.91	0.73
125% RDF	63899.1	50944	58645	1.96	1.29	1.21
150% RDF	71587.3	52310	68599	2.04	1.29	1.36

C.D. (5%) Ai-Aj	4097.8	4398.1	12853.9	0.08	0.11	0.26
C.V. (%) Error A	6.2	9.4	23.6	4.0	9.4	23.4
F (5%)	S	S	S	S	S	S

JH 32434	75422	58571	34567	2.13	1.48	0.70
CMVL 2 (C)	61863	40400	79382	1.93	1.02	1.62
ABHS4-1 (C)	69141	51190	65678	2.03	1.29	1.35
ABSHS 27	53571	34733	50308	1.80	0.88	1.03
AH 7023 (C)	67131	46016	38641	2.00	1.16	0.79

C.D. (5%) Bi-Bj	2665.2	5078.1	10971.8	0.04	0.13	0.22
C.V. (%) Error B	4.2	11.3	21.0	2.0	11.3	20.8
F (5%)	S	S	S	S	S	S

**Table 21: Performance of pre release genotypes of baby corn under varying nutrient levels in North East Plain Zone (NEPZ).**

Fertility levels	Genotypes	Baby corn yield with husk (kg/ha)			NEPZ (mean)	Baby corn yield without husk (kg/ha)			NEPZ (mean)
		Kalyani	Ranchi	Varanasi		Kalyani	Ranchi	Varanasi	
100% RDF	JH 32434	10707	15827	2330	<b>9621</b>	3998	2341	635	<b>2325</b>
	CMVL 2 (C)	10041	16538	3073	<b>9884</b>	3332	2444	799	<b>2192</b>
	ABHS4-1 (C)	11902	14349	3781	<b>10011</b>	5193	2119	924	<b>2745</b>
	ABSHS 27	10314	12972	3014	<b>8767</b>	3605	1915	712	<b>2077</b>
	AH 7023 (C)	8751	12053	1625	<b>7476</b>	2466	1778	583	<b>1609</b>
125% RDF	JH 32434	12913	17801	2441	<b>11052</b>	5783	2667	413	<b>2954</b>
	CMVL 2 (C)	11750	18098	3156	<b>11001</b>	5041	2711	819	<b>2857</b>
	ABHS4-1 (C)	13114	16172	3889	<b>11058</b>	6405	2422	948	<b>3258</b>
	ABSHS 27	11188	15520	2962	<b>9890</b>	4400	2322	757	<b>2493</b>
	AH 7023 (C)	10244	14459	1090	<b>8598</b>	3535	2163	618	<b>2105</b>
150% RDF	JH 32434	14273	18812	2302	<b>11796</b>	5937	2781	587	<b>3102</b>
	CMVL 2 (C)	12684	18933	2556	<b>11391</b>	5975	2796	715	<b>3162</b>
	ABHS4-1 (C)	14691	17326	3149	<b>11722</b>	6837	2556	785	<b>3392</b>
	ABSHS 27	12603	16820	2392	<b>10605</b>	5894	2478	563	<b>2978</b>
	AH 7023 (C)	12275	16120	1601	<b>9999</b>	5566	2374	542	<b>2827</b>

Location mean	11830.0	16120.0	2624.1	10191.3	4931.0	2391.1	693.3	2671.8
C.D.(5%) AiBj-AiBk	2401.7	2711.6	1022.0	2045.1	1206.6	410.1	300.2	639.0
C.D.(5%) AiBk-AjBk	2633.3	3052.6	1109.0	2265.0	1353.6	461.9	307.3	707.6
F(5%)	NS	NS	NS	-	NS	NS	NS	-

100% RDF	10343	14348	2765	<b>9152</b>	3719	2119	731	<b>2189</b>
125% RDF	11842	16410	2708	<b>10320</b>	5033	2457	711	<b>2734</b>
150% RDF	13305	17602	2400	<b>11102</b>	6042	2597	638	<b>3092</b>

C.D. (5%) Ai-Aj	1563.5	1901.0	644.8	1369.8	837.9	287.8	153.9	426.5
C.V. (%) Error A	13.0	11.6	24.2	16.3	16.8	11.9	21.9	16.8
F (5%)	S	S	NS	S	S	S	NS	-

JH 32434	12631	17480	2358	<b>10823</b>	5239	2596	545	<b>2794</b>
CMVL 2 (C)	11491	17856	2928	<b>10759</b>	4782	2651	778	<b>2737</b>
ABHS4-1 (C)	13235	15949	3606	<b>10930</b>	6145	2365	885	<b>3132</b>
ABSHS 27	11368	15104	2789	<b>9754</b>	4633	2238	677	<b>2516</b>
AH 7023 (C)	10423	14211	1439	<b>8691</b>	3855	2105	581	<b>2180</b>

C.D. (5%) Bi-Bj	1386.6	1565.5	590.0	1180.7	696.6	236.8	173.3	368.9
C.V. (%) Error B	12.0	10.0	23.1	15.0	14.5	10.2	25.7	16.8
F (5%)	S	S	S	S	S	S	S	-

Cont...

# A-93

Fertility levels	Genotypes	Green fodder yield (kg/ha)			Plants ('000/ha)			Cobs ('000/ha)
		Kalyani	Ranchi	Varanasi	Kalyani	Ranchi	Varanasi	Varanasi
100% RDF	JH 32434	12616	33602	7604	89.3	107.4	29.5	38.2
	CMVL 2 (C)	11950	32727	6319	88.3	105.9	34.7	66.3
	ABHS4-1 (C)	13811	31460	6979	95.3	105.9	37.5	83.3
	ABSHS 27	12223	32391	6910	86.7	106.7	32.3	69.8
	AH 7023 (C)	10660	30296	6146	87.7	107.4	28.8	34.4
125% RDF	JH 32434	14822	36660	7153	97.0	107.8	28.8	27.8
	CMVL 2 (C)	13659	36273	7014	93.0	107.0	34.0	68.8
	ABHS4-1 (C)	15023	33619	7222	97.0	107.4	37.5	80.6
	ABSHS 27	13097	34826	7361	91.0	107.8	33.3	66.0
	AH 7023 (C)	12153	32635	5660	87.7	107.8	36.1	29.9
150% RDF	JH 32434	16182	38997	7847	97.0	107.4	33.0	33.7
	CMVL 2 (C)	14593	38563	5347	97.3	104.1	33.3	59.0
	ABHS4-1 (C)	16600	35190	6319	102.7	105.9	35.8	69.1
	ABSHS 27	14512	36570	6493	98.7	107.4	33.0	49.7
	AH 7023 (C)	14184	34446	6007	97.0	104.4	31.6	39.9

Location mean	13739.0	34550.4	6692.1	93.7	106.7	33.3	54.4
C.D.(5%) AiBj-AiBk	2401.7	5153.3	2367.0	5.5	9.2	9.0	23.8
C.D.(5%) AiBk-AjBk	2633.3	6764.7	2393.9	5.2	10.0	10.7	30.7
F(5%)	NS	NS	NS	NS	NS	NS	NS

100% RDF	12252	32095	6792	89.5	106.7	32.6	58.4
125% RDF	13751	34803	6882	93.1	107.6	34.0	54.6
150% RDF	15214	36753	6403	98.5	105.9	33.3	50.3

C.D. (5%) Ai-Aj	1563.5	5052.3	1150.5	1.9	5.8	7.2	22.6
C.V. (%) Error A	11.2	14.4	17.0	2.0	5.3	21.3	41.0
F (5%)	S	NS	NS	S	NS	NS	NS

JH 32434	14540	36420	7535	94.4	107.5	30.4	33.2
CMVL 2 (C)	13400	35854	6227	92.9	105.7	34.0	64.7
ABHS4-1 (C)	15144	33423	6840	98.3	106.4	36.9	77.7
ABSHS 27	13277	34595	6921	92.1	107.3	32.9	61.8
AH 7023 (C)	12332	32459	5938	90.8	106.5	32.2	34.7

C.D. (5%) Bi-Bj	1386.6	2975.2	1366.6	3.2	5.3	5.2	13.7
C.V. (%) Error B	10.4	8.9	21.0	3.5	5.1	16.1	26.0
F (5%)	S	NS	NS	S	NS	NS	S

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# A-94

Fertility levels	Genotypes	Plant height (cm)			Days to 50% tasseling	Days to 50% silking	
		Kalyani	Ranchi	Varanasi	Kalyani	Kalyani	Varanasi
100% RDF	JH 32434	188.7	183.8	140.3	48.3	51.3	54.7
	CMVL 2 (C)	199.7	173.5	125.3	49.0	52.0	52.7
	ABHS4-1 (C)	220.3	164.1	134.3	48.0	51.0	56.0
	ABSHS 27	195.0	170.2	134.7	48.0	51.0	53.3
	AH 7023 (C)	191.7	154.5	115.0	49.0	52.0	53.7
125% RDF	JH 32434	190.0	189.4	143.0	47.0	50.0	55.0
	CMVL 2 (C)	220.7	175.4	134.7	47.0	50.0	52.7
	ABHS4-1 (C)	229.0	178.6	131.0	47.0	50.0	54.3
	ABSHS 27	203.7	189.9	143.0	48.7	51.7	53.3
	AH 7023 (C)	217.7	176.7	121.0	48.3	51.3	54.0
150% RDF	JH 32434	213.7	186.5	146.3	48.3	51.3	55.3
	CMVL 2 (C)	214.7	188.2	126.0	47.7	50.7	53.0
	ABHS4-1 (C)	259.7	184.9	131.0	46.0	49.0	54.3
	ABSHS 27	218.0	193.5	138.7	48.3	51.3	54.0
	AH 7023 (C)	214.0	180.3	117.0	48.7	51.7	54.7

Location mean	211.8	179.3	132.1	48.0	51.0	54.1
C.D.(5%) AiBj-AiBk	30.7	18.7	13.2	3.2	3.2	2.7
C.D.(5%) AiBk-AjBk	32.2	21.0	18.4	3.3	3.3	2.9
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	199.1	169.2	129.9	48.5	51.5	54.1
125% RDF	212.2	182.0	134.5	47.6	50.6	53.9
150% RDF	224.0	186.7	131.8	47.8	50.8	54.3

C.D. (5%) Ai-Aj	17.2	13.0	14.4	1.7	1.7	1.8
C.V. (%) Error A	8.0	7.1	10.8	3.4	3.2	3.2
F (5%)	S	S	NS	NS	NS	NS

JH 32434	197.4	186.6	143.2	47.9	50.9	55.0
CMVL 2 (C)	211.7	179.0	128.7	47.9	50.9	52.8
ABHS4-1 (C)	236.3	175.9	132.1	47.0	50.0	54.9
ABSHS 27	205.6	184.5	138.8	48.3	51.3	53.6
AH 7023 (C)	207.8	170.5	117.7	48.7	51.7	54.1

C.D. (5%) Bi-Bj	17.7	10.8	7.6	1.8	1.8	1.5
C.V. (%) Error B	8.6	6.2	5.9	3.9	3.7	2.9
F (5%)	S	S	S	NS	NS	S

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# A-95

Fertility levels	Genotypes	Days to first picking		No. of pickings	Net returns (Rs./ha)		B:C ratio	
		Ranchi	Varanasi		Kalyani	Ranchi	Kalyani	Ranchi
100% RDF	JH 32434	54.7	56.0	4.67	414012	176893	9.12	3.44
	CMVL 2 (C)	52.3	52.0	5.33	339432	186663	7.66	3.63
	ABHS4-1 (C)	53.7	55.0	4.67	547827	155760	11.74	3.03
	ABSHS 27	51.7	52.0	4.67	369984	136678	8.25	2.66
	AH 7023 (C)	53.0	54.0	4.33	241532	123384	5.74	2.40
125% RDF	JH 32434	53.3	58.7	3.00	612775	203210	12.56	3.81
	CMVL 2 (C)	52.7	51.0	5.67	528791	207286	10.98	3.89
	ABHS4-1 (C)	52.0	53.0	5.33	681584	179787	13.86	3.37
	ABSHS 27	52.0	53.0	5.33	457194	170897	9.63	3.20
	AH 7023 (C)	51.7	58.7	3.00	360168	155608	7.80	2.92
150% RDF	JH 32434	53.3	55.0	4.67	630472	215890	12.46	3.91
	CMVL 2 (C)	51.0	51.0	5.67	631386	217504	12.48	3.93
	ABHS4-1 (C)	53.0	55.0	4.67	730233	194326	14.28	3.52
	ABSHS 27	51.3	54.0	5.00	622364	187517	12.32	3.39
	AH 7023 (C)	51.0	54.0	4.33	585591	177299	11.65	3.21

Location mean	52.4	54.2	4.69	516889.6	179247.0	10.70	3.35
C.D.(5%) AiBj-AiBk	1.4	3.5	1.13	135673.0	38117.5	2.54	0.72
C.D.(5%) AiBk-AjBk	1.7	4.8	1.55	152631.3	42466.3	2.86	0.80
F(5%)	NS	NS	S	NS	NS	NS	NS

100% RDF	53.1	53.8	4.73	382557	155876	8.50	3.03
125% RDF	52.3	54.9	4.47	528102	183358	10.96	3.44
150% RDF	51.9	53.8	4.87	640009	198507	12.64	3.59

C.D. (5%) Ai-Aj	1.3	3.8	1.19	94940.1	25973.6	1.77	0.49
C.V. (%) Error A	2.4	6.9	25.1	18.1	14.3	16.4	14.3
F (5%)	NS	NS	NS	S	S	S	NS

JH 32434	53.8	56.6	4.11	552419	198664	11.38	3.72
CMVL 2 (C)	52.0	51.3	5.56	499870	203818	10.37	3.82
ABHS4-1 (C)	52.9	54.3	4.89	653215	176624	13.29	3.31
ABSHS 27	51.7	53.0	5.00	483180	165031	10.07	3.08
AH 7023 (C)	51.9	55.6	3.89	395764	152097	8.39	2.84

C.D. (5%) Bi-Bj	0.8	2.0	0.65	78330.8	22007.2	1.47	0.41
C.V. (%) Error B	1.5	3.8	14.3	15.6	12.6	14.1	12.7
F (5%)	S	S	S	S	S	S	S

**Table 22: Performance of pre release genotypes of baby corn under varying nutrient levels in Peninsular Zone (PZ).**

Fertility levels	Genotypes	Baby corn yield with husk (kg/ha)		PZ (mean)	Baby corn yield without husk (kg/ha)			PZ (mean)
		Dharwad	Hyderabad		Coimbatore	Dharwad	Hyderabad	
100% RDF	JH 32434	3982	6685	<b>5334</b>	1056	1138	2593	<b>1595</b>
	CMVL 2 (C)	4025	6296	<b>5160</b>	1113	1196	2500	<b>1603</b>
	ABHS4-1 (C)	4859	6815	<b>5837</b>	1069	1303	2824	<b>1732</b>
	ABSHS 27	4363	6444	<b>5404</b>	1002	1195	2593	<b>1597</b>
	AH 7023 (C)	4077	6759	<b>5418</b>	1035	1153	2824	<b>1671</b>
125% RDF	JH 32434	4814	6796	<b>5805</b>	1106	1360	2747	<b>1737</b>
	CMVL 2 (C)	4506	6296	<b>5401</b>	1425	1259	2515	<b>1733</b>
	ABHS4-1 (C)	5045	7130	<b>6087</b>	1048	1386	2855	<b>1763</b>
	ABSHS 27	4376	6463	<b>5419</b>	1082	1229	2716	<b>1676</b>
	AH 7023 (C)	4357	6759	<b>5558</b>	1092	1227	2886	<b>1735</b>
150% RDF	JH 32434	4712	7019	<b>5865</b>	1268	1254	2824	<b>1782</b>
	CMVL 2 (C)	4477	6296	<b>5387</b>	1525	1277	2701	<b>1834</b>
	ABHS4-1 (C)	4784	7148	<b>5966</b>	1120	1250	3009	<b>1793</b>
	ABSHS 27	4512	6667	<b>5589</b>	1095	1279	2762	<b>1712</b>
	AH 7023 (C)	4440	7074	<b>5757</b>	1042	1176	2948	<b>1722</b>

Location mean	4488.7	6709.9	5599.3	1138.6	1245.4	2753.1	1712.4
C.D.(5%) AiBj-AiBk	464.9	955.4	710.1	310.8	146.9	286.2	248.0
C.D.(5%) AiBk-AjBk	524.1	907.4	715.8	345.2	147.9	485.5	326.2
F(5%)	NS	NS	-	NS	NS	NS	-

100% RDF	4261	6600	<b>5431</b>	1055	1197	2667	<b>1640</b>
125% RDF	4620	6689	<b>5654</b>	1151	1292	2744	<b>1729</b>
150% RDF	4585	6841	<b>5713</b>	1210	1247	2849	<b>1769</b>

C.D. (5%) Ai-Aj	327.2	315.0	321.1	209.9	69.9	418.1	232.6
C.V. (%) Error A	7.2	4.6	5.9	18.2	5.5	15.0	12.9
F (5%)	NS	NS	NS	NS	S	NS	-

JH 32434	4503	6833	<b>5668</b>	1143	1251	2721	<b>1705</b>
CMVL 2 (C)	4336	6296	<b>5316</b>	1355	1244	2572	<b>1723</b>
ABHS4-1 (C)	4896	7031	<b>5963</b>	1079	1313	2896	<b>1763</b>
ABSHS 27	4417	6525	<b>5471</b>	1060	1234	2690	<b>1661</b>
AH 7023 (C)	4292	6864	<b>5578</b>	1057	1185	2886	<b>1709</b>

C.D. (5%) Bi-Bj	268.4	551.6	410.0	179.5	84.8	165.2	143.2
C.V. (%) Error B	6.1	8.4	7.3	16.2	7.0	6.2	9.8
F (5%)	S	NS	S	S	NS	S	-

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# A-97

Fertility levels	Genotypes	Green fodder yield (kg/ha)			Plants ('000/ha)		Cobs ('000/ha)
		Coimbatore	Dharwad	Hyderabad	Coimbatore	Hyderabad	Coimbatore
100% RDF	JH 32434	21938	11900	12099	114.2	99.5	120.0
	CMVL 2 (C)	28273	10200	11852	119.1	100.7	126.7
	ABHS4-1 (C)	27010	11697	12099	118.4	102.0	121.0
	ABSHS 27	29293	10417	13580	125.0	100.7	135.0
	AH 7023 (C)	24558	10200	12593	120.8	98.2	129.0
125% RDF	JH 32434	24742	11720	12346	119.4	98.2	142.7
	CMVL 2 (C)	28339	10220	12346	111.8	102.6	128.3
	ABHS4-1 (C)	27441	11900	12840	112.5	97.0	124.3
	ABSHS 27	30934	10333	13827	110.4	98.9	121.3
	AH 7023 (C)	27765	10367	13086	120.8	101.4	126.0
150% RDF	JH 32434	25591	12867	13086	112.2	103.3	123.3
	CMVL 2 (C)	28780	10933	13086	120.8	97.0	136.0
	ABHS4-1 (C)	30588	12850	14568	115.3	102.0	122.3
	ABSHS 27	27882	11307	15062	110.4	101.4	119.3
	AH 7023 (C)	27170	11100	13333	108.3	100.7	123.0

Location mean	27353.6	11200.7	13053.5	116.0	100.2	126.6
C.D.(5%) AiBj-AiBk	9769.5	1324.1	1863.2	6.2	8.7	10.6
C.D.(5%) AiBk-AjBk	9797.7	1515.4	2335.2	11.1	8.6	12.4
F(5%)	NS	NS	NS	S	NS	S

100% RDF	26214	10883	12444	119.5	100.2	126.3
125% RDF	27844	10908	12889	115.0	99.6	128.5
150% RDF	28002	11811	13827	113.4	100.9	124.8

C.D. (5%) Ai-Aj	4564.1	968.9	1671.5	9.7	3.7	8.2
C.V. (%) Error A	16.5	8.5	12.6	8.2	3.7	6.4
F (5%)	NS	NS	NS	NS	NS	NS

JH 32434	24090	12162	12510	115.3	100.3	128.7
CMVL 2 (C)	28464	10451	12428	117.2	100.1	130.3
ABHS4-1 (C)	28347	12149	13169	115.4	100.3	122.6
ABSHS 27	29370	10686	14156	115.3	100.3	125.2
AH 7023 (C)	26498	10556	13004	116.7	100.1	126.0

C.D. (5%) Bi-Bj	5640.4	764.5	1075.7	3.6	5.0	6.1
C.V. (%) Error B	21.2	7.0	8.5	3.2	5.2	5.0
F (5%)	NS	S	S	NS	NS	NS

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# A-98

Fertility levels	Genotypes	Plant height (cm)		Days to 50% tasseling	Days to 50% silking	Days to first picking		Cob length (cm)	Cob girth (cm)
		Coimbatore	Hyderabad	Coimbatore	Coimbatore	Dharwad	Hyderabad	Coimbatore	Coimbatore
100% RDF	JH 32434	142.4	154.4	51.7	53.7	71.5	53.7	9.53	1.23
	CMVL 2 (C)	125.2	156.8	48.0	50.0	62.4	53.3	10.17	1.33
	ABHS4-1 (C)	135.2	155.4	49.7	51.7	70.2	53.3	9.73	1.17
	ABSHS 27	125.8	156.8	48.0	50.3	65.2	54.3	9.87	1.28
	AH 7023 (C)	121.3	157.5	48.0	50.3	65.5	54.7	9.37	1.30
125% RDF	JH 32434	145.2	157.4	49.0	51.3	70.0	53.3	9.70	1.23
	CMVL 2 (C)	118.9	158.7	48.3	50.7	63.6	54.7	10.07	1.47
	ABHS4-1 (C)	138.1	158.9	50.0	52.0	72.6	53.7	9.77	1.10
	ABSHS 27	133.1	159.6	49.7	51.7	62.7	53.3	9.83	1.20
	AH 7023 (C)	135.3	161.1	48.0	50.0	64.0	54.3	9.90	1.37
150% RDF	JH 32434	146.0	160.1	50.0	52.0	74.2	53.3	9.83	1.35
	CMVL 2 (C)	134.7	162.0	49.7	51.7	63.8	54.3	10.50	1.45
	ABHS4-1 (C)	137.4	161.1	48.7	50.7	73.1	54.7	9.87	1.47
	ABSHS 27	132.4	163.4	49.3	51.3	64.0	54.3	9.97	1.32
	AH 7023 (C)	127.6	164.3	49.0	51.0	71.8	53.3	9.93	1.43

Location mean	133.3	159.2	49.1	51.2	67.6	53.9	9.87	1.31
C.D.(5%) AiBj-AiBk	16.0	5.3	2.7	2.7	3.3	0.9	0.83	0.30
C.D.(5%) AiBk-AjBk	16.9	8.3	2.6	2.6	3.4	1.2	1.01	0.47
F(5%)	NS	NS	NS	NS	S	S	NS	NS

100% RDF	130.0	156.2	49.1	51.2	66.9	53.9	9.73	1.26
125% RDF	134.1	159.1	49.0	51.1	66.6	53.9	9.85	1.27
150% RDF	135.6	162.2	49.3	51.3	69.4	54.0	10.02	1.40

C.D. (5%) Ai-Aj	9.2	7.0	0.9	0.8	1.7	0.9	0.69	0.39
C.V. (%) Error A	6.8	4.3	1.9	1.5	2.5	1.6	6.9	29.0
F (5%)	NS	NS	NS	NS	S	NS	NS	NS

JH 32434	144.6	157.3	50.2	52.3	71.9	53.4	9.69	1.27
CMVL 2 (C)	126.3	159.2	48.7	50.8	63.3	54.1	10.24	1.42
ABHS4-1 (C)	136.9	158.5	49.4	51.4	71.9	53.9	9.79	1.24
ABSHS 27	130.4	159.9	49.0	51.1	64.0	54.0	9.89	1.27
AH 7023 (C)	128.1	161.0	48.3	50.4	67.1	54.1	9.73	1.37

C.D. (5%) Bi-Bj	9.2	3.0	1.6	1.6	1.9	0.5	0.48	0.17
C.V. (%) Error B	7.1	2.0	3.3	3.2	2.9	1.0	5.0	13.7
F (5%)	S	NS	NS	NS	S	NS	NS	NS

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# A-99

Fertility levels	Genotypes	Net returns (Rs./ha)			B:C ratio			FAW damage (%) at 30 DAS
		Coimbatore	Dharwad	Hyderabad	Coimbatore	Dharwad	Hyderabad	Dharwad
100% RDF	JH 32434	80766	136817	83251	1.91	3.20	1.99	5.17
	CMVL 2 (C)	95170	138927	77449	2.07	3.23	1.92	4.23
	ABHS4-1 (C)	87782	180664	97140	1.99	3.90	2.15	5.27
	ABSHS 27	80635	155831	84733	1.91	3.50	2.00	5.33
	AH 7023 (C)	80566	141567	97634	1.91	3.27	2.16	4.47
125% RDF	JH 32434	88470	177182	90783	1.97	3.79	2.05	3.37
	CMVL 2 (C)	136838	161816	76895	2.50	3.55	1.89	3.43
	ABHS4-1 (C)	83100	188738	97759	1.91	3.97	2.13	3.63
	ABSHS 27	91356	155300	90413	2.00	3.45	2.05	3.33
	AH 7023 (C)	89645	154373	99858	1.98	3.43	2.16	2.80
150% RDF	JH 32434	109869	170005	93413	2.18	3.59	2.05	5.23
	CMVL 2 (C)	149030	158267	86005	2.60	3.41	1.97	4.70
	ABHS4-1 (C)	94158	173587	106005	2.01	3.65	2.19	4.97
	ABSHS 27	87951	160009	91684	1.94	3.44	2.03	5.07
	AH 7023 (C)	79850	156421	101067	1.86	3.38	2.13	3.43

Location mean	95679.1	160633.5	91606.0	2.05	3.52	2.06	4.30
C.D.(5%) AiBj-AiBk	46915.8	23243.9	17125.4	0.51	0.36	0.20	1.63
C.D.(5%) AiBk-AjBk	53228.1	26206.5	28713.3	0.58	0.41	0.33	2.20
F(5%)	NS	NS	NS	NS	NS	NS	NS

100% RDF	84984	150761	88041	1.96	3.42	2.04	4.89
125% RDF	97882	167482	91142	2.08	3.64	2.06	3.31
150% RDF	104172	163658	95635	2.12	3.49	2.07	4.68

C.D. (5%) Ai-Aj	33572.7	16360.9	24622.2	0.37	0.26	0.29	1.67
C.V. (%) Error A	34.6	10.0	26.5	17.7	7.3	13.8	38.4
F (5%)	NS	NS	NS	NS	NS	NS	NS

JH 32434	93035	161335	89149	2.02	3.53	2.03	4.59
CMVL 2 (C)	127012	153003	80116	2.39	3.40	1.92	4.12
ABHS4-1 (C)	88347	180996	100301	1.97	3.84	2.16	4.62
ABSHS 27	86648	157047	88943	1.95	3.46	2.03	4.58
AH 7023 (C)	83354	150787	99520	1.92	3.36	2.15	3.57

C.D. (5%) Bi-Bj	27086.8	13419.9	9887.4	0.30	0.21	0.11	0.94
C.V. (%) Error B	29.1	8.6	11.1	14.9	6.1	5.7	22.5
F (5%)	S	S	S	S	S	S	NS

**Table 23: Performance of pre release genotypes of baby corn under varying nutrient levels in Central West Zone (CWZ).**

Fertility levels	Genotypes	Baby corn yield with husk (kg/ha)		CWZ (mean)	Babycorn yield without husk (kg/ha)			CWZ (mean)
		Banswara	Chhindwara		Ambikapur	Banswara	Chhindwara	
100% RDF	JH 32434	11363	6386	<b>8874</b>	2352	2554	1808	<b>2238</b>
	CMVL 2 (C)	10200	7590	<b>8895</b>	2494	2338	1991	<b>2274</b>
	ABHS4-1 (C)	11213	7058	<b>9135</b>	1982	2544	1918	<b>2148</b>
	ABSHS 27	9225	6375	<b>7800</b>	1943	2145	1705	<b>1931</b>
	AH 7023 (C)	7613	6734	<b>7173</b>	2033	1770	1818	<b>1874</b>
125% RDF	JH 32434	11888	6584	<b>9236</b>	2507	2765	1812	<b>2361</b>
	CMVL 2 (C)	10800	7768	<b>9284</b>	2624	2512	2006	<b>2381</b>
	ABHS4-1 (C)	11588	7058	<b>9323</b>	2022	2695	1918	<b>2211</b>
	ABSHS 27	9413	6386	<b>7899</b>	2056	2189	1808	<b>2017</b>
	AH 7023 (C)	8813	6851	<b>7832</b>	2189	2049	1855	<b>2031</b>
150% RDF	JH 32434	11963	6734	<b>9348</b>	2688	2782	1818	<b>2429</b>
	CMVL 2 (C)	11138	7954	<b>9546</b>	2715	2590	2026	<b>2444</b>
	ABHS4-1 (C)	11813	7555	<b>9684</b>	1858	2747	1975	<b>2194</b>
	ABSHS 27	9450	6584	<b>8017</b>	2121	2198	1812	<b>2044</b>
	AH 7023 (C)	9225	6921	<b>8073</b>	2284	2145	1900	<b>2110</b>

Location mean	10380.0	6969.2	8674.6	2257.8	2401.6	1877.9	2179.1
C.D.(5%) AiBj-AiBk	1461.6	1048.4	1255.0	447.0	351.5	268.4	355.6
C.D.(5%) AiBk-AjBk	1685.3	1144.6	1415.0	474.2	425.4	381.8	427.1
F(5%)	NS	NS	-	NS	NS	NS	-

100% RDF	9923	6829	<b>8376</b>	2161	2270	1848	<b>2093</b>
125% RDF	10500	6929	<b>8715</b>	2279	2442	1880	<b>2200</b>
150% RDF	10718	7150	<b>8934</b>	2333	2492	1906	<b>2244</b>

C.D. (5%) Ai-Aj	1089.8	673.9	881.8	262.2	293.1	302.2	285.8
C.V. (%) Error A	10.4	9.5	9.9	11.5	12.0	15.9	13.1
F (5%)	NS	NS	NS	NS	NS	NS	-

JH 32434	11738	6568	<b>9153</b>	2515	2700	1813	<b>2343</b>
CMVL 2 (C)	10713	7771	<b>9242</b>	2611	2480	2008	<b>2366</b>
ABHS4-1 (C)	11538	7223	<b>9380</b>	1954	2662	1937	<b>2184</b>
ABSHS 27	9363	6448	<b>7905</b>	2040	2177	1775	<b>1997</b>
AH 7023 (C)	8550	6835	<b>7693</b>	2168	1988	1858	<b>2005</b>

C.D. (5%) Bi-Bj	843.9	605.3	724.6	258.1	203.0	155.0	205.3
C.V. (%) Error B	8.4	8.9	8.6	11.7	8.7	8.5	9.6
F (5%)	S	S	S	S	S	S	-

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# A-101

Fertility levels	Genotypes	Green fodder yield (kg/ha)			Plants ('000/ha)			Cobs ('000/ha)
		Ambikapur	Banswara	Chhindwara	Ambikapur	Banswara	Chhindwara	Banswara
100% RDF	JH 32434	24809	5745	17841	77.9	74.6	97.7	171.6
	CMVL 2 (C)	24610	5448	20205	79.1	73.4	115.7	168.8
	ABHS4-1 (C)	25473	5580	19055	80.3	72.5	111.6	166.7
	ABSHS 27	22316	7668	17662	81.1	73.4	95.5	168.8
	AH 7023 (C)	26003	4082	18225	79.7	74.7	99.6	171.7
125% RDF	JH 32434	27043	5755	18182	77.7	74.7	98.5	171.9
	CMVL 2 (C)	26683	5437	21215	81.3	73.2	117.8	168.4
	ABHS4-1 (C)	29559	5656	19055	82.6	73.5	111.6	168.9
	ABSHS 27	25119	7652	17841	79.4	73.2	97.7	168.4
	AH 7023 (C)	26494	4148	18293	78.5	75.9	107.4	174.5
150% RDF	JH 32434	25945	5761	18225	79.0	74.8	99.6	172.1
	CMVL 2 (C)	26323	5426	22301	81.2	73.1	119.7	168.1
	ABHS4-1 (C)	25093	5720	20019	81.8	74.3	114.5	170.9
	ABSHS 27	25750	7795	18182	79.2	74.6	98.5	171.6
	AH 7023 (C)	30588	4131	19025	80.1	75.6	110.5	173.8

Location mean	26120.6	5733.7	19021.8	79.9	74.1	106.4	170.4
C.D.(5%) AiBj-AiBk	2713.1	287.0	2040.2	2.7	3.6	4.6	8.2
C.D.(5%) AiBk-AjBk	4463.5	262.5	3491.1	3.2	3.3	6.6	7.6
F(5%)	S	NS	NS	NS	NS	NS	NS

100% RDF	24642	5705	18598	79.6	73.7	104.0	169.5
125% RDF	26980	5730	18917	79.9	74.1	106.6	170.4
150% RDF	26740	5767	19551	80.3	74.5	108.5	171.3

C.D. (5%) Ai-Aj	3799.6	57.0	3016.0	2.1	0.9	5.2	2.1
C.V. (%) Error A	14.4	1.0	15.6	2.6	1.2	4.9	1.2
F (5%)	NS	NS	NS	NS	NS	NS	NS

JH 32434	25932	5754	18083	78.2	74.7	98.6	171.9
CMVL 2 (C)	25872	5437	21240	80.5	73.2	117.7	168.4
ABHS4-1 (C)	26709	5652	19376	81.6	73.4	112.6	168.8
ABSHS 27	24395	7705	17895	79.9	73.7	97.2	169.6
AH 7023 (C)	27695	4120	18515	79.4	75.4	105.8	173.3

C.D. (5%) Bi-Bj	1566.4	165.7	1177.9	1.6	2.1	2.6	4.7
C.V. (%) Error B	6.2	3.0	6.4	2.0	2.8	2.5	2.8
F (5%)	S	S	S	S	NS	S	NS

Cont...

## A-102

Fertility levels	Genotypes	Plants height (cm)			Days to 50% tasseling	Days to 50% silking
		Ambikapur	Banswara	Chhindwara	Chhindwara	
100% RDF	JH 32434	157.1	215.0	117.6	46.0	51.0
	CMVL 2 (C)	152.5	210.0	133.8	47.0	56.0
	ABHS4-1 (C)	152.5	208.3	130.1	45.5	53.5
	ABSHS 27	150.1	205.0	116.0	49.0	55.0
	AH 7023 (C)	134.8	193.3	121.2	45.0	53.0
125% RDF	JH 32434	165.4	220.0	119.2	47.0	54.0
	CMVL 2 (C)	156.5	213.3	135.3	48.0	57.0
	ABHS4-1 (C)	157.8	220.3	130.1	45.5	53.5
	ABSHS 27	155.1	210.0	117.6	46.0	51.0
	AH 7023 (C)	140.4	203.3	127.8	45.0	52.0
150% RDF	JH 32434	168.7	221.7	121.2	45.0	53.0
	CMVL 2 (C)	157.8	216.7	140.5	48.5	58.0
	ABHS4-1 (C)	161.3	221.0	131.5	46.0	55.0
	ABSHS 27	159.3	218.3	119.2	47.0	54.0
	AH 7023 (C)	145.8	207.7	129.5	45.0	52.5

Location mean	154.3	212.3	126.0	46.4	53.9
C.D.(5%) AiBj-AiBk	18.9	16.0	7.9	6.6	2.0
C.D.(5%) AiBk-AjBk	33.9	17.4	10.7	9.3	2.1
F(5%)	NS	NS	NS	NS	S

100% RDF	149.4	206.3	123.7	46.5	53.7
125% RDF	155.1	213.4	126.0	46.3	53.5
150% RDF	158.6	217.1	128.4	46.3	54.5

C.D. (5%) Ai-Aj	29.8	10.2	8.3	7.3	1.2
C.V. (%) Error A	19.0	4.7	6.5	15.5	2.2
F (5%)	NS	NS	NS	NS	NS

JH 32434	163.7	218.9	119.3	46.0	52.7
CMVL 2 (C)	155.6	213.3	136.5	47.8	57.0
ABHS4-1 (C)	157.2	216.6	130.6	45.7	54.0
ABSHS 27	154.8	211.1	117.6	47.3	53.3
AH 7023 (C)	140.3	201.4	126.2	45.0	52.5

C.D. (5%) Bi-Bj	10.9	9.2	4.5	3.8	1.2
C.V. (%) Error B	7.3	4.5	3.7	8.5	2.2
F (5%)	S	S	S	NS	S

Cont...

# A-103

Fertility levels	Genotypes	No. of picking	Days of first picking	Net returns (Rs./ha)		B:C Ratio	
		Ambikapur	Chhindwara	Ambikapur	Chhindwara	Ambikapur	Chhindwara
100% RDF	JH 32434	5.6	51.0	174716	83820	2.89	2.90
	CMVL 2 (C)	5.0	54.0	188982	112901	3.13	3.40
	ABHS4-1 (C)	5.4	54.0	137716	110335	2.28	3.14
	ABSHS 27	5.5	54.0	133816	81254	2.21	2.62
	AH 7023 (C)	5.4	53.0	142849	90663	2.36	3.00
125% RDF	JH 32434	5.5	52.0	183708	85531	2.74	2.94
	CMVL 2 (C)	5.3	55.0	195474	124020	2.92	3.49
	ABHS4-1 (C)	5.4	54.0	135241	110335	2.02	3.14
	ABSHS 27	5.2	51.0	138608	83820	2.07	2.90
	AH 7023 (C)	5.2	52.0	151908	94084	2.27	3.07
150% RDF	JH 32434	5.4	53.0	201177	90663	2.97	3.00
	CMVL 2 (C)	5.6	55.0	203877	133428	3.01	3.58
	ABHS4-1 (C)	5.3	54.0	118210	112046	1.75	3.32
	ABSHS 27	5.4	52.0	144510	85531	2.14	2.94
	AH 7023 (C)	5.4	53.0	160744	102637	2.38	3.11

Location mean	5.4	53.1	160769.0	100071.3	2.48	3.10
C.D.(5%) AiBj-AiBk	0.6	4.7	44697.2	16568.8	0.67	0.45
C.D.(5%) AiBk-AjBk	0.6	5.1	47424.1	16894.8	0.72	0.64
F(5%)	NS	NS	NS	NS	NS	NS

100% RDF	5.4	53.2	155616	95795	2.57	3.01
125% RDF	5.3	52.8	160988	99558	2.40	3.11
150% RDF	5.4	53.4	165704	104861	2.45	3.19

C.D. (5%) Ai-Aj	0.2	3.0	26216.6	8349.6	0.41	0.50
C.V. (%) Error A	4.1	5.6	16.1	8.2	16.3	16.1
F (5%)	NS	NS	NS	NS	NS	NS

JH 32434	5.5	52.0	186533	86671	2.87	2.94
CMVL 2 (C)	5.3	54.7	196111	123450	3.02	3.49
ABHS4-1 (C)	5.4	54.0	130389	110905	2.02	3.20
ABSHS 27	5.4	52.3	138978	83535	2.14	2.82
AH 7023 (C)	5.3	52.7	151833	95795	2.34	3.06

C.D. (5%) Bi-Bj	0.3	2.7	25805.9	9566.0	0.39	0.26
C.V. (%) Error B	6.6	5.2	16.5	9.8	16.1	8.6
F (5%)	NS	NS	S	S	S	S

**Table 24: Nutrient management in maize-wheat-green gram/cowpea cropping system under different tillage practices in Pantnagar.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking
Zero Tillage	GS guided	5950	8571	64.3	64.3	169.5	55.0	58.3
	SSNM	6168	8413	63.5	63.5	172.4	55.3	58.7
	100% RDF	6193	8413	65.1	65.1	174.7	55.0	58.0
Conventional Tillage	GS guided	6047	8571	63.5	63.5	175.3	55.7	58.7
	SSNM	6578	8571	64.3	64.3	173.7	55.7	58.7
	100% RDF	6596	8810	64.3	64.3	177.7	55.3	58.7
Permanent Beds	GS guided	4985	6349	63.5	63.5	159.9	55.3	58.3
	SSNM	4928	6667	65.1	65.1	162.8	55.0	58.3
	100% RDF	5261	7143	63.5	63.5	164.4	55.3	58.7

Location mean	5856.2	7945.3	64.1	64.1	170.0	55.3	58.5
C.D.(5%) AiBj-AiBk	1117.5	1279.9	3.4	3.4	13.3	0.9	0.9
C.D.(5%) AiBk-AjBk	1225.3	1806.0	4.3	4.3	13.3	0.9	1.1
F(5%)	NS	NS	NS	NS	NS	NS	NS

Zero Tillage	6104	8466	64.3	64.3	172.2	55.1	58.3
Conventional Tillage	6407	8651	64.0	64.0	175.6	55.6	58.7
Permanent Beds	5058	6720	64.0	64.0	162.4	55.2	58.4

C.D. (5%) Ai-Aj	830.6	1488.2	3.3	3.3	7.8	0.5	0.9
C.V. (%) Error A	10.8	14.3	4.0	4.0	3.5	0.7	1.1
F (5%)	S	S	NS	NS	S	NS	NS

GS guided	5661	7831	63.8	63.8	168.2	55.3	58.4
SSNM	5891	7884	64.3	64.3	169.6	55.3	58.6
100% RDF	6017	8122	64.3	64.3	172.3	55.2	58.4

C.D. (5%) Bi-Bj	645.2	739.0	1.9	1.9	7.7	0.5	0.5
C.V. (%) Error B	10.7	9.1	2.9	2.9	4.4	1.0	0.9
F (5%)	NS	NS	NS	NS	NS	NS	NS

Cont....



## A-105

Tillage practices	Nutrient management	100-seed weight (g)	Cob length (cm)	Cob girth (cm)	Net returns (Rs./ha)	B:C ratio
Zero Tillage	GS guided	27.9	15.3	14.0	88177	2.44
	SSNM	28.0	15.4	14.3	92451	2.54
	100% RDF	28.2	15.6	14.2	93062	2.56
Conventional Tillage	GS guided	28.2	15.5	14.3	79535	1.70
	SSNM	28.1	15.5	14.5	91143	1.97
	100% RDF	28.3	15.6	14.7	91587	1.98
Permanent Beds	GS guided	26.5	14.7	14.2	64933	1.65
	SSNM	26.7	14.8	14.1	63782	1.63
	100% RDF	26.7	14.9	14.1	70815	1.81

Location mean	27.6	15.3	14.3	81720.6	2.03
C.D.(5%) AiBj-AiBk	1.7	0.7	0.4	23356.1	0.59
C.D.(5%) AiBk-AjBk	1.7	0.8	0.6	25608.5	0.65
F(5%)	NS	NS	NS	NS	NS

Zero Tillage	28.0	15.4	14.2	91230	2.51
Conventional Tillage	28.2	15.5	14.5	87422	1.88
Permanent Beds	26.6	14.8	14.1	66510	1.70

C.D. (5%) Ai-Aj	1.0	0.5	0.5	17359.5	0.44
C.V. (%) Error A	2.6	2.7	2.8	16.2	16.6
F (5%)	S	S	NS	S	S

GS guided	27.5	15.2	14.2	77548	1.93
SSNM	27.6	15.2	14.3	82459	2.04
100% RDF	27.7	15.4	14.3	85155	2.12

C.D. (5%) Bi-Bj	1.0	0.4	0.2	13484.7	0.34
C.V. (%) Error B	3.4	2.5	1.5	16.1	16.5
F (5%)	NS	NS	NS	NS	NS

**Table 25: Nutrient management in maize-wheat-green gram cropping system under different tillage practices in Dholi.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days of 50% tasseling	Days of 50% silking
Zero Tillage	60% RDN+GS	5387	7258	78.0	81.9	61.0	64.3
	RDF	4369	7089	72.3	71.7	60.0	63.3
	SSNM	5427	7301	75.3	76.2	61.0	63.7
Conventional Tillage	60% RDN+GS	4545	6691	79.7	77.6	62.0	65.0
	RDF	3977	6241	75.7	71.5	60.0	62.7
	SSNM	4482	6631	78.0	76.8	61.3	64.3
Permanent Bed	60% RDN+GS	5935	8021	81.3	84.2	62.0	65.0
	RDF	5227	7310	77.0	82.3	61.0	64.3
	SSNM	5720	7596	80.0	81.1	61.0	64.3

Location mean	5007.7	7126.4	77.5	78.1	61.0	64.1
C.D.(5%) AiBj-AiBk	1034.9	896.3	8.3	15.2	6.1	6.5
C.D.(5%) AiBk-AjBk	1238.0	1123.4	9.0	14.6	6.0	6.3
F(5%)	NS	NS	NS	NS	NS	NS

Zero Tillage	5061	7216	75.2	76.6	60.7	63.8
Conventional Tillage	4335	6521	77.8	75.3	61.1	64.0
Permanent Bed	5627	7642	79.4	82.5	61.3	64.6

C.D. (5%) Ai-Aj	917.2	863.1	6.1	8.0	3.5	3.5
C.V. (%) Error A	14.0	9.3	6.0	7.8	4.4	4.2
F (5%)	S	NS	NS	NS	NS	NS

60% RDN+GS	5289	7323	79.7	81.2	61.7	64.8
RDF	4524	6880	75.0	75.2	60.3	63.4
SSNM	5210	7176	77.8	78.0	61.1	64.1

C.D. (5%) Bi-Bj	597.5	517.5	4.8	8.7	3.5	3.7
C.V. (%) Error B	11.6	7.1	6.0	10.9	5.6	5.7
F (5%)	S	NS	NS	NS	NS	NS

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# A-107

Tillage practices	Nutrient management	Days of maturity	Plant height (cm)	Ear height (cm)	Cob length (cm)	Net returns (Rs./ha)	B:C ratio
Zero Tillage	60% RDN+GS	116.0	193.7	92.7	19.1	75656	1.78
	RDF	114.3	177.7	80.7	16.5	53902	1.26
	SSNM	115.3	180.3	87.7	19.0	76438	1.80
Conventional Tillage	60% RDN+GS	115.7	188.0	88.0	15.6	52633	1.11
	RDF	113.3	172.3	77.7	14.4	40066	0.84
	SSNM	114.0	181.0	81.7	15.6	51178	1.08
Permanent Bed	60% RDN+GS	116.7	204.7	98.7	19.8	84674	1.86
	RDF	115.0	192.3	82.7	16.6	69007	1.51
	SSNM	115.0	199.3	93.7	19.5	79783	1.76

Location mean	115.0	187.7	87.0	17.3	64815.1	1.44
C.D.(5%) AiBj-AiBk	9.2	32.8	13.4	2.1	22224.8	0.50
C.D.(5%) AiBk-AjBk	9.1	36.7	14.8	3.0	26273.4	0.58
F(5%)	NS	NS	NS	NS	NS	NS

Zero Tillage	115.2	183.9	87.0	18.2	68665	1.61
Conventional Tillage	114.3	180.4	82.4	15.2	47959	1.01
Permanent Bed	115.6	198.8	91.7	18.6	77821	1.71

C.D. (5%) Ai-Aj	5.2	25.5	10.0	2.4	19264.7	0.41
C.V. (%) Error A	3.5	10.4	8.8	10.7	22.7	21.9
F (5%)	NS	NS	NS	S	S	S

60% RDN+GS	116.1	195.4	93.1	18.2	70988	1.59
RDF	114.2	180.8	80.3	15.8	54325	1.20
SSNM	114.8	186.9	87.7	18.0	69133	1.54

C.D. (5%) Bi-Bj	5.3	19.0	7.8	1.2	12831.5	0.29
C.V. (%) Error B	4.5	9.8	8.7	6.8	19.3	19.5
F (5%)	NS	NS	S	S	S	S

**Table 26: Nutrient management in maize-wheat-green gram cropping system under different tillage practices in Udaipur.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking
Zero Tillage	33% RDF+GS	4920	7315	65.4	69.7	226.4	52.0	56.3
	RDF	4349	6307	64.9	69.0	224.1	52.3	56.7
	SSNM	4286	6257	64.3	68.3	230.1	52.7	56.7
Conventional Tillage	33% RDF+GS	5259	8105	64.7	71.4	233.5	52.0	57.3
	RDF	5070	7619	65.3	71.7	226.4	53.0	57.0
	SSNM	5566	8269	64.0	70.3	238.9	52.7	57.3
Permanent Bed	33% RDF+GS	3865	5772	64.0	70.5	224.2	54.3	57.7
	RDF	3328	4805	64.0	67.7	212.6	54.0	57.7
	SSNM	3616	5309	64.9	71.0	218.6	54.7	57.3

Location mean	4473.2	6639.8	64.6	70.0	226.1	53.1	57.1
C.D.(5%) AiBj-AiBk	513.3	764.2	1.3	2.3	12.7	2.2	3.2
C.D.(5%) AiBk-AjBk	647.1	928.1	2.3	3.2	18.2	3.5	4.5
F(5%)	NS	NS	NS	NS	NS	NS	NS

Zero Tillage	4518	6626	64.9	69.0	226.9	52.3	56.6
Conventional Tillage	5298	7998	64.7	71.1	232.9	52.6	57.2
Permanent Bed	3603	5296	64.3	69.7	218.5	54.3	57.6

C.D. (5%) Ai-Aj	499.2	696.2	2.0	2.6	15.1	3.0	3.7
C.V. (%) Error A	8.5	8.0	2.4	2.9	5.1	4.3	5.0
F (5%)	S	S	NS	NS	NS	NS	NS

33% RDF+GS	4681	7064	64.7	70.5	228.0	52.8	57.1
RDF	4249	6244	64.7	69.5	221.0	53.1	57.1
SSNM	4489	6612	64.4	69.9	229.2	53.3	57.1

C.D. (5%) Bi-Bj	296.3	441.2	0.8	1.3	7.4	1.3	1.9
C.V. (%) Error B	6.4	6.5	1.1	1.8	3.2	2.4	3.2
F (5%)	S	S	NS	NS	NS	NS	NS

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## A-109

Tillage practices	Nutrient management	Cob length (cm)	Shelling (%)	Net returns (Rs./ha)	B:C ratio	Grain uptake (kg/ha)		
						N	P	K
Zero Tillage	33% RDF+GS	18.0	78.6	111870	3.90	77.3	13.7	20.7
	RDF	16.8	77.2	90742	2.76	75.1	13.4	19.2
	SSNM	16.6	79.0	91379	2.98	67.2	11.8	17.8
Conventional Tillage	33% RDF+GS	18.3	80.9	122382	4.22	84.3	15.1	22.3
	RDF	16.5	78.0	112006	3.38	88.5	16.2	22.5
	SSNM	16.6	79.9	128109	4.14	88.9	15.6	23.6
Permanent Bed	33% RDF+GS	15.5	77.3	81826	2.85	60.0	10.5	16.0
	RDF	14.5	79.0	61635	1.87	57.0	9.5	14.3
	SSNM	14.7	76.0	72405	2.36	56.1	9.7	14.8

Location mean	16.4	78.4	96928.1	3.16	72.7	12.8	19.0
C.D.(5%) AiBj-AiBk	0.7	4.8	14616.3	0.48	7.2	1.2	2.1
C.D.(5%) AiBk-AjBk	1.3	5.5	18325.5	0.60	11.0	1.9	3.0
F(5%)	NS	NS	NS	NS	NS	S	NS

Zero Tillage	17.2	78.2	97997	3.21	73.2	13.0	19.2
Conventional Tillage	17.1	79.6	120832	3.91	87.3	15.6	22.8
Permanent Bed	14.9	77.4	71955	2.36	57.7	9.9	15.0

C.D. (5%) Ai-Aj	1.2	3.9	14083.3	0.46	9.4	1.6	2.4
C.V. (%) Error A	5.4	3.8	11.1	11.1	9.9	9.6	9.8
F (5%)	S	NS	S	S	S	S	S

33% RDF+GS	17.3	78.9	105359	3.66	73.9	13.1	19.7
RDF	16.0	78.1	88128	2.67	73.5	13.0	18.7
SSNM	16.0	78.3	97297	3.16	70.8	12.4	18.7

C.D. (5%) Bi-Bj	0.4	2.7	8438.7	0.28	4.2	0.7	1.2
C.V. (%) Error B	2.4	3.4	8.5	8.5	5.6	5.4	6.3
F (5%)	S	NS	S	S	NS	NS	NS

### *Treatment details:*

#### **A. Main plots: Tillage practices (03)**

T<sub>1</sub>: Zero tillage

T<sub>2</sub>: Conventional tillage

T<sub>3</sub>: Permanent bed

#### **B. Sub plots: Nutrient management practices (03)**

N<sub>1</sub>: 33% RDF+GS (SSB)

N<sub>2</sub>: RDF (SSB at KH+SSB at TS) RDF: 120:60:40 (kg NPK/ha)

N<sub>3</sub>: SSNM (SSB at KH+SSB at TS) SSNM: 110:37:31 (kg NPK/ha)

SSB: Sub Surface Banding /KH: Knee high/TS: Tasseling stage

**Table 27: Nutrient management in rice-maize cropping system under different tillage practices in Dholi.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Straw yield (kg/ha)	Days of flowering	Days of maturity	Plant height (cm)
Zero Tillage	60% RDN+GS	4349	5861	68.0	116.0	104.9
	RDF	3767	4970	70.0	112.0	93.9
	SSNM	4080	5564	69.0	115.0	101.0
Conventional Tillage	60% RDN+GS	4025	5432	71.0	115.0	99.0
	RDF	3446	4728	74.0	111.0	91.0
	SSNM	3790	5282	72.0	115.0	96.9
Permanent Bed	60% RDN+GS	4585	6068	67.0	119.0	111.1
	RDF	3816	5149	69.0	114.0	101.0
	SSNM	4330	5837	66.0	117.0	106.0

Location mean	4020.9	5432.3	69.6	114.9	100.5
C.D.(5%) AiBj-AiBk	559.5	1600.1	15.1	11.3	15.7
C.D.(5%) AiBk-AjBk	1037.1	2529.9	12.8	12.7	19.1
F(5%)	NS	NS	NS	NS	NS

Zero Tillage	4065	5465	69.0	114.3	99.9
Conventional Tillage	3754	5147	72.3	113.7	95.6
Permanent Bed	4244	5685	67.3	116.7	106.0

C.D. (5%) Ai-Aj	937.1	2185.1	3.6	8.9	14.4
C.V. (%) Error A	17.8	30.7	3.9	5.9	10.9
F (5%)	NS	NS	S	NS	NS

60% RDN+GS	4320	5787	68.7	116.7	105.0
RDF	3676	4949	71.0	112.3	95.3
SSNM	4066	5561	69.0	115.7	101.3

C.D. (5%) Bi-Bj	323.0	923.8	8.7	6.5	9.0
C.V. (%) Error B	7.8	16.6	12.2	5.5	8.8
F (5%)	S	NS	NS	NS	NS

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Tillage practices	Nutrient management	Panicle length (cm)	Grains/panicle	Panicles/m <sup>2</sup>	Net returns (Rs./ha)	B:C ratio
Zero Tillage	60% RDN+GS	20.4	115.0	238.7	62337	1.56
	RDF	16.7	95.0	207.3	48330	1.20
	SSNM	19.2	110.0	234.3	55872	1.39
Conventional Tillage	60% RDN+GS	18.5	100.0	211.3	54727	1.37
	RDF	15.6	85.0	194.7	41013	1.02
	SSNM	15.3	97.0	205.0	49189	1.22
Permanent Bed	60% RDN+GS	22.0	120.0	244.7	67740	1.69
	RDF	17.7	103.0	210.0	49616	1.24
	SSNM	20.3	113.0	242.0	61671	1.54

Location mean	18.4	104.2	220.9	54499.4	1.36
C.D.(5%) AiBj-AiBk	2.9	12.5	35.1	13603.7	0.34
C.D.(5%) AiBk-AjBk	3.3	16.8	47.1	25381.4	0.63
F(5%)	NS	NS	NS	NS	NS

Zero Tillage	18.8	106.7	226.8	55513	1.39
Conventional Tillage	16.5	94.0	203.7	48309	1.20
Permanent Bed	20.0	112.0	232.2	59676	1.49

C.D. (5%) Ai-Aj	2.3	13.5	37.8	22968.6	0.57
C.V. (%) Error A	9.6	9.9	13.1	32.2	32.1
F (5%)	S	S	NS	NS	NS

60% RDN+GS	20.3	111.7	231.6	61601	1.54
RDF	16.7	94.3	204.0	46320	1.15
SSNM	18.3	106.7	227.1	55577	1.38

C.D. (5%) Bi-Bj	1.7	7.2	20.3	7854.1	0.20
C.V. (%) Error B	8.8	6.7	8.9	14.0	14.0
F (5%)	S	S	S	S	S

**Table 28: Nutrient management in rice-maize cropping system under different tillage practices (Performance of Rice) in Kalyani.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Stalk yield (kg/ha)	Effective tillers/m <sup>2</sup>	Plants height (cm)	Days to flowering	Days to maturity	Grains/ panicle	1000-seed weight (g)
Zero Tillage	33%+GS based	5915	8905	281.2	124.7	68.0	102.3	229.3	22.9
	RDF	5717	8728	277.1	124.1	68.0	103.0	242.5	22.5
	SSNM	5389	8263	254.9	123.6	68.0	101.3	221.6	20.5
Conventional Tillage	33%+GS based	3949	6343	252.1	122.9	68.0	102.0	215.1	19.9
	RDF	4502	6928	262.7	127.5	70.3	102.3	226.3	20.5
	SSNM	3746	6087	246.8	126.1	69.3	102.7	201.2	19.5
Permanent Bed	33%+GS based	3784	6125	243.4	125.5	69.7	102.7	203.6	19.7
	RDF	4148	6509	251.8	119.9	70.0	103.0	220.3	20.2
	SSNM	3801	6065	228.3	120.5	70.0	103.0	203.3	19.2

Location mean	4550.2	7105.9	255.4	123.9	69.0	102.5	218.1	20.5
C.D.(5%) AiBj-AiBk	729.6	756.0	22.7	10.4	2.1	1.4	15.7	1.7
C.D.(5%) AiBk-AjBk	709.6	783.3	30.1	9.1	1.8	1.3	16.6	2.7
F(5%)	NS	NS	NS	NS	NS	NS	NS	NS

Zero Tillage	5674	8632	271.1	124.1	68.0	102.2	231.2	21.9
Conventional Tillage	4066	6453	253.9	125.5	69.2	102.3	214.2	19.9
Permanent Bed	3911	6233	241.1	122.0	69.9	102.9	209.0	19.7

C.D. (5%) Ai-Aj	392.8	490.5	24.0	3.4	0.5	0.6	10.8	2.4
C.V. (%) Error A	6.6	5.3	7.2	2.1	0.6	0.4	3.8	8.9
F (5%)	S	S	NS	NS	S	NS	S	NS

33%+GS based	4549	7124	258.9	124.4	68.6	102.3	216.0	20.8
RDF	4789	7389	263.9	123.9	69.4	102.8	229.7	21.1
SSNM	4312	6805	243.3	123.4	69.1	102.3	208.7	19.7

C.D. (5%) Bi-Bj	421.2	436.5	13.1	6.0	1.2	0.8	9.0	1.0
C.V. (%) Error B	9.0	6.0	5.0	4.7	1.7	0.8	4.0	4.6
F (5%)	NS	S	S	NS	NS	NS	S	S



**Table 29: Nutrient management in maize based rainfed cropping systems under different tillage practices in Srinagar.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)
Zero Tillage	33% RDN+GS	4847	10221	83.1	91.8	234.7	81.0	84.3	22.2
	RDF	5702	13295	83.4	98.3	242.0	80.7	84.3	25.7
	SSNM	5368	12049	82.7	94.8	226.0	80.7	84.3	24.5
Conventional Tillage	33% RDN+GS	4312	9588	82.3	90.7	219.3	81.0	84.0	23.1
	RDF	5149	11272	82.3	96.5	234.0	82.3	85.7	24.6
	SSNM	5187	11093	82.9	94.5	231.0	81.7	85.7	24.2
Permanent Bed	33% RDN+GS	4450	9675	82.5	89.0	223.0	82.3	86.0	22.8
	RDF	5337	12344	83.3	92.0	241.0	82.3	85.7	25.6
	SSNM	5225	11228	83.0	88.9	229.7	83.3	86.7	24.0

Location mean	5064.2	11196.2	82.8	92.9	231.2	81.7	85.2	24.1
C.D.(5%) AiBj-AiBk	701.7	1072.3	1.3	1.5	4.3	1.4	1.8	0.9
C.D.(5%) AiBk-AjBk	672.0	1211.1	1.6	1.4	4.5	1.7	2.2	1.4
F(5%)	NS	NS	NS	S	S	NS	NS	S

Zero Tillage	5306	11855	83.0	95.0	234.2	80.8	84.3	24.1
Conventional Tillage	4883	10651	82.5	93.9	228.1	81.7	85.1	23.9
Permanent Bed	5004	11082	82.9	90.0	231.2	82.7	86.1	24.1

C.D. (5%) Ai-Aj	357.8	849.3	1.2	0.6	2.9	1.3	1.6	1.2
C.V. (%) Error A	5.4	5.8	1.1	0.5	1.0	1.2	1.4	3.7
F (5%)	NS	S	NS	S	S	S	NS	NS

33% RDN+GS	4537	9828	82.6	90.5	225.7	81.4	84.8	22.7
RDF (120:60:40)	5396	12304	83.0	95.6	239.0	81.8	85.2	25.3
SSNM	5260	11457	82.9	92.7	228.9	81.9	85.6	24.2

C.D. (5%) Bi-Bj	405.1	619.1	0.8	0.9	2.5	0.8	1.1	0.5
C.V. (%) Error B	7.8	5.4	0.9	0.9	1.0	0.9	1.2	2.1
F (5%)	S	S	NS	S	S	NS	NS	S

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Tillage practices	Nutrient management	Net returns (Rs./ha)	B:C ratio	Barrenness in maize (%)	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
Zero Tillage	33% RDN+GS	80402	1.75	20.0	20.8	12.6	12.6	34.7
	RDF	121271	2.52	12.1	22.0	15.4	13.6	44.9
	SSNM	122360	2.36	15.5	21.3	14.3	12.9	42.0
Conventional Tillage	33% RDN+GS	70608	1.50	21.0	20.5	11.5	11.6	38.9
	RDF	101175	2.40	12.1	21.4	14.3	14.5	43.7
	SSNM	99944	2.18	14.1	20.5	13.5	14.5	45.8
Permanent Bed	33% RDN+GS	60897	1.34	22.3	20.2	12.3	11.1	36.1
	RDF	100202	1.96	11.1	21.3	14.3	14.0	45.4
	SSNM	100188	2.16	20.8	21.5	12.4	14.0	43.0

Location mean	95227.4	2.02	16.6	21.1	13.4	13.2	41.6
C.D.(5%) AiBj-AiBk	1190.2	0.36	1.5	1.3	0.5	1.1	2.8
C.D.(5%) AiBk-AjBk	1979.7	0.39	1.5	1.5	0.5	1.4	3.3
F(5%)	S	NS	S	NS	S	S	S

Zero Tillage	108011	2.21	15.9	21.4	14.1	13.0	40.5
Conventional Tillage	90575	2.02	15.7	20.8	13.1	13.5	42.8
Permanent Bed	87096	1.82	18.1	21.0	13.0	13.0	41.5

C.D. (5%) Ai-Aj	1738.4	0.26	0.9	1.1	0.3	1.1	2.4
C.V. (%) Error A	1.4	9.8	4.3	4.2	1.6	6.3	4.5
F (5%)	S	S	S	NS	S	NS	NS

33% RDN+GS	70636	1.53	21.1	20.5	12.1	11.8	36.6
RDF (120:60:40)	107549	2.29	11.8	21.6	14.7	14.0	44.7
SSNM	107497	2.23	16.8	21.1	13.4	13.8	43.6

C.D. (5%) Bi-Bj	687.2	0.21	0.8	0.7	0.3	0.6	1.6
C.V. (%) Error B	0.7	9.9	5.0	3.4	2.1	4.7	3.7
F (5%)	S	S	S	S	S	S	S

**Table 30: Nutrient management in maize-chickpea cropping system under different tillage practices in Banswara.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)
Zero Tillage	33% RDN+GS	7285	9819	8953	66.1	98.2	270.0
	RDF	5939	8163	7392	65.2	82.8	260.0
	SSNM	6933	9642	8613	66.1	87.3	267.3
Conventional Tillage	33% RDN+GS	5963	7728	7775	66.1	86.6	263.3
	RDF	5518	7193	7224	64.1	78.2	257.0
	SSNM	5816	7541	7417	63.7	81.7	261.3
Permanent Bed	33% RDN+GS	6350	8554	8261	65.0	86.4	264.0
	RDF	5536	7611	7080	66.2	83.1	259.3
	SSNM	5851	8624	7754	65.6	85.9	265.3

Location mean	6132.2	8319.4	7829.9	65.3	85.6	263.1
C.D.(5%) AiBj-AiBk	1023.4	1478.8	1249.9	2.9	4.3	7.4
C.D.(5%) AiBk-AjBk	1027.0	1541.6	1215.9	3.5	4.3	8.6
F(5%)	NS	NS	NS	NS	S	NS

Zero Tillage	6719	9208	8319	65.8	89.4	265.8
Conventional Tillage	5765	7487	7472	64.6	82.2	260.6
Permanent Bed	5912	8263	7698	65.6	85.2	262.9

C.D. (5%) Ai-Aj	607.8	974.6	673.3	2.6	2.6	6.2
C.V. (%) Error A	7.6	9.0	6.6	3.1	2.3	1.8
F (5%)	S	S	NS	NS	S	NS

33% RDN+GS	6533	8700	8329	65.7	90.4	265.8
RDF	5664	7656	7232	65.2	81.4	258.8
SSNM	6200	8602	7928	65.1	85.0	264.7

C.D. (5%) Bi-Bj	590.9	853.8	721.7	1.7	2.5	4.2
C.V. (%) Error B	9.4	10.0	9.0	2.5	2.8	1.6
F (5%)	S	S	S	NS	S	S

**Table 31: Nutrient management in maize based rainfed cropping systems under different tillage practices in Chhindwara.**

Tillage practices	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking
Zero Tillage	33% RDN+GS	6349	16164	69.3	78.8	187.3	55.1	61.0
	100% RDF	7979	17407	71.0	86.0	192.7	57.1	62.0
	SSNM	9336	20769	73.8	91.9	208.6	62.1	65.0
Conventional Tillage	33% RDN+GS	6700	17312	70.3	82.7	190.6	57.1	62.0
	100% RDF	8208	18477	72.1	88.5	198.5	59.1	63.0
	SSNM	9315	20409	73.4	90.4	205.3	60.1	64.0
Permanent Bed	33% RDN+GS	6382	17182	69.9	80.4	187.5	56.6	61.0
	100% RDF	7986	18440	71.3	87.6	197.8	57.1	63.0
	SSNM	9066	18562	72.2	89.4	203.3	59.1	63.0

Location mean	7924.5	18302.5	71.5	86.2	196.8	58.2	62.6
C.D.(5%) AiBj-AiBk	1404.4	5680.5	5.5	1.8	18.7	6.8	12.0
C.D.(5%) AiBk-AjBk	1185.2	5039.5	5.9	3.4	19.9	5.7	16.8
F(5%)	NS	NS	NS	S	NS	NS	NS

Zero Tillage	7888	18113	71.4	85.6	196.2	58.1	62.6
Conventional Tillage	8074	18733	71.9	87.2	198.1	58.8	63.0
Permanent Bed	7811	18061	71.1	85.8	196.2	57.6	62.3

C.D. (5%) Ai-Aj	306.2	2013.0	3.9	3.2	13.0	1.3	13.8
C.V. (%) Error A	3.0	8.4	4.1	2.8	5.0	1.7	16.9
F (5%)	NS	NS	NS	NS	NS	NS	NS

33% RDN+GS	6477	16886	69.8	80.7	188.5	56.3	61.3
100% RDF	8058	18108	71.5	87.4	196.3	57.8	62.6
SSNM	9239	19913	73.1	90.6	205.7	60.5	64.0

C.D. (5%) Bi-Bj	810.9	3279.6	3.2	1.0	10.8	3.9	6.9
C.V. (%) Error B	10.0	17.4	4.3	1.2	5.3	6.6	10.8
F (5%)	S	NS	NS	S	S	NS	NS

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Tillage practices	Nutrient management	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/cob
Zero Tillage	33% RDN+GS	71043	2.63	16.6	17.8	13.1	30.6
	100% RDF	99424	2.72	17.6	18.5	14.1	34.6
	SSNM	124184	3.18	19.6	20.3	17.1	41.6
Conventional Tillage	33% RDN+GS	78082	2.68	17.1	18.3	14.1	32.6
	100% RDF	104891	2.84	18.1	18.9	15.1	36.6
	SSNM	123996	3.14	18.8	19.5	16.1	38.6
Permanent Bed	33% RDN+GS	71253	2.64	17.1	17.8	14.1	31.6
	100% RDF	103055	2.80	17.6	18.8	14.1	34.6
	SSNM	119792	3.10	18.6	19.3	15.6	37.6

Location mean	99524.5	2.86	17.9	18.8	14.8	35.3
C.D.(5%) AiBj-AiBk	16509.3	0.16	2.0	0.9	1.1	5.2
C.D.(5%) AiBk-AjBk	20523.8	0.17	1.8	1.7	1.2	4.6
F(5%)	NS	NS	NS	NS	S	NS

Zero Tillage	98217	2.84	17.9	18.9	14.7	35.6
Conventional Tillage	102323	2.89	18.0	18.9	15.1	35.9
Permanent Bed	98033	2.85	17.7	18.6	14.6	34.6

C.D. (5%) Ai-Aj	15675.6	0.11	0.8	1.6	0.8	1.9
C.V. (%) Error A	12.0	3.0	3.4	6.4	3.9	4.2
F (5%)	NS	NS	NS	NS	NS	NS

33% RDN+GS	73460	2.65	16.9	18.0	13.7	31.6
100% RDF	102457	2.79	17.7	18.7	14.4	35.2
SSNM	122657	3.14	19.0	19.7	16.2	39.2

C.D. (5%) Bi-Bj	9531.6	0.09	1.2	0.5	0.7	3.0
C.V. (%) Error B	9.3	3.2	6.4	2.8	4.3	8.3
F (5%)	S	S	S	S	S	S

Table 32: Long term trial on integrated nutrient management in maize system in Srinagar.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)
T <sub>1</sub>	3604	9279	83.7	88.5	206.0	80.3	84.0	19.5
T <sub>2</sub>	6898	13832	82.5	97.3	221.3	87.3	90.3	23.9
T <sub>3</sub>	6133	14534	83.0	97.9	228.7	86.3	89.7	24.0
T <sub>4</sub>	4973	11661	83.4	95.4	239.3	85.7	88.7	24.8
T <sub>5</sub>	4330	7579	81.9	91.7	213.3	82.0	85.3	23.3
T <sub>6</sub>	5824	13663	82.0	99.4	236.7	88.7	92.0	24.0
T <sub>7</sub>	6935	14958	83.0	100.6	242.3	87.0	90.0	24.9
T <sub>8</sub>	6230	13620	83.2	98.8	226.7	87.0	90.3	24.9
T <sub>9</sub>	5209	13901	82.8	99.5	229.3	85.0	88.0	23.3
T <sub>10</sub>	6415	14065	82.9	96.9	218.3	80.0	83.3	23.2
T <sub>11</sub>	4359	9968	82.3	91.0	199.3	81.7	85.0	20.4
Mean	5537.3	12459.9	82.8	96.1	223.8	84.6	87.9	23.3
CD	471.5	3206.1	1.1	2.9	13.1	3.2	3.0	1.6
CV (%)	5.0	15.1	0.8	1.8	3.4	2.2	2.0	4.0
Significance	S	S	NS	S	S	S	S	S

Treatments	Net returns (Rs./ha)	B:C ratio	Barrenness in maize (%)	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
T <sub>1</sub>	86188	1.33	30.6	17.0	10.7	10.6	26.6
T <sub>2</sub>	117967	2.33	13.4	21.7	14.4	13.2	41.5
T <sub>3</sub>	105173	2.43	12.9	20.8	12.9	11.8	40.9
T <sub>4</sub>	99832	1.79	11.9	21.2	15.0	11.3	40.6
T <sub>5</sub>	104720	2.10	17.0	18.0	10.1	10.2	35.7
T <sub>6</sub>	132322	2.11	20.6	21.4	11.7	10.7	38.1
T <sub>7</sub>	137086	2.61	12.2	21.9	14.5	15.2	48.3
T <sub>8</sub>	125720	2.68	12.2	21.9	13.4	13.9	43.7
T <sub>9</sub>	134613	2.71	13.0	21.5	11.6	13.1	40.3
T <sub>10</sub>	118606	1.85	12.1	20.3	11.1	9.7	32.2
T <sub>11</sub>	100698	1.34	15.4	17.4	10.3	8.6	26.7
Mean	114811.5	2.12	15.6	20.3	12.3	11.7	37.7
CD	5585.9	0.17	1.0	1.5	1.1	1.1	1.8
CV (%)	2.9	4.8	3.7	4.3	5.4	5.8	2.8
Significance	S	S	S	S	S	S	S

**Table 33: Long term trial on integrated nutrient management in maize-wheat cropping system in Pantnagar.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking
T <sub>1</sub>	3489	5048	77.6	77.3	161.1	59.0	64.3
T <sub>2</sub>	5871	7636	82.2	83.1	188.9	54.3	58.3
T <sub>3</sub>	5529	6763	82.0	82.9	182.2	54.3	59.3
T <sub>4</sub>	4880	6413	81.8	82.4	178.3	55.0	60.3
T <sub>5</sub>	5139	6847	81.6	82.2	178.9	58.0	63.0
T <sub>6</sub>	5451	7447	82.7	82.9	180.7	56.0	60.7
T <sub>7</sub>	6802	8858	83.1	84.2	195.0	53.3	57.0
T <sub>8</sub>	6329	8388	82.2	83.1	194.5	54.3	59.0
T <sub>9</sub>	5645	7527	82.0	82.2	184.9	55.0	59.3
T <sub>10</sub>	6139	8202	82.7	83.4	191.3	54.0	58.0
T <sub>11</sub>	4266	6161	79.8	80.2	170.5	58.3	63.0

Mean	5412.7	7208.2	81.6	82.2	182.4	55.6	60.2
CD	557.3	808.9	1.7	1.6	8.7	2.7	2.4
CV (%)	6.0	6.6	1.3	1.2	2.8	2.8	2.3
Significance	S	S	S	S	S	S	S

Treatment	Days to maturity	100-seed weight (g)	Cob length (cm)	Cob girth (cm)	Net returns (Rs./ha)	B:C ratio
T <sub>2</sub>	118.3	30.8	14.1	14.1	77961	1.74
T <sub>3</sub>	119.3	27.8	13.8	13.8	73626	1.76
T <sub>4</sub>	119.7	26.3	13.5	13.7	61902	1.54
T <sub>5</sub>	121.7	26.7	12.7	13.8	66025	1.60
T <sub>6</sub>	119.7	27.3	13.2	14.1	93805	2.14
T <sub>7</sub>	117.7	34.6	15.2	14.3	88392	1.64
T <sub>8</sub>	118.3	32.5	14.7	14.2	81319	1.60
T <sub>9</sub>	119.3	28.7	14.1	14.1	68877	1.40
T <sub>10</sub>	119.0	32.1	14.3	14.4	82328	1.79
T <sub>11</sub>	120.0	24.9	12.5	13.1	55322	1.63

Mean	119.6	28.4	13.7	13.8	72238.9	1.66
CD	2.1	1.7	0.6	0.4	11621.9	0.27
CV (%)	1.1	3.5	2.7	1.8	9.4	9.5
Significance	S	S	S	S	S	S

Cont....

# A-120

Treatment	Narrow leaves weeds/m <sup>2</sup>	Broad leaves/m <sup>2</sup>	Sedges/m <sup>2</sup>	Total uptake (kg/ha)			
				N	P	K	Zn
T <sub>1</sub>	39.0	1.67	6.00	77.7	11.6	30.0	0.153
T <sub>2</sub>	26.7	2.67	4.00	136.4	24.6	64.5	0.297
T <sub>3</sub>	25.0	1.67	4.67	122.7	20.3	56.1	0.260
T <sub>4</sub>	20.3	0.67	1.67	104.2	17.1	47.6	0.236
T <sub>5</sub>	13.0	0.67	1.33	121.4	16.8	48.2	0.255
T <sub>6</sub>	10.7	1.33	0.67	129.5	17.9	49.1	0.268
T <sub>7</sub>	20.7	2.33	2.67	169.5	29.9	79.3	0.410
T <sub>8</sub>	22.3	2.00	1.67	147.4	27.0	76.7	0.378
T <sub>9</sub>	17.3	1.00	2.00	126.2	22.2	68.8	0.337
T <sub>10</sub>	21.3	1.33	8.33	144.2	24.2	71.0	0.468
T <sub>11</sub>	26.3	3.67	10.67	102.4	14.6	41.1	0.204

Mean	22.1	1.73	3.97	125.6	20.6	57.5	0.297
CD	4.9	1.19	1.76	12.8	2.1	6.1	0.028
CV (%)	13.0	40.6	26.1	6.0	5.9	6.3	5.6
Significance	S	S	S	S	S	S	S

**Table 34: Long term trial on integrated nutrient management in maize system in Bhubaneswar.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Plant height (cm)	Days to 50% pollen shed	Days to 50% silking	Days to 50% maturity	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3941	8732	4736	80.3	143.4	56.0	58.0	91.6	45351	0.84
T <sub>2</sub>	6362	14016	7601	78.1	179.5	52.3	54.3	91.3	82343	1.62
T <sub>3</sub>	6142	13521	7333	79.2	167.0	52.3	54.3	90.6	79949	1.58
T <sub>4</sub>	5882	12998	7049	78.1	155.2	51.3	53.3	89.6	75920	1.52
T <sub>5</sub>	6354	13246	7184	79.7	157.6	55.7	57.7	88.6	73312	1.47
T <sub>6</sub>	6348	13871	7523	80.1	152.9	54.3	56.3	89.6	79318	1.47
T <sub>7</sub>	7502	16375	8881	77.7	180.0	54.7	56.7	90.6	102642	2.03
T <sub>8</sub>	6578	14687	7965	81.2	170.9	52.3	54.3	91.3	87159	1.71
T <sub>9</sub>	6317	13802	7485	79.7	161.1	52.3	54.3	89.6	82653	1.65
T <sub>10</sub>	6643	14587	7911	79.0	176.8	54.0	56.0	90.6	89531	1.79
T <sub>11</sub>	6302	13771	7468	78.1	167.7	53.0	55.0	90.6	82350	1.56

Mean	6215.5	13600.6	7376.1	79.2	164.7	53.5	55.5	90.4	80048.0	1.57
CD	735.1	1392.3	755.1	2.7	6.2	2.9	2.9	1.5	11969.8	0.30
CV (%)	6.9	6.0	6.0	2.0	2.2	3.2	3.1	0.9	8.8	11.3
Significance	S	S	S	NS	S	S	S	S	S	S



Table 35: Long term trial on integrated nutrient management in maize in Coimbatore.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Days to maturity
T <sub>1</sub>	3507	6275	63.7	58.0	187.0	52.0	54.0	106.3
T <sub>2</sub>	6055	9667	59.3	63.7	206.2	52.0	54.0	111.0
T <sub>3</sub>	5683	7082	62.0	63.3	193.2	52.0	54.0	108.7
T <sub>4</sub>	4969	7935	61.0	62.0	195.8	50.7	53.3	105.0
T <sub>5</sub>	4565	7303	57.3	59.7	198.2	53.0	55.0	109.3
T <sub>6</sub>	4731	7567	61.3	61.3	197.6	52.3	54.3	111.7
T <sub>7</sub>	7411	11820	59.3	67.0	209.6	50.7	53.3	110.7
T <sub>8</sub>	5831	9322	59.0	63.7	201.4	52.0	54.0	109.0
T <sub>9</sub>	5319	8488	57.7	62.7	208.2	51.7	53.7	107.7
T <sub>10</sub>	6405	10243	56.3	64.7	203.4	51.7	53.7	111.7
T <sub>11</sub>	4432	7095	57.3	59.3	203.2	51.3	53.3	106.3
Mean	5355.1	8436.1	59.5	62.3	200.4	51.8	53.9	108.8
CD	1304.7	2358.8	6.3	5.4	20.1	1.3	1.1	2.6
CV (%)	14.3	16.4	6.2	5.1	5.9	1.4	1.2	1.4
Significance	S	S	NS	NS	NS	S	NS	S

Treatments	100-grain weight (g)	Shelling (%)	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
T <sub>1</sub>	28.0	78.7	33038	1.65	16.1	11.9	12.8	28.0
T <sub>2</sub>	36.0	82.8	79337	2.20	18.9	14.1	15.0	32.2
T <sub>3</sub>	33.3	82.6	72576	2.14	18.6	13.8	14.8	31.9
T <sub>4</sub>	32.7	80.8	57611	1.93	18.0	13.7	14.4	31.7
T <sub>5</sub>	31.7	80.0	43478	1.66	18.0	13.5	14.3	31.2
T <sub>6</sub>	32.7	81.0	32034	1.39	18.2	13.6	14.3	31.2
T <sub>7</sub>	37.3	84.0	99549	2.27	19.0	14.6	15.3	33.3
T <sub>8</sub>	33.7	82.7	63792	1.84	18.8	13.8	14.9	32.2
T <sub>9</sub>	33.0	81.9	53661	1.73	18.5	13.8	14.6	31.8
T <sub>10</sub>	36.7	83.4	86404	2.28	18.9	14.3	15.0	32.6
T <sub>11</sub>	31.3	79.5	40659	1.62	17.6	13.2	13.6	30.0
Mean	33.3	81.6	60194.4	1.88	18.2	13.7	14.5	31.5
CD	7.2	4.6	31312.7	0.47	2.0	1.0	1.0	3.9
CV (%)	12.7	3.3	30.5	14.5	6.3	4.3	4.0	7.3
Significance	NS	NS	S	S	NS	S	S	NS

Table 36: Long term trial on integrated nutrient management in maize system in Dharwad.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	1198	1877	78.4	68.1	200.4	51.3	56.3	25.7	-27485	0.48
T <sub>2</sub>	5991	7570	81.1	76.9	213.0	51.3	55.7	31.7	64561	2.05
T <sub>3</sub>	5690	7221	81.4	73.9	202.9	51.0	56.3	30.2	60340	2.02
T <sub>4</sub>	5214	6363	80.3	68.5	199.0	49.0	56.3	27.6	52551	1.92
T <sub>5</sub>	5768	6948	80.9	77.5	204.2	51.0	55.7	30.7	57628	1.91
T <sub>6</sub>	5950	7527	81.2	77.2	201.0	50.7	56.0	30.9	61100	1.96
T <sub>7</sub>	6447	7870	81.0	78.6	212.0	50.0	57.3	32.5	68880	2.04
T <sub>8</sub>	6203	7561	81.1	77.9	230.7	50.0	55.0	29.9	65620	2.02
T <sub>9</sub>	5740	7152	80.9	76.6	206.6	51.3	57.7	28.5	58197	1.93
T <sub>10</sub>	5937	7521	81.0	77.2	216.6	50.0	55.3	30.1	62570	2.01
T <sub>11</sub>	5203	6376	80.6	75.4	205.3	50.3	56.0	29.6	49770	1.84

Mean	5394.7	6726.1	80.7	75.3	208.3	50.5	56.2	29.8	52157.5	1.83
CD	503.2	953.4	2.4	5.3	19.0	2.2	2.3	2.9	10567.2	0.17
CV (%)	5.5	8.3	1.8	4.1	5.3	2.6	2.4	5.7	11.9	5.5
Significance	S	S	NS	S	NS	NS	NS	S	S	S

Treatments	Weeds/m <sup>2</sup> (at 30 DAS)	Total weeds dry wt. (g/m <sup>2</sup> ) (at 25 DAS)	FAW damage (%) (at 30 DAS)	OC (%) after harvesting	Available (kg/ha) (after harvesting)			OC (%) Initial	Available (kg/ha) Initial		
					N	P	K		N	P	K
T <sub>1</sub>	17.8	3.60	3.67	0.333	146.1	16.9	293.2	0.330	175.6	20.2	303.3
T <sub>2</sub>	14.6	2.70	3.67	0.337	203.8	29.1	355.3	0.360	187.5	29.6	359.8
T <sub>3</sub>	14.9	2.23	3.53	0.357	166.9	21.3	328.0	0.390	178.1	23.5	339.3
T <sub>4</sub>	17.0	2.83	3.53	0.340	152.0	22.0	330.1	0.360	174.7	21.6	335.7
T <sub>5</sub>	22.8	4.07	2.50	0.593	224.6	27.5	321.6	0.560	205.3	30.1	329.7
T <sub>6</sub>	20.0	3.67	2.60	0.577	254.9	28.7	343.1	0.540	257.0	28.9	342.0
T <sub>7</sub>	19.4	3.60	2.50	0.587	314.8	34.4	379.2	0.520	298.5	35.6	361.3
T <sub>8</sub>	18.6	4.00	2.93	0.583	260.8	30.9	346.5	0.530	278.6	28.6	345.3
T <sub>9</sub>	23.1	4.13	2.73	0.520	264.0	25.3	338.2	0.560	254.3	27.1	348.3
T <sub>10</sub>	16.1	3.00	3.40	0.400	191.5	26.6	327.8	0.390	183.6	27.6	355.8
T <sub>11</sub>	18.7	4.37	2.87	0.560	221.5	24.6	322.2	0.530	224.1	23.5	319.5

Mean	18.5	3.47	3.08	0.472	218.3	26.1	335.0				
CD	8.0	1.57	1.22	0.049	28.9	3.5	23.1				
CV (%)	25.5	26.6	23.2	6.1	7.8	7.9	4.1				
Significance	NS	NS	NS	S	S	S	S				

Table 37: Long term trial on integrated nutrient management in maize system in Kolhapur.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Days to maturity	100-seeds weight (g)	B:C ratio
T <sub>1</sub>	3909	4378	65.2	52.7	173.3	60.7	62.0	104.7	22.3	0.71
T <sub>2</sub>	8271	9123	65.6	61.0	210.0	59.7	61.7	105.0	31.7	1.79
T <sub>3</sub>	7189	7937	66.0	60.9	203.3	60.7	62.0	103.3	28.7	1.51
T <sub>4</sub>	5902	6685	64.8	57.7	193.3	60.3	62.3	106.0	26.7	1.19
T <sub>5</sub>	4491	5090	65.6	56.7	190.0	61.0	62.3	105.3	26.0	0.75
T <sub>6</sub>	5740	6257	65.8	59.1	195.0	60.0	61.7	106.3	25.7	1.23
T <sub>7</sub>	10693	11957	66.0	65.6	218.3	59.7	61.3	105.0	37.0	2.62
T <sub>8</sub>	9055	9778	65.8	65.2	215.0	60.7	62.3	106.3	36.3	2.17
T <sub>9</sub>	6362	8126	65.3	60.4	206.7	60.3	62.3	107.3	29.0	1.33
T <sub>10</sub>	8773	9520	65.6	62.6	208.7	61.0	63.0	104.7	32.0	2.03
T <sub>11</sub>	8335	9256	65.6	63.3	215.0	60.0	62.7	106.0	33.7	1.82

Mean	7156.5	8009.7	65.6	60.5	202.6	60.4	62.2	105.5	29.9	1.56
CD	863.2	901.7	1.8	7.4	19.4	1.3	1.6	5.9	6.4	0.31
CV (%)	7.1	6.6	1.6	7.2	5.6	1.3	1.5	3.3	12.6	11.8
Significance	S	S	NS	NS	S	NS	NS	NS	S	S

Treatment	Available (kg/ha) (before harvest)			Available (kg/ha) (after harvest)			Weed intensity/m <sup>2</sup>	Weed dry matter (g/m <sup>2</sup> )
	N	P	K	N	P	K		
T <sub>1</sub>	297.2	21.8	185.7	277.3	20.7	182.7	11.7	11.4
T <sub>2</sub>	318.1	43.2	224.5	319.0	43.3	228.0	8.7	6.9
T <sub>3</sub>	308.6	35.6	207.2	311.3	36.3	209.0	5.3	4.9
T <sub>4</sub>	305.3	34.6	202.4	306.3	34.7	203.7	3.0	2.1
T <sub>5</sub>	302.2	29.2	193.4	303.3	29.1	195.3	18.3	15.2
T <sub>6</sub>	305.2	31.8	200.6	307.7	33.0	202.7	11.0	8.5
T <sub>7</sub>	321.3	48.7	234.5	324.3	50.3	236.7	0.0	0.0
T <sub>8</sub>	320.5	46.8	228.8	322.3	46.7	231.3	0.0	0.0
T <sub>9</sub>	307.9	35.4	204.8	310.0	36.7	207.7	3.0	2.7
T <sub>10</sub>	311.9	38.0	212.4	315.0	39.1	214.0	1.3	0.4
T <sub>11</sub>	312.6	40.7	219.5	315.7	42.3	223.0	2.0	0.9

Mean	310.1	36.9	210.3	310.2	37.5	212.2	5.8	4.8
CD	4.3	4.6	5.9	6.3	3.0	5.6	2.1	2.8
CV (%)	0.8	7.3	1.6	1.2	4.7	1.5	21.1	34.4
Significance	S	S	S	S	S	S	S	S

Table 38: Long term trial on integrated nutrient management in maize system in Ambikapur.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Plant height (cm)	Day to 50% tasseling	Day to 50% silking	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	2390	6745	63.3	154.2	52.9	53.1	4800	0.11
T <sub>2</sub>	6598	16518	62.8	215.3	53.2	54.4	86538	1.79
T <sub>3</sub>	5522	15910	63.5	205.5	51.9	53.7	66233	1.40
T <sub>4</sub>	4313	14629	62.0	190.4	53.3	52.6	42466	0.88
T <sub>5</sub>	4027	7871	62.4	189.0	52.4	53.7	32540	0.73
T <sub>6</sub>	4024	8475	62.8	179.0	52.8	54.1	27487	0.67
T <sub>7</sub>	6668	17376	59.3	218.1	53.3	53.7	77938	1.33
T <sub>8</sub>	6063	16293	62.5	207.9	54.0	53.5	67066	1.16
T <sub>9</sub>	4545	15397	60.7	205.5	52.8	55.4	41106	0.70
T <sub>10</sub>	6647	15802	64.1	221.0	53.3	54.0	77518	1.32
T <sub>11</sub>	5871	15988	65.0	219.7	53.4	53.2	62005	1.05
Mean	5151.6	13727.6	62.6	200.5	53.0	53.8	53245.2	1.01
CD	451.6	1188.4	4.0	26.3	2.0	1.8	9089.1	0.22
CV (%)	5.1	5.1	3.8	7.7	2.2	1.9	10.0	12.9
Significance	S	S	NS	S	NS	NS	S	S

Table 39: Long term trial on integrated nutrient management in maize system in Banswara.

Treatments	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)
T <sub>1</sub>	3789	5792	64.0	61.5	223.3
T <sub>2</sub>	7300	9271	65.9	94.0	258.3
T <sub>3</sub>	6068	8217	64.3	74.6	238.3
T <sub>4</sub>	4433	6266	66.0	56.6	226.7
T <sub>5</sub>	5391	7323	63.3	66.4	246.7
T <sub>6</sub>	7164	9254	63.0	92.1	263.0
T <sub>7</sub>	7722	9763	65.2	95.1	266.7
T <sub>8</sub>	7001	8813	65.4	86.6	257.3
T <sub>9</sub>	5458	7189	66.3	68.1	250.7
T <sub>10</sub>	7493	9389	65.7	92.9	259.3
T <sub>11</sub>	4133	5981	64.6	64.0	231.7
Mean	5995.8	7932.4	64.9	77.5	247.5
CD	875.5	1008.6	1.9	7.4	11.5
CV (%)	8.6	7.5	1.7	5.6	2.7
Significance	S	S	S	S	S

**Table 40: Long term trial on integrated nutrient management in maize system in Chhindwara.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking
T <sub>1</sub>	5557	8719	70.5	64.3	114.4	64.4	64.2
T <sub>2</sub>	7006	10917	69.2	72.4	149.1	64.1	63.5
T <sub>3</sub>	7122	11022	67.6	73.2	146.0	64.8	64.2
T <sub>4</sub>	6272	10063	66.1	70.1	142.1	64.4	63.5
T <sub>5</sub>	6105	9827	63.5	69.3	139.4	64.1	63.2
T <sub>6</sub>	6034	9412	72.5	69.1	135.0	63.8	63.2
T <sub>7</sub>	7906	12304	68.7	78.6	151.4	64.8	62.8
T <sub>8</sub>	7387	11133	67.9	76.0	145.4	65.1	62.8
T <sub>9</sub>	6534	10613	73.7	71.8	144.4	64.1	64.5
T <sub>10</sub>	7605	11407	60.3	78.0	153.3	64.4	63.2
T <sub>11</sub>	5770	9197	57.7	65.8	129.2	62.3	63.5

Mean	6663.4	10419.6	67.1	71.7	140.9	64.2	63.5
CD	658.7	1302.3	13.0	8.4	13.8	6.2	7.2
CV (%)	5.8	7.3	11.4	6.9	5.7	5.6	6.6
Significance	S	S	NS	S	S	NS	NS

Treatment	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	15.2	14.0	13.2	36.2	67844	2.62
T <sub>2</sub>	18.5	15.5	16.9	43.6	85528	2.91
T <sub>3</sub>	17.3	15.6	17.1	44.0	86940	3.29
T <sub>4</sub>	16.4	14.9	16.7	42.2	76568	2.82
T <sub>5</sub>	16.2	14.7	16.6	42.0	74527	2.76
T <sub>6</sub>	16.0	14.1	16.5	40.8	73663	2.74
T <sub>7</sub>	18.5	17.0	17.3	45.2	96516	3.44
T <sub>8</sub>	16.6	16.0	17.1	44.4	90172	3.35
T <sub>9</sub>	16.6	15.2	16.8	42.3	79761	2.85
T <sub>10</sub>	19.0	16.5	17.2	44.6	92838	3.40
T <sub>11</sub>	15.5	14.0	16.1	39.8	70433	2.68

Mean	16.9	15.2	16.5	42.3	81344.7	2.99
CD	1.7	1.9	1.8	2.7	8102.5	0.33
CV (%)	5.9	7.4	6.3	3.8	5.8	6.5
Significance	S	S	S	S	S	S

***Treatment details:***

- T<sub>1</sub> Unmanured
- T<sub>2</sub> 100% RDF
- T<sub>3</sub> 75% RDF+ legume intercropping (for economic produce) with FYM 5 t/ha + Azotobacter
- T<sub>4</sub> 50% RDF + legume intercropping (for economic produce) with FYM 5 t/ha +Azotobacter
- T<sub>5</sub> FYM 10t/ha + Azotobactor
- T<sub>6</sub> Maize + legume intercropping(for economic produce) with FYM 10 t/ha + Azotobactor
- T<sub>7</sub> 100% RDF + 5 t/ha FYM
- T<sub>8</sub> 75% RDF + 5 t/ha FYM
- T<sub>9</sub> 50% RDF + 5 t/ha FYM
- T<sub>10</sub> 100% RDF + 5 kg Zn/ha
- T<sub>11</sub> FYM 5 t/ha (state practice)

Table 41: Efficacy of nano urea in maize system in Imphal.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking
T <sub>1</sub>	3918	9803	52.5	55.5	221.7	54.7	58.0
T <sub>2</sub>	7814	18895	61.2	64.5	294.0	51.0	53.3
T <sub>3</sub>	6440	16342	58.3	59.8	256.0	51.3	55.3
T <sub>4</sub>	5396	13658	56.1	56.0	245.7	51.7	54.0
T <sub>5</sub>	6946	17330	58.4	61.0	277.3	51.3	54.7
T <sub>6</sub>	7839	19398	61.3	63.8	296.7	52.0	55.0
T <sub>7</sub>	5855	15615	56.5	57.6	258.0	52.3	55.3
T <sub>8</sub>	6721	17527	57.3	60.0	271.3	51.7	54.7
T <sub>9</sub>	5846	15092	55.1	58.2	251.3	52.3	54.3
T <sub>10</sub>	6638	16618	57.1	59.7	266.3	52.3	55.0
T <sub>11</sub>	5721	14513	56.1	58.6	257.0	52.7	55.0
T <sub>12</sub>	6284	15795	57.8	59.5	263.8	53.3	56.0

Mean	6284.7	15882.2	57.3	59.5	263.3	52.2	55.1
CD	769.8	1944.4	4.7	5.2	24.2	2.4	2.5
CV (%)	7.2	7.2	4.8	5.2	5.4	2.7	2.7
Significance	S	S	S	S	S	NS	NS

Treatment	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
T <sub>1</sub>	31.2	39501	1.93	14.0	12.1	11.2	22.3
T <sub>2</sub>	33.3	116759	3.54	20.1	16.5	16.4	42.0
T <sub>3</sub>	32.4	89816	3.01	17.9	14.7	14.3	35.7
T <sub>4</sub>	31.4	68937	2.58	16.1	13.6	13.5	29.3
T <sub>5</sub>	32.6	99310	3.18	19.3	15.3	14.9	36.7
T <sub>6</sub>	33.2	116938	3.51	20.4	16.3	16.1	42.7
T <sub>7</sub>	32.8	77992	2.74	17.4	14.3	13.5	33.7
T <sub>8</sub>	31.8	94996	3.08	18.7	15.9	14.8	36.0
T <sub>9</sub>	32.1	76995	2.70	16.5	13.7	13.3	30.3
T <sub>10</sub>	31.9	93097	3.05	18.0	15.0	15.1	37.7
T <sub>11</sub>	32.8	74996	2.69	16.7	13.8	13.2	30.7
T <sub>12</sub>	32.7	86687	2.95	18.3	14.5	14.5	36.7

Mean	32.3	86335.3	2.91	17.8	14.7	14.2	34.5
CD	1.8	15113.4	0.34	1.8	1.3	1.3	5.4
CV (%)	3.4	10.3	6.8	5.9	5.3	5.2	9.2
Significance	NS	S	S	S	S	S	S

Table 42: Efficacy of Nano urea in maize systems in Srinagar.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days 50% tasseling	Days 50% silking	100-seed weight (g)
T <sub>1</sub>	4469	8647	80.8	96.2	179.0	81.3	85.0	20.4
T <sub>2</sub>	7094	13327	83.7	99.9	221.3	90.3	93.3	24.8
T <sub>3</sub>	4709	9655	81.7	98.0	183.3	85.7	88.7	24.7
T <sub>4</sub>	4425	9180	81.6	97.4	179.0	86.0	89.0	24.9
T <sub>5</sub>	6711	11629	83.4	98.9	203.3	90.3	93.3	20.7
T <sub>6</sub>	6119	12268	83.5	99.4	207.0	92.0	95.0	25.1
T <sub>7</sub>	5641	9753	82.0	98.4	183.7	88.0	91.7	25.0
T <sub>8</sub>	5437	9714	82.5	98.7	188.7	87.3	90.7	25.0
T <sub>9</sub>	5848	9849	82.7	98.8	190.3	85.7	88.7	20.7
T <sub>10</sub>	6172	10230	83.3	99.1	198.0	86.3	90.0	25.1
T <sub>11</sub>	4550	9286	81.3	97.4	180.3	84.7	88.0	25.0
T <sub>12</sub>	4530	9572	81.5	97.7	182.0	84.0	87.0	25.0

Mean	5475.4	10259.2	82.3	98.3	191.3	86.8	90.0	23.9
CD	807.7	523.2	0.8	2.0	19.9	2.0	2.1	0.7
CV (%)	8.7	3.0	0.6	1.2	6.1	1.4	1.4	1.7
Significance	S	S	S	S	S	S	S	S

Treatments	Net returns (Rs./ha)	B:C ratio	Barrenness in maize (%)	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
T <sub>1</sub>	90354	1.82	31.1	16.5	10.4	8.8	25.5
T <sub>2</sub>	141811	2.86	11.2	23.9	15.0	15.2	48.1
T <sub>3</sub>	95976	1.87	12.2	20.8	12.8	11.8	35.8
T <sub>4</sub>	94335	1.86	11.5	20.9	14.9	12.8	42.2
T <sub>5</sub>	118005	2.33	33.1	18.0	10.5	9.7	27.0
T <sub>6</sub>	133456	2.47	11.3	21.9	11.8	11.0	40.3
T <sub>7</sub>	96200	2.00	12.2	22.1	14.5	14.6	46.3
T <sub>8</sub>	98643	2.06	12.2	21.3	13.3	14.1	42.8
T <sub>9</sub>	101915	2.16	33.2	18.0	10.4	9.7	27.0
T <sub>10</sub>	108820	2.21	11.3	22.0	11.8	11.0	40.3
T <sub>11</sub>	93523	1.84	12.2	22.1	14.4	14.6	46.1
T <sub>12</sub>	95353	1.86	12.1	21.4	13.3	14.1	42.8

Mean	105699.2	2.11	16.9	20.7	12.8	12.3	38.7
CD	6116.7	0.26	0.7	1.7	1.0	1.2	1.7
CV (%)	3.4	7.4	2.5	4.7	4.4	5.7	2.6
Significance	S	S	S	S	S	S	S



Table 43: Efficacy of nano urea in maize systems in Karnal.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Days to 50% tasseling	Days to 50% silking	Plant height (cm)	Shelling (%)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	2903	5450	3719	64.8	55.0	58.0	173.7	78.0	18971	1.47
T <sub>2</sub>	7858	16320	9743	64.4	51.0	54.0	217.7	80.7	113931	3.68
T <sub>3</sub>	6360	13209	7984	64.4	52.3	55.3	212.7	79.7	85132	3.03
T <sub>4</sub>	5271	10947	6643	64.3	54.0	57.0	203.0	79.3	64308	2.55
T <sub>5</sub>	6288	13060	7890	64.1	53.0	56.0	214.7	79.7	83058	2.95
T <sub>6</sub>	6677	13868	8454	64.1	52.3	55.3	218.7	79.0	89967	3.07
T <sub>7</sub>	5929	12315	7473	63.9	54.0	57.0	210.7	79.3	76476	2.81
T <sub>8</sub>	6286	13055	7926	64.6	53.0	56.0	212.7	79.3	82748	2.93
T <sub>9</sub>	6163	12801	7737	64.5	53.7	56.7	211.3	79.7	80631	2.89
T <sub>10</sub>	6397	13286	8000	64.1	54.0	57.0	213.3	80.0	85315	3.00
T <sub>11</sub>	6525	13552	8193	64.1	52.3	55.3	217.0	79.7	88908	3.14
T <sub>12</sub>	6997	14532	8855	64.9	52.7	55.7	217.7	79.0	97624	3.32

Mean	6137.7	12699.7	7718.2	64.3	53.1	56.1	210.3	79.4	80589.1	2.90
CD	769.4	1587.6	987.1	1.5	1.3	1.3	5.9	1.3	15003.8	0.35
CV (%)	7.4	7.4	7.6	1.3	1.5	1.4	1.7	0.9	11.0	7.2
Significance	S	S	S	NS	S	S	S	NS	S	S

Table 44: Efficacy of nano urea in maize system in Ludhiana.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Barren plant/plot	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3671	4500	78.2	75.8	178.0	59.7	63.7	4.00	31438	0.68
T <sub>2</sub>	7587	10262	84.1	83.5	220.7	58.3	60.3	1.00	112508	2.31
T <sub>3</sub>	6323	8288	81.5	80.4	202.0	59.0	61.0	2.67	85669	1.77
T <sub>4</sub>	5764	7460	80.2	78.4	188.3	60.0	63.3	3.00	74029	1.54
T <sub>5</sub>	6343	8393	82.3	81.3	205.0	58.3	60.3	1.67	85585	1.75
T <sub>6</sub>	6550	8839	82.1	80.4	203.3	58.7	60.7	3.00	89570	1.81
T <sub>7</sub>	5937	7740	81.2	79.8	194.7	59.3	62.3	2.33	77152	1.59
T <sub>8</sub>	6067	8024	81.5	80.0	195.7	60.3	63.3	2.67	79462	1.61
T <sub>9</sub>	5417	7038	81.0	79.8	185.7	60.0	63.0	3.00	65734	1.34
T <sub>10</sub>	6669	9095	82.9	81.9	208.0	60.3	63.3	1.67	92933	1.90
T <sub>11</sub>	6962	9448	83.3	82.1	210.0	59.3	61.3	2.00	100031	2.09
T <sub>12</sub>	7060	9764	83.1	81.7	211.7	59.0	61.0	2.33	101934	2.11

Mean	6195.8	8237.6	81.8	80.4	200.3	59.4	62.0	2.4	83003.8	1.71
CD	958.4	1241.1	3.9	3.7	21.6	2.2	2.2	1.2	20286.2	0.42
CV (%)	9.1	8.9	2.8	2.7	6.4	2.2	2.1	28.0	14.4	14.4
Significance	S	S	NS	S	S	NS	S	S	S	S

Table 45: Efficacy of nano urea in maize systems in Pantnagar.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling
T <sub>1</sub>	2625	6032	64.3	64.3	146.1	53.3
T <sub>2</sub>	7577	13730	65.9	65.9	193.7	50.0
T <sub>3</sub>	6013	9921	66.7	66.7	183.0	50.3
T <sub>4</sub>	4315	6587	65.9	65.9	173.7	50.7
T <sub>5</sub>	6280	10159	65.1	65.1	183.7	50.0
T <sub>6</sub>	6337	10159	66.7	66.7	185.9	50.0
T <sub>7</sub>	4450	6587	66.7	66.7	177.0	50.3
T <sub>8</sub>	4578	7222	65.1	65.1	178.1	50.3
T <sub>9</sub>	4220	5794	65.9	65.9	175.4	50.7
T <sub>10</sub>	6264	8571	65.9	65.9	176.1	50.3
T <sub>11</sub>	5007	6667	65.1	65.1	176.7	50.7
T <sub>12</sub>	6227	9603	65.1	65.1	172.9	50.7

Mean	5324.6	8419.3	65.7	65.7	176.9	50.6
CD	805.6	1557.5	2.7	2.7	15.3	0.9
CV (%)	8.9	10.9	2.5	2.5	5.1	1.0
Significance	S	S	NS	NS	S	S

Treatments	Days to 50% silking	Cob length (cm)	Cob girth (cm)	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	57.3	11.5	11.8	19.7	11398	0.26
T <sub>2</sub>	53.0	16.8	13.7	26.9	112098	2.42
T <sub>3</sub>	53.3	15.3	12.8	25.0	79790	1.74
T <sub>4</sub>	54.0	13.5	12.4	22.7	44672	0.98
T <sub>5</sub>	53.0	15.6	12.9	25.0	83633	1.76
T <sub>6</sub>	53.0	15.7	12.9	25.3	83088	1.68
T <sub>7</sub>	53.7	13.8	12.6	22.8	45763	0.97
T <sub>8</sub>	53.7	13.9	12.6	22.9	46705	0.95
T <sub>9</sub>	54.0	13.5	12.7	22.0	40991	0.87
T <sub>10</sub>	53.3	13.7	12.9	22.1	86686	1.96
T <sub>11</sub>	54.0	13.6	12.8	22.2	58409	1.26
T <sub>12</sub>	53.7	13.9	12.8	22.4	86399	1.97

Mean	53.8	14.2	12.8	23.2	64969.3	1.40
CD	0.8	1.4	0.8	1.5	16836.9	0.36
CV (%)	0.9	5.7	3.6	3.8	15.3	15.1
Significance	S	S	S	S	S	S

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**Table 46: Efficiency of nano urea in maize systems in Bhubaneswar.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Plant height (cm)	Days to 50% pollen shed	Days to 50% silking	Days to 50% maturity	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3855	9680	4960	79.6	147.9	50.7	54.0	91.3	47420	1.13
T <sub>2</sub>	6916	15951	8587	79.1	163.1	51.3	54.9	91.7	77295	1.72
T <sub>3</sub>	6520	13753	7459	73.8	177.3	52.0	55.4	91.7	74549	1.69
T <sub>4</sub>	6215	13313	7220	80.3	173.0	51.7	55.0	92.3	73485	1.71
T <sub>5</sub>	4421	9471	5137	78.9	177.5	51.7	55.3	91.7	90965	2.02
T <sub>6</sub>	5158	11050	5993	76.9	180.4	51.3	54.5	91.7	101564	2.26
T <sub>7</sub>	4264	9135	4954	80.7	175.0	51.3	54.5	91.0	83014	1.89
T <sub>8</sub>	4110	8804	4774	78.9	179.0	51.7	55.0	92.0	87590	1.99
T <sub>9</sub>	4412	9451	5126	79.8	167.5	52.0	55.4	92.3	74543	1.69
T <sub>10</sub>	5382	11530	6253	77.6	161.2	51.7	55.0	92.0	65079	1.51
T <sub>11</sub>	5488	11755	6375	80.3	162.9	51.0	54.4	92.7	70000	1.63
T <sub>12</sub>	6607	14069	7396	79.8	156.7	51.0	54.4	91.7	66202	1.54

Mean	5279.1	11496.9	6186.2	78.8	168.5	51.4	54.8	91.8	75975.5	1.73
CD	907.0	2067.1	1089.1	5.5	15.0	1.1	1.0	1.5	14408.8	0.33
CV (%)	10.1	10.6	10.4	4.1	5.3	1.3	1.1	1.0	11.2	11.2
Significance	S	S	S	NS	S	NS	NS	NS	S	S

**Table 47: Efficacy of nano urea in maize systems in Chitrakoot.**

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days to 50% tasseling	Days to 50% silking	Days to 75% maturity	Shelling (%)
T <sub>1</sub>	5424	6985	10549	90.7	90.7	62.7	67.0	85.3	63.6
T <sub>2</sub>	10498	12015	17277	94.3	94.3	65.0	67.7	85.0	66.8
T <sub>3</sub>	8521	9815	15527	83.2	90.3	63.3	65.7	84.7	70.9
T <sub>4</sub>	7112	8553	12858	88.8	88.8	64.7	66.3	84.3	65.5
T <sub>5</sub>	10011	10760	16571	94.3	94.3	62.3	64.3	85.3	69.4
T <sub>6</sub>	10121	10333	16605	90.7	90.7	64.0	65.0	84.7	69.3
T <sub>7</sub>	9019	9646	15244	87.0	92.6	64.7	66.7	85.3	71.9
T <sub>8</sub>	9500	9782	15355	88.8	88.8	62.0	64.0	84.3	70.1
T <sub>9</sub>	8747	8902	15200	88.8	94.4	62.0	64.0	84.3	69.2
T <sub>10</sub>	8101	8953	14826	83.2	88.4	61.7	63.7	84.7	63.3
T <sub>11</sub>	7567	8585	12356	88.8	88.8	63.0	65.7	84.3	69.5
T <sub>12</sub>	7917	8718	13500	90.7	90.7	64.0	66.3	85.3	70.3

Mean	8544.9	9420.5	14655.6	89.1	91.1	63.3	65.5	84.8	68.3
CD	1595.8	1675.0	2465.7	11.0	9.9	3.2	2.7	1.3	6.8
CV (%)	11.0	10.5	9.9	7.3	6.4	3.0	2.5	0.9	5.8
Significance	S	S	S	NS	NS	NS	NS	NS	NS

**Cont....**

Treatments	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)	Cob weight/cob (g)	Seeds weight/cob (g)	Seed moisture (%)
T <sub>1</sub>	14.4	92712	4.12	14.7	13.0	134.0	85.3	31.0
T <sub>2</sub>	16.7	202496	7.43	16.9	14.5	190.0	138.3	22.6
T <sub>3</sub>	16.0	158927	6.11	16.1	14.1	179.1	131.2	33.8
T <sub>4</sub>	16.4	127814	5.16	16.0	13.7	163.3	113.3	28.2
T <sub>5</sub>	15.9	189772	6.94	16.2	14.2	182.3	135.3	26.0
T <sub>6</sub>	16.0	190243	6.79	16.7	14.3	183.3	140.3	25.0
T <sub>7</sub>	16.9	168083	6.32	16.4	14.5	164.7	118.6	29.7
T <sub>8</sub>	15.6	177115	6.46	16.5	14.3	169.0	125.0	25.1
T <sub>9</sub>	15.2	160576	5.99	15.7	14.2	168.7	118.9	29.3
T <sub>10</sub>	15.6	148087	5.65	16.3	14.1	159.7	111.2	28.2
T <sub>11</sub>	15.5	137403	5.42	15.7	13.3	134.7	99.7	24.5
T <sub>12</sub>	15.2	144469	5.62	16.1	13.9	145.3	105.3	29.1

Mean	15.8	158141.4	6.00	16.1	14.0	164.5	118.5	27.7
CD	1.2	32885.9	1.03	1.3	0.8	22.7	16.7	10.9
CV (%)	4.4	12.3	10.2	4.9	3.6	8.2	8.3	23.3
Significance	S	S	S	NS	S	S	S	NS

**Table 48: Efficacy of nano urea based nutrient management in maize systems in Buldana.**

Treatment	Grain yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% silking	Days to 50% tasseling	Days to maturity	100-grain weight (g)
T <sub>1</sub>	4831	63.9	63.9	147.3	65.7	61.0	104.0	23.7
T <sub>2</sub>	9311	63.9	64.3	188.0	66.3	64.3	116.3	38.2
T <sub>3</sub>	7613	63.9	63.3	174.0	68.0	63.7	116.0	34.1
T <sub>4</sub>	6031	64.6	64.1	171.3	67.3	64.3	107.7	28.4
T <sub>5</sub>	7020	64.4	64.3	184.0	67.3	61.3	114.0	33.4
T <sub>6</sub>	7893	64.6	64.6	179.0	67.0	63.0	108.3	35.1
T <sub>7</sub>	6256	64.4	63.9	158.7	66.0	61.7	104.7	26.9
T <sub>8</sub>	5863	64.4	63.9	163.7	67.3	62.3	105.0	26.5
T <sub>9</sub>	7283	64.4	64.3	178.0	64.3	62.0	109.0	33.1
T <sub>10</sub>	8402	64.8	64.1	183.3	66.7	64.3	112.7	35.4
T <sub>11</sub>	5315	64.3	63.9	165.0	64.3	61.7	108.7	25.6
T <sub>12</sub>	8463	64.6	64.3	190.0	68.7	64.3	114.3	35.8

Mean	7023.5	64.4	64.1	173.5	66.6	62.8	110.1	31.3
CD	1444.7	0.7	0.8	15.4	3.2	2.0	4.0	1.3
CV (%)	12.1	0.6	0.7	5.2	2.9	1.9	2.2	2.4
Significance	S	N.S.	N.S.	S	N.S.	S	S	S

**Table 49: Efficacy of nano urea in maize systems in Coimbatore.**

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Days to maturity	100-grain weight (g)
T <sub>1</sub>	4631	7125	60.7	66.3	164.3	51.3	53.7	107.3	30.0
T <sub>2</sub>	7185	10588	59.3	71.7	187.7	51.0	53.3	109.7	36.3
T <sub>3</sub>	6749	10115	64.0	70.3	182.8	51.3	53.7	110.3	35.7
T <sub>4</sub>	5809	8673	63.7	68.3	173.3	51.7	53.7	109.0	33.3
T <sub>5</sub>	6840	10258	64.0	70.7	184.3	53.0	55.0	109.3	36.0
T <sub>6</sub>	6967	10447	62.3	70.7	186.0	52.0	54.0	109.7	36.0
T <sub>7</sub>	6329	9500	62.7	68.7	176.9	51.3	53.3	109.7	34.7
T <sub>8</sub>	6429	9638	64.0	69.7	181.4	52.0	54.0	109.7	34.7
T <sub>9</sub>	5845	8802	64.7	67.7	170.8	51.7	53.7	108.3	32.7
T <sub>10</sub>	5969	8947	64.0	68.7	176.4	52.0	54.0	110.0	35.3
T <sub>11</sub>	5430	8140	63.0	66.3	164.4	52.3	54.3	108.7	33.0
T <sub>12</sub>	5939	8907	62.3	68.3	177.2	52.0	54.3	109.3	34.0

[illegible]

Treatments	Shelling (%)	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row	Partial factor productivity (PFP)	Agronomic efficiency
T <sub>1</sub>	80.2	38233	1.52	15.9	12.4	13.8	26.9	0.0	0.0
T <sub>2</sub>	85.6	96293	2.26	17.7	13.4	14.7	30.6	28.7	10.2
T <sub>3</sub>	84.3	86647	2.15	17.0	13.2	14.4	28.9	36.0	11.3
T <sub>4</sub>	83.3	64883	1.87	16.3	12.9	14.2	27.6	46.5	17.0
T <sub>5</sub>	85.0	88817	2.18	17.1	13.3	14.4	29.4	36.5	11.8
T <sub>6</sub>	85.2	91863	2.22	17.3	13.3	14.4	29.7	37.2	12.5
T <sub>7</sub>	84.0	77363	2.04	16.6	13.1	14.3	28.1	50.6	13.6
T <sub>8</sub>	84.0	79774	2.07	16.9	13.1	14.3	28.6	51.4	14.4
T <sub>9</sub>	82.9	66302	1.90	16.3	12.7	14.0	27.6	70.8	14.7
T <sub>10</sub>	83.9	68214	1.91	16.6	13.1	14.2	27.9	36.2	8.1
T <sub>11</sub>	82.5	56340	1.76	16.2	12.7	13.9	27.4	65.8	9.7
T <sub>12</sub>	83.8	67483	1.90	16.4	13.0	14.2	27.7	36.0	7.9

[illegible]

Table 50: Efficacy of nano urea in maize systems in Dharwad.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3847	5427	79.1	61.9	169.6	49.3	46.9	26.7	24203	1.41
T <sub>2</sub>	6695	8217	80.8	80.4	202.1	50.3	48.1	32.3	82085	2.33
T <sub>3</sub>	5967	7307	80.3	77.8	195.1	50.0	49.4	29.8	67233	2.10
T <sub>4</sub>	5127	6403	80.1	76.8	181.0	50.3	50.7	27.2	49973	1.83
T <sub>5</sub>	6253	7217	80.1	80.1	197.1	50.3	50.3	31.1	72272	2.16
T <sub>6</sub>	6480	7660	80.4	80.0	198.5	50.3	48.8	31.2	76020	2.20
T <sub>7</sub>	5317	6387	78.4	80.2	172.7	49.3	49.2	28.4	52933	1.86
T <sub>8</sub>	5480	6730	80.0	79.5	181.3	50.3	49.0	29.2	55320	1.89
T <sub>9</sub>	4157	5447	79.7	75.6	175.0	50.7	50.2	27.6	27768	1.45
T <sub>10</sub>	6347	7940	78.2	79.5	201.9	50.0	48.8	30.6	74278	2.19
T <sub>11</sub>	4420	5583	79.9	75.8	168.0	49.7	49.8	27.8	34180	1.56
T <sub>12</sub>	6193	7473	79.1	79.3	204.6	51.0	49.9	31.2	71357	2.15

Mean	5523.4	6815.8	79.7	77.3	187.2	50.1	49.3	29.4	57302.0	1.93
CD	774.0	763.7	1.5	5.3	27.3	1.9	1.9	3.2	16640.5	0.27
CV (%)	8.3	6.6	1.1	4.1	8.6	2.3	2.2	6.5	17.1	8.3
Significance	S	S	S	S	NS	NS	S	S	S	S

Treatment	FAW (%)	Agronomic Efficiency/ NUE (%)	PFP (kg grain/kg N)	Total RE of N (applied & soil)	N-content (%)		N-uptake (kg/ha)		Total N-uptake (kg/ha)
					Grain	Stover	Grain	Stover	
T <sub>1</sub>	3.57	0.0	0.0	0.00	0.91	0.797	34.8	43.0	77.8
T <sub>2</sub>	2.70	19.0	44.6	0.96	1.25	0.747	83.6	60.8	144.4
T <sub>3</sub>	3.07	18.8	53.0	1.20	1.18	0.893	70.1	65.1	135.2
T <sub>4</sub>	2.90	17.1	68.4	1.46	1.09	0.843	55.7	54.0	109.7
T <sub>5</sub>	3.23	21.4	55.6	1.27	1.22	0.920	76.4	66.4	142.8
T <sub>6</sub>	2.38	23.4	57.5	1.31	1.23	0.883	79.9	67.7	147.6
T <sub>7</sub>	2.56	19.6	70.8	1.55	1.15	0.860	61.8	54.7	116.5
T <sub>8</sub>	3.33	21.7	73.0	1.64	1.16	0.880	63.8	59.3	123.2
T <sub>9</sub>	3.77	8.2	110.5	2.58	1.10	0.947	45.6	51.5	97.1
T <sub>10</sub>	2.61	22.2	56.4	1.33	1.21	0.920	76.4	73.1	149.5
T <sub>11</sub>	2.82	12.3	94.6	2.19	1.12	0.937	49.8	52.3	102.1
T <sub>12</sub>	2.44	15.1	52.9	1.18	1.20	0.847	74.7	63.2	137.9

Mean	2.95	16.6	61.5	1.39	1.15	0.873	64.4	59.3	123.7
CD	1.36	10.8	7.7	0.20	0.14	0.158	13.5	11.6	18.9
CV (%)	27.3	38.6	7.4	8.6	7.1	10.7	12.3	11.6	9.0
Significance	NS	S	S	S	S	NS	S	S	S

Cont....

# A-135

Treatment	OC (%) after harvesting	Available (kg/ha)			OC (%) initial	Available (kg/ha) initial		
		N	P	K		N	P	K
T <sub>1</sub>	0.527	176.7	31.8	352.0	0.510	185.0	29.5	365.0
T <sub>2</sub>	0.493	179.0	30.7	348.0	0.497	176.0	28.5	351.0
T <sub>3</sub>	0.490	176.9	30.4	354.0	0.490	181.0	28.6	361.0
T <sub>4</sub>	0.483	171.8	27.2	359.7	0.517	188.0	29.5	359.0
T <sub>5</sub>	0.497	177.9	31.2	347.7	0.530	191.0	28.3	367.0
T <sub>6</sub>	0.510	174.4	29.6	362.7	0.540	197.0	30.5	349.0
T <sub>7</sub>	0.530	172.5	29.1	346.0	0.520	183.0	30.4	366.0
T <sub>8</sub>	0.530	174.6	31.3	341.0	0.560	187.0	30.6	357.0
T <sub>9</sub>	0.517	177.3	31.5	341.3	0.510	188.0	29.4	358.0
T <sub>10</sub>	0.537	173.2	29.4	338.3	0.497	179.0	29.6	357.0
T <sub>11</sub>	0.523	167.7	29.4	336.7	0.500	183.0	28.6	349.0
T <sub>12</sub>	0.540	176.0	30.3	333.7	0.510	178.0	30.2	353.0

Mean	0.515	174.8	30.2	346.8	0.515	184.7	29.5	357.7
CD	0.049	12.9	3.2	34.0				
CV (%)	5.6	4.3	6.4	5.8				
Significance	NS	NS	NS	NS				

**Table 51: Efficacy of nano urea in maize systems in Karaikal.**

Treatment	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days to 50% tasseling	Days to 50% silking	Days to maturity	100-grain weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>2</sub>	5142	5965	61.7	55.6	46.0	51.0	81.7	25.3	81429	2.48
T <sub>3</sub>	4431	5237	59.7	51.1	46.0	52.3	81.7	23.9	66480	2.22
T <sub>4</sub>	3318	4207	58.0	44.4	46.3	52.0	81.0	22.5	43785	1.82
T <sub>5</sub>	6087	6959	58.7	57.8	47.0	52.7	82.3	25.6	100669	2.83
T <sub>6</sub>	8013	8819	60.7	60.0	47.3	51.7	82.0	25.8	138646	3.47
T <sub>7</sub>	3873	4712	57.7	48.9	46.0	51.7	80.7	23.0	54651	2.01
T <sub>8</sub>	4862	5774	58.3	53.3	46.7	52.3	81.0	24.0	75674	2.37
T <sub>9</sub>	4177	5083	57.3	48.9	46.0	53.3	80.7	23.2	61272	2.13
T <sub>10</sub>	4758	5664	57.3	53.3	46.0	52.0	81.3	23.9	73170	2.34
T <sub>11</sub>	2949	3838	52.7	40.0	46.7	52.0	81.3	21.4	35656	1.67
T <sub>12</sub>	3479	4365	59.0	44.4	46.0	52.3	82.0	22.6	46440	1.86

Mean	4428.1	5294.8	57.8	49.7	46.2	52.0	81.3	23.5	65656.2	2.20
CD	1040.8	1197.2	7.9	15.1	1.7	2.8	1.7	2.7	21664.5	0.40
CV (%)	13.9	13.4	8.1	17.9	2.2	3.2	1.3	6.7	19.5	10.7
Significance	S	S	NS	NS	NS	NS	NS	S	S	S

# A-136

Treatment	Protein (%) in grain	N content in stover	pH	EC	Organic carbon (OC)	Available (kg/ha)			Partial Factor Productivity (PFP)	Agronomic Efficiency
						N	P	K		
T <sub>1</sub>	6.88	89.1	6.77	0.174	0.633	168.5	35.4	185.5	0.0	0.0
T <sub>2</sub>	8.47	219.0	6.73	0.168	0.657	204.5	35.9	182.8	20.6	12.4
T <sub>3</sub>	7.70	200.3	6.73	0.123	0.677	198.2	35.5	176.5	23.6	12.7
T <sub>4</sub>	7.31	171.0	6.80	0.187	0.723	193.3	39.2	164.2	26.5	10.2
T <sub>5</sub>	8.73	214.0	6.53	0.125	0.820	181.9	43.0	176.2	32.5	21.5
T <sub>6</sub>	8.40	218.0	6.43	0.140	0.817	184.6	41.1	193.5	42.7	31.8
T <sub>7</sub>	7.53	188.4	6.13	0.119	0.750	191.0	39.1	196.2	31.0	14.6
T <sub>8</sub>	7.37	200.7	6.43	0.146	0.727	181.0	35.0	179.5	38.9	22.5
T <sub>9</sub>	7.57	189.0	6.33	0.112	0.613	176.3	39.9	173.8	50.6	25.8
T <sub>10</sub>	7.53	186.6	6.00	0.126	0.743	192.4	42.8	187.8	28.8	16.4
T <sub>11</sub>	7.60	145.4	6.37	0.115	0.793	182.2	45.9	183.2	35.7	10.9
T <sub>12</sub>	7.57	167.0	6.63	0.131	0.773	174.5	38.2	170.8	21.1	8.7

Mean	7.72	182.4	6.49	0.139	0.727	185.7	39.2	180.8	29.3	15.6
CD	0.92	56.2	0.33	0.047	0.288	15.0	2.8	11.0	8.0	7.3
CV (%)	7.0	18.2	3.0	20.2	23.4	4.8	4.2	3.6	16.1	27.7
Significance	S	S	S	S	NS	S	S	S	S	S

**Table 52: Efficacy of nano-urea in maize systems in Kolhapur.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling
T <sub>1</sub>	4883	5304	63.8	38.6	158.3	60.7
T <sub>2</sub>	11327	12130	65.7	65.1	216.7	63.7
T <sub>3</sub>	10277	11117	64.2	60.6	188.3	63.3
T <sub>4</sub>	8250	8963	64.6	53.8	175.3	61.0
T <sub>5</sub>	8737	9543	65.2	56.0	181.7	63.0
T <sub>6</sub>	10337	11287	64.8	60.8	196.7	61.7
T <sub>7</sub>	7543	8107	64.0	49.9	170.7	61.3
T <sub>8</sub>	8353	9053	63.4	53.4	171.7	61.7
T <sub>9</sub>	8243	8957	64.8	55.1	180.3	61.7
T <sub>10</sub>	10817	11803	64.7	61.6	205.0	60.7
T <sub>11</sub>	6753	7310	61.9	48.9	160.7	62.3
T <sub>12</sub>	10583	11587	64.3	61.0	200.0	63.0

Mean	8841.9	9596.7	64.3	55.4	183.8	62.0
CD	1202.6	1340.2	2.2	6.8	20.3	2.1
CV (%)	8.0	8.2	2.0	7.2	6.5	2.0
Significance	S	S	NS	S	S	NS



# A-137

Treatment	Days to 50% silking	Days to maturity	100-seeds weight (g)	Net returns (Rs./ha)	B:C ratio	Partial factor productivity (N)	Agronomic efficiency
T <sub>1</sub>	63.3	102.0	21.8	50557	0.53	0.0	0.0
T <sub>2</sub>	65.0	111.0	40.7	242130	2.48	94.4	36.7
T <sub>3</sub>	65.0	109.7	35.0	215563	2.32	114.2	28.4
T <sub>4</sub>	62.3	104.0	28.3	159696	1.82	137.5	21.0
T <sub>5</sub>	64.7	111.3	33.0	165363	1.71	90.0	19.6
T <sub>6</sub>	63.0	102.3	36.0	209363	2.08	106.5	27.7
T <sub>7</sub>	63.3	104.7	27.7	134496	1.47	125.6	16.6
T <sub>8</sub>	63.3	101.0	27.3	154796	1.61	139.0	21.7
T <sub>9</sub>	63.7	105.3	29.3	154851	1.67	189.9	23.4
T <sub>10</sub>	63.3	104.3	38.7	225342	2.27	162.2	35.6
T <sub>11</sub>	63.3	103.3	25.0	115401	1.32	79.5	10.1
T <sub>12</sub>	64.7	105.7	38.7	223717	2.38	94.8	26.9

Mean	63.8	105.4	31.8	170939.5	1.81	111.1	22.3
CD	2.0	3.2	4.9	36076.6	0.38	18.2	8.0
CV (%)	1.9	1.8	9.1	12.5	12.5	9.7	21.1
Significance	NS	S	S	S	S	S	S

**Table 53: Efficacy of nano urea in maize systems in Vagarai.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)
T <sub>1</sub>	4226	5904	62.6	61.1	159.4	52.3	53.3	32.5
T <sub>2</sub>	8933	13377	60.7	59.3	196.9	52.0	53.7	35.9
T <sub>3</sub>	7838	11427	61.3	59.8	190.1	52.7	54.7	35.6
T <sub>4</sub>	6508	8564	62.6	61.1	181.5	52.3	53.3	34.4
T <sub>5</sub>	8139	11970	63.0	61.7	190.7	51.7	53.3	35.7
T <sub>6</sub>	8715	12307	60.4	58.9	191.3	52.3	54.0	35.8
T <sub>7</sub>	7555	10510	61.9	60.7	181.5	52.0	53.3	35.1
T <sub>8</sub>	7725	9819	63.3	61.9	189.8	52.7	53.7	35.4
T <sub>9</sub>	6472	8429	61.1	59.6	181.2	52.7	54.0	34.1
T <sub>10</sub>	7636	11184	63.7	62.2	186.9	52.3	53.7	35.1
T <sub>11</sub>	6328	8369	62.2	60.7	180.7	53.0	54.3	33.5
T <sub>12</sub>	7598	10041	61.5	60.2	185.9	52.0	53.3	35.1

Mean	7306.1	10158.3	62.0	60.6	184.7	52.3	53.7	34.9
CD	1045.8	1424.7	1.8	2.0	16.1	1.4	1.7	1.0
CV (%)	8.5	8.3	1.7	1.9	5.1	1.5	1.9	1.7
Significance	S	S	S	S	S	NS	NS	S

Treatment	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)	Grains row/cob	Grains/row	Partial factor productivity (PFP-N)	Agronomic efficiency N
T <sub>1</sub>	10003	1.12	15.6	13.6	13.6	29.5	0.0	0.0
T <sub>2</sub>	113564	2.38	19.1	14.3	14.5	34.5	35.7	18.8
T <sub>3</sub>	89481	2.08	18.7	14.1	14.4	33.6	41.8	19.3
T <sub>4</sub>	60221	1.73	18.0	13.9	13.7	31.5	52.1	18.3
T <sub>5</sub>	96103	2.16	18.8	14.2	14.4	34.0	43.4	20.9
T <sub>6</sub>	108768	2.32	18.8	14.3	14.5	34.1	46.5	23.9
T <sub>7</sub>	83241	2.01	18.1	14.0	13.7	31.7	60.4	26.6
T <sub>8</sub>	86988	2.05	18.5	14.1	14.3	33.5	61.8	28.0
T <sub>9</sub>	59415	1.72	17.8	13.9	13.7	31.3	78.4	27.2
T <sub>10</sub>	85023	2.03	18.4	14.0	14.3	32.7	46.3	20.7
T <sub>11</sub>	56247	1.68	17.5	13.6	13.6	31.3	76.7	25.5
T <sub>12</sub>	84201	2.02	18.3	14.0	14.0	32.6	46.1	20.4

Mean	77771.2	1.94	18.1	14.0	14.1	32.5	49.1	20.8
CD	23008.5	0.28	1.7	0.8	0.6	4.6	7.6	8.7
CV (%)	17.5	8.4	5.5	3.2	2.7	8.4	9.2	24.7
Significance	S	S	S	NS	S	NS	S	S

Table 54: Efficacy of nano urea in maize-wheat cropping systems in Banswara.

Treatments	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)
T <sub>1</sub>	2844	4344	58.4	42.1	231.7
T <sub>2</sub>	6429	7800	65.3	78.0	263.3
T <sub>3</sub>	5476	7333	58.0	66.1	258.3
T <sub>4</sub>	4667	6200	61.6	54.3	246.7
T <sub>5</sub>	5678	7593	65.6	67.3	256.7
T <sub>6</sub>	5844	7480	65.3	68.8	258.3
T <sub>7</sub>	4800	6396	60.1	57.3	248.3
T <sub>8</sub>	5233	6618	62.6	61.3	252.7
T <sub>9</sub>	4611	6178	64.2	56.2	246.0
T <sub>10</sub>	5780	7151	65.6	65.1	257.0
T <sub>11</sub>	4867	6191	58.0	56.9	247.0
T <sub>12</sub>	5833	7804	62.9	65.8	258.3

Mean	5171.8	6757.4	62.3	61.6	252.0
CD	876.8	1147.5	4.7	6.4	8.6
CV (%)	10.0	10.0	4.4	6.1	2.0
Significance	S	S	S	S	S

Table 55: Efficacy of nano urea in maize systems in Udaipur.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3616	5960	61.0	65.0	172.5	55.7	59.7	32.6	63125	2.19
T <sub>2</sub>	5676	7852	62.1	68.3	195.3	54.0	58.7	34.2	107910	3.50
T <sub>3</sub>	4947	7566	61.7	68.0	187.0	55.3	58.7	34.1	93209	3.07
T <sub>4</sub>	4698	7373	61.0	68.7	182.5	54.3	58.3	32.6	88109	2.94
T <sub>5</sub>	4446	5239	62.2	68.7	194.8	54.3	58.7	31.1	75196	2.50
T <sub>6</sub>	4656	5965	61.8	67.7	200.0	53.7	57.7	33.1	81861	2.72
T <sub>7</sub>	4570	5760	62.8	68.7	201.3	54.7	58.0	30.2	79418	2.63
T <sub>8</sub>	4268	7089	62.4	68.7	205.2	54.7	58.3	32.3	78395	2.58
T <sub>9</sub>	5723	7625	62.0	68.3	212.0	51.3	55.3	35.0	108111	3.53
T <sub>10</sub>	5474	7412	62.4	68.3	214.0	52.0	54.0	35.0	102457	3.34
T <sub>11</sub>	5422	7368	62.0	67.3	209.7	51.7	54.7	34.9	101152	3.28
T <sub>12</sub>	5404	7558	62.6	68.3	219.0	53.0	56.7	34.9	101477	3.28
Mean	4908.3	6897.3	62.0	68.0	199.4	53.7	57.4	33.4	90035.0	2.96
CD	574.6	1120.8	3.1	2.1	16.5	2.0	2.3	1.8	13260.7	0.44
CV (%)	6.9	9.6	3.0	1.8	4.9	2.2	2.3	3.2	8.7	8.8
Significance	S	S	NS	NS	S	S	S	S	S	S

*Treatment details:*

Treatments		1 <sup>st</sup> Application (Basal)	2 <sup>nd</sup> Application 25-30 DAS	3 <sup>rd</sup> Application 40-45 DAS
T <sub>1</sub>	Control (only PK)			
T <sub>2</sub>	RDN (3 split N application)	1/3 <sup>rd</sup> N as basal	1/3 <sup>rd</sup> N band placement by urea	1/3 <sup>rd</sup> N band placement by urea
T <sub>3</sub>	75% RDN (3 split N application)	1/3 <sup>rd</sup> N as basal	1/3 <sup>rd</sup> N band placement by urea	1/3 <sup>rd</sup> N band placement by urea
T <sub>4</sub>	50% RDN (3 split N application)	1/3 <sup>rd</sup> N as basal	1/3 <sup>rd</sup> N band placement by urea	1/3 <sup>rd</sup> N band placement by urea
T <sub>5</sub>	T <sub>3</sub> + Nano urea one spray		Nano urea @ 1250 ml/ha spray	
T <sub>6</sub>	T <sub>3</sub> + Nano urea two spray		Nano urea @ 1250 ml/ha spray	Nano urea @ 1250 ml/ha spray
T <sub>7</sub>	T <sub>4</sub> + Nano urea one spray		Nano urea @ 1250 ml/ha spray	
T <sub>8</sub>	T <sub>4</sub> + Nano urea two spray		Nano urea @ 1250 ml/ha spray	Nano urea @ 1250 ml/ha spray
T <sub>9</sub>	1/3 <sup>rd</sup> RDN basal + nano urea two spray		Nano urea @ 1250 ml/ha spray	Nano urea @ 1250 ml/ha spray
T <sub>10</sub>	2/3 <sup>rd</sup> RDN + one nano urea spray	1/3 <sup>rd</sup> RDN as basal	1/3 <sup>rd</sup> RDN as band placement by urea	Nano urea @ 1250 ml/ha spray
T <sub>11</sub>	1/3 <sup>rd</sup> RDN basal + 2% urea two foliar spray		Urea @ 2% foliar spray (500 liter water)	Urea @ 2% foliar spray (600 liter water)
T <sub>12</sub>	2/3 <sup>rd</sup> RDN + one urea foliar spray	1/3 <sup>rd</sup> RDN as basal	1/3 <sup>rd</sup> RDN as band placement by urea	Urea @ 2% foliar spray (600 liter water)

Table 56: Crop residue management in traditional and emerging maize systems in Karnal.

Residue management	Nutrient management	Grain yield of paddy (kg/ha)
M <sub>1</sub>	N <sub>1</sub>	6144
	N <sub>2</sub>	4739
M <sub>2</sub>	N <sub>1</sub>	6279
	N <sub>2</sub>	5332
M <sub>3</sub>	N <sub>1</sub>	6327
	N <sub>2</sub>	5592
M <sub>4</sub>	N <sub>1</sub>	4057
	N <sub>2</sub>	3701

Location mean	5271.4
C.D.(5%) AiBj-AiBk	123.8
C.D.(5%) AiBk-AjBk	134.0
F(5%)	S

M <sub>1</sub>	5442
M <sub>2</sub>	5805
M <sub>3</sub>	5960
M <sub>4</sub>	3879

C.D. (5%) Ai-Aj	101.5
C.V. (%) Error A	1.4
F (5%)	S

N <sub>1</sub>	5702
N <sub>2</sub>	4841

C.D. (5%) Bi-Bj	61.9
C.V. (%) Error B	1.2
F (5%)	S

**Treatment details:****A. Main plots: Residue management (04)**M<sub>1</sub>: Residue removalM<sub>2</sub>: Residue incorporation (Paddy straw @ 6.0 t/ha)M<sub>3</sub>: Residue incorporation + spray of microbial consortium on residueM<sub>4</sub> : Zero-tillage + residue**B. Sub plots: Nutrient management (02)**N<sub>1</sub>: 100% RDF of NPK,N<sub>2</sub>: 100% RDN & P and 50% RDK

Table 57: Crop residue management in traditional and emerging maize systems (Paddy) in Ludhiana.

Residue management	Nutrient management	Grain yield (kg/ha)	Tiller/m <sup>2</sup>	Plant height (cm)
M <sub>1</sub>	N <sub>1</sub>	7740	362.7	101.2
	N <sub>2</sub>	6785	350.3	99.4
	N <sub>3</sub>	7674	365.3	102.0
M <sub>2</sub>	N <sub>1</sub>	7764	369.0	100.3
	N <sub>2</sub>	7569	356.0	100.1
	N <sub>3</sub>	7976	376.3	101.9
M <sub>3</sub>	N <sub>1</sub>	7847	373.3	102.5
	N <sub>2</sub>	7684	358.7	100.5
	N <sub>3</sub>	8653	379.0	104.5
M <sub>4</sub>	N <sub>1</sub>	6854	357.7	100.6
	N <sub>2</sub>	6444	322.7	94.9
	N <sub>3</sub>	7458	370.0	102.9
Location mean		7537.3	361.8	100.9
C.D.(5%) AiBj-AiBk		785.1	38.1	5.3
C.D.(5%) AiBk-AjBk		915.9	33.5	5.6
F(5%)		NS	NS	NS
M <sub>1</sub>		7399	359.4	100.9
M <sub>2</sub>		7770	367.1	100.8
M <sub>3</sub>		8061	370.3	102.5
M <sub>4</sub>		6919	350.1	99.4
C.D. (5%) Ai-Aj		657.5	12.7	3.5
C.V. (%) Error A		7.6	3.0	3.0
F (5%)		S	S	NS
N <sub>1</sub>		7551	365.7	101.2
N <sub>2</sub>		7121	346.9	98.7
N <sub>3</sub>		7940	372.7	102.8
C.D. (5%) Bi-Bj		392.5	19.0	2.6
C.V. (%) Error B		6.0	6.1	3.0
F (5%)		S	S	S

**Treatment details:****A. Main plots: Residue management (04)**M<sub>1</sub>: Residue removalM<sub>2</sub>: Residue incorporation,M<sub>3</sub>: Residue incorporation + spray of microbial consortium on residueM<sub>4</sub>: Zero-tillage + residue retention and spray of microbial consortia on residue**B. Sub plots: Nutrient management (03)**N<sub>1</sub>: 100% RDF of NPK 125:60:30 (N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O kg/ha)N<sub>2</sub>: 100% RDN & P and 50% RDKN<sub>3</sub>: 125% RDN and RDF (P and K)

Table 58: Crop residue management in traditional and emerging maize system in Pantnagar.

Residue management	K dose	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling
M <sub>1</sub>	100%	5281	7391	65.1	65.1	171.5	53.3
	50%	3659	5105	65.4	65.4	151.5	53.3
	75%	4459	6409	64.4	64.4	165.4	53.0
M <sub>2</sub>	100%	6180	8100	64.7	64.7	178.9	53.3
	50%	5648	7488	65.4	65.4	171.2	53.0
	75%	5947	7987	64.1	64.1	176.0	53.0
M <sub>3</sub>	100%	6335	8148	64.7	64.7	181.0	53.7
	50%	5551	7601	64.1	64.1	173.8	53.7
	75%	6049	8019	64.1	64.1	176.8	53.0
M <sub>4</sub>	100%	5490	7456	64.7	64.7	173.7	53.0
	50%	3668	5137	65.1	65.1	149.6	53.3
	75%	4640	6554	64.7	64.7	162.6	53.7

Location mean	5242.2	7116.2	64.7	64.7	169.3	53.3
C.D.(5%) AiBj-AiBk	469.3	747.4	3.8	3.8	7.0	0.8
C.D.(5%) AiBk-AjBk	611.2	685.1	3.4	3.4	7.4	0.8
F(5%)	S	S	NS	NS	S	NS

M <sub>1</sub>	4467	6302	64.9	64.9	162.8	53.2
M <sub>2</sub>	5925	7858	64.7	64.7	175.4	53.1
M <sub>3</sub>	5978	7923	64.3	64.3	177.2	53.4
M <sub>4</sub>	4599	6382	64.8	64.8	162.0	53.3

C.D. (5%) Ai-Aj	478.2	313.8	1.4	1.4	4.6	0.5
C.V. (%) Error A	7.9	3.8	1.9	1.9	2.4	0.8
F (5%)	S	S	NS	NS	S	NS

100% (40 kg K <sub>2</sub> O/ha)	5822	7774	64.8	64.8	176.3	53.3
50%	4632	6333	65.0	65.0	161.5	53.3
75%	5274	7242	64.3	64.3	170.2	53.2

C.D. (5%) Bi-Bj	234.7	373.7	1.9	1.9	3.5	0.4
C.V. (%) Error B	5.2	6.1	3.4	3.4	2.4	0.9
F (5%)	S	S	NS	NS	S	NS

**Treatment details:****A. Main plots: Residue management (04)**M<sub>1</sub>: Residual removalM<sub>2</sub>: Residue incorporationM<sub>3</sub>: Residue incorporation + spray of microbial consortium on residueM<sub>4</sub>: Zero tillage + residue retention and spray of microbial consortia**B. Sub plots: K dose (03)**K<sub>1</sub>: 100% (40 kg K<sub>2</sub>O/ha)K<sub>2</sub>: 50%K<sub>3</sub>: 75%

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Residue management	K dose	Days to 50% silking	Cob length (cm)	Cob girth (cm)	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio
M <sub>1</sub>	100%	56.3	16.1	13.5	23.6	64108	1.39
	50%	56.7	13.9	11.1	20.3	31461	0.70
	75%	56.3	15.0	12.3	22.1	47516	1.04
M <sub>2</sub>	100%	56.7	16.7	13.8	24.5	81184	1.69
	50%	56.0	16.3	13.1	23.7	71319	1.53
	75%	56.3	16.7	13.8	24.4	76918	1.62
M <sub>3</sub>	100%	57.0	16.8	13.8	24.6	83656	1.72
	50%	56.7	16.0	13.1	23.7	68516	1.44
	75%	56.0	16.7	13.7	24.4	78269	1.63
M <sub>4</sub>	100%	56.3	16.1	13.7	23.6	77583	2.09
	50%	56.3	14.0	11.5	20.5	40750	1.13
	75%	56.7	15.4	12.6	22.5	60405	1.65

Location mean	56.4	15.8	13.0	23.2	65140.5	1.47
C.D.(5%) AiBj-AiBk	1.0	0.6	0.8	1.2	9808.7	0.21
C.D.(5%) AiBk-AjBk	0.9	1.0	0.9	1.5	12774.7	0.30
F(5%)	NS	S	S	S	S	S

M <sub>1</sub>	56.4	15.0	12.3	22.0	47695	1.04
M <sub>2</sub>	56.3	16.6	13.6	24.2	76474	1.61
M <sub>3</sub>	56.6	16.5	13.5	24.2	76814	1.59
M <sub>4</sub>	56.4	15.2	12.6	22.2	59579	1.62

C.D. (5%) Ai-Aj	0.3	0.9	0.6	1.2	9993.7	0.24
C.V. (%) Error A	0.5	4.7	4.3	4.4	13.3	14.2
F (5%)	NS	S	S	S	S	S

100% (40 kg K <sub>2</sub> O/ha)	56.6	16.4	13.7	24.1	76633	1.72
50%	56.4	15.1	12.2	22.1	53012	1.20
75%	56.3	15.9	13.1	23.4	65777	1.49

C.D. (5%) Bi-Bj	0.5	0.3	0.4	0.6	4904.4	0.11
C.V. (%) Error B	1.0	2.4	3.7	3.1	8.7	8.3
F (5%)	NS	S	S	S	S	S

Table 59: Crop residue management in traditional and emerging maize systems in Dholi.

Residue management	Nutrient management	Grain yield (kg/ha)	Straw yield (kg/ha)	Days of flowering	Days of maturity	Plant height (cm)
M <sub>1</sub>	N <sub>1</sub>	3904	5423	72.0	114.0	95.8
	N <sub>2</sub>	3686	5164	74.0	113.0	89.7
M <sub>2</sub>	N <sub>1</sub>	4571	6247	69.0	115.0	101.4
	N <sub>2</sub>	4373	5870	70.0	114.0	95.3
M <sub>3</sub>	N <sub>1</sub>	4756	6322	67.0	117.0	108.3
	N <sub>2</sub>	4336	5800	69.0	116.0	102.8
M <sub>4</sub>	N <sub>1</sub>	4490	5829	69.0	117.0	101.8
	N <sub>2</sub>	4032	5423	71.0	116.0	98.5

Mean of location	4268.5	5759.6	70.1	115.3	99.2
C.D. at 5 (%)	602.5	1406.5	11.8	9.3	13.9
F (5%)	NS	NS	NS	NS	NS

M <sub>1</sub>	3795	5293	73.0	113.5	92.7
M <sub>2</sub>	4472	6059	69.5	114.5	98.3
M <sub>3</sub>	4546	6061	68.0	116.5	105.5
M <sub>4</sub>	4261	5626	70.0	116.5	100.1

C.D. at 5 (%)	426.0	994.5	8.4	6.6	9.9
F (5%)	S	NS	NS	NS	NS

N <sub>1</sub>	4430	5955	69.3	115.8	101.8
N <sub>2</sub>	4107	5564	71.0	114.8	96.6

C.D. at 5 (%)	301.2	703.3	5.9	4.7	7.0
C.V. (%)	9.6	16.6	11.5	5.5	9.6
F (5%)	S	NS	NS	NS	NS

***Treatment details:*****A. Main plots: Residue management (04)**M<sub>1</sub>: Residue removalM<sub>2</sub>: Residue incorporationM<sub>3</sub>: Residue incorporation + spray of microbial consortium on residueM<sub>4</sub>: Zero tillage + spray of microbial consortium on residue**B. Sub plots: Nutrient management (02)**N<sub>1</sub>: 100% RDF of NPKN<sub>2</sub>: 100% RDN & P and 50% RDK

Cont....



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Residue management	Nutrient management	Panicle length (cm)	Grains/panicle	Panicles/m <sup>2</sup>	Net returns (Rs./ha)	B:C ratio
M <sub>1</sub>	N <sub>1</sub>	19.3	106.0	212.0	51874	1.29
	N <sub>2</sub>	17.2	104.0	203.0	47339	1.20
M <sub>2</sub>	N <sub>1</sub>	20.4	114.0	231.0	67471	1.69
	N <sub>2</sub>	17.6	108.0	215.0	63219	1.60
M <sub>3</sub>	N <sub>1</sub>	24.7	119.0	246.0	71602	1.79
	N <sub>2</sub>	22.5	109.0	225.0	62313	1.58
M <sub>4</sub>	N <sub>1</sub>	23.2	115.0	231.0	65185	1.63
	N <sub>2</sub>	21.1	110.0	210.0	55210	1.40

Mean of location	20.8	110.6	221.6	60526.5	1.52
C.D. at 5 (%)	3.8	8.9	29.0	14509.6	0.36
F (5%)	NS	NS	NS	NS	NS

M <sub>1</sub>	18.3	105.0	207.5	49607	1.25
M <sub>2</sub>	19.0	111.0	223.0	65345	1.64
M <sub>3</sub>	23.6	114.0	235.5	66958	1.68
M <sub>4</sub>	22.2	112.5	220.5	60198	1.51

C.D. at 5 (%)	2.7	6.3	20.5	10259.8	0.25
F (5%)	S	S	NS	S	S

N <sub>1</sub>	21.9	113.5	230.0	64033	1.60
N <sub>2</sub>	19.6	107.8	213.3	57020	1.44

C.D. at 5 (%)	1.9	4.4	14.5	7254.8	0.18
C.V. (%)	12.4	5.4	8.9	16.3	16.1
F (5%)	S	S	S	NS	NS

**Table 60: Crop residue management in traditional and emerging maize system (Performance of Rice) in Kalyani.**

Residue management	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Effective tillers/m <sup>2</sup>	Plant height (cm)	Days to maturity	Grains/panicle	1000-grains weight (g)
M <sub>1</sub>	N <sub>1</sub>	3816	9062	222.9	101.1	101.3	209.2	20.7
	N <sub>2</sub>	3788	8714	222.9	102.2	101.7	218.7	18.9
M <sub>2</sub>	N <sub>1</sub>	4398	8703	229.2	101.8	101.3	224.9	19.3
	N <sub>2</sub>	4494	9705	235.8	105.3	101.3	245.3	20.3
M <sub>3</sub>	N <sub>1</sub>	5213	11058	220.9	100.4	101.7	255.9	18.9
	N <sub>2</sub>	5384	10569	234.6	100.8	102.0	273.2	17.9
M <sub>4</sub>	N <sub>1</sub>	4144	9163	226.0	102.2	100.7	202.4	18.2
	N <sub>2</sub>	4057	9375	237.0	104.4	101.3	222.1	17.5

Mean of location                      4411.7      9543.6      228.7      102.3      101.4      231.5      19.0

M <sub>1</sub>	3802	8888	222.9	101.6	101.5	214.0	19.8
M <sub>2</sub>	4446	9204	232.5	103.5	101.3	235.1	19.8
M <sub>3</sub>	5299	10813	227.8	100.6	101.8	264.6	18.4
M <sub>4</sub>	4100	9269	231.5	103.3	101.0	212.3	17.9

CD at 5%                      981.3      NS      NS      NS      NS      36.0      1.2

CV (%)                      15.7      11.2      2.9      2.0      1.3      11.0      4.3

N <sub>1</sub>	4393	9496	224.8	101.4	101.3	223.1	19.3
N <sub>2</sub>	4431	9591	232.6	103.1	101.6	239.9	18.7

CD at 5%                      NS      NS      1.8      1.0      NS      15.9      NS

CV (%)                      4.9      8.3      0.5      0.6      1.1      3.9      4.2

***Treatment details:***

**A. Main plots: Residue management (04)**

M<sub>1</sub>: Residue removal

M<sub>2</sub>: Residue incorporation

M<sub>3</sub>: Residue incorporation + spray of microbial consortium on residue

M<sub>4</sub>: Zero-tillage + residue retention and spray of microbial consortia on residue\*

**B. Sub plots: Nutrient management (02)**

N<sub>1</sub>: 100% RDF of NPK

N<sub>2</sub>: 100% RDN & P and 50% RDK

Table 61: Crop residue management in traditional and emerging maize systems in Dharwad.

Residue management	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking
M <sub>1</sub>	N <sub>1</sub>	5674	7048	7859	81.2	77.1	189.7	52.7	57.7
	N <sub>2</sub>	5975	7407	8155	80.5	77.7	202.5	50.7	57.0
M <sub>2</sub>	N <sub>1</sub>	6261	7794	8365	80.9	81.8	199.6	52.7	57.7
	N <sub>2</sub>	6398	7505	8334	79.8	80.1	196.5	50.7	58.7
M <sub>3</sub>	N <sub>1</sub>	6726	8187	9048	80.9	78.9	202.2	51.0	58.7
	N <sub>2</sub>	6822	8359	9036	81.4	81.4	188.2	51.7	58.3
M <sub>4</sub>	N <sub>1</sub>	6003	7232	7874	78.7	80.1	205.9	51.3	58.3
	N <sub>2</sub>	6107	7173	7521	81.3	80.7	202.5	52.3	60.7

Mean of location                      6245.7    7588.1    8274.2    80.6        79.7        198.4        51.6        58.4

M <sub>1</sub>	5824	7228	8007	80.9	77.4	196.1	51.7	57.3
M <sub>2</sub>	6330	7650	8350	80.4	81.0	198.1	51.7	58.2
M <sub>3</sub>	6774	8273	9042	81.2	80.1	195.2	51.3	58.5
M <sub>4</sub>	6055	7203	7698	80.0	80.4	204.2	51.8	59.5

CD at 5%                      392.9    426.7    728.6    NS        2.2        NS        NS        1.4  
CV (%)                        4.5        4.0        6.2        2.6        2.0        8.1        1.7        1.7

N <sub>1</sub>	6166	7565	8287	80.4	79.5	199.4	51.9	58.1
N <sub>2</sub>	6326	7611	8262	80.8	80.0	197.4	51.3	58.7

CD at 5%                      NS        NS        NS        NS        NS        NS        NS        NS  
CV (%)                        4.2        6.3        6.4        1.4        2.0        6.1        3.4        2.1

***Treatment details:***

**A. Main plots: Residue management (04)**

M<sub>1</sub>: Residue removal

M<sub>2</sub>: Residue incorporation

M<sub>3</sub>: Residue incorporation + spray of microbial consortium on residue

M<sub>4</sub>: Zero-tillage + residue retention and spray of microbial consortia on residue

**B. Sub-plots: Nutrient management (02)**

N<sub>1</sub>: 100% RDF of NPK

N<sub>2</sub>: 100% RDN & P and 50% RDK

Cont....

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Residue management	Nutrient management	100-seeds weight (g)	Net returns (Rs./ha)	B:C ratio	Total weeds/m <sup>2</sup> (at 25 DAS)	Total weeds dry wt. (g/m <sup>2</sup> ) (at 30 DAS)	FAW (at 25 DAS)	OC (%) after harvest	OC (%) initial
M <sub>1</sub>	N <sub>1</sub>	30.4	99047	1.92	39.1	6.40	3.43	0.410	0.450
	N <sub>2</sub>	31.3	104642	1.97	41.2	6.30	3.03	0.430	0.430
M <sub>2</sub>	N <sub>1</sub>	32.3	111641	2.18	24.7	4.77	3.13	0.507	0.440
	N <sub>2</sub>	31.2	113832	2.11	21.3	4.27	2.60	0.520	0.390
M <sub>3</sub>	N <sub>1</sub>	30.7	121322	2.29	27.0	5.27	2.63	0.510	0.450
	N <sub>2</sub>	30.9	122638	2.20	29.7	4.57	3.00	0.527	0.470
M <sub>4</sub>	N <sub>1</sub>	31.5	107203	2.18	48.1	7.90	3.83	0.533	0.460
	N <sub>2</sub>	31.3	108987	2.19	46.1	7.47	3.37	0.537	0.450

Mean of location                      31.2      111164.0      2.13      34.7      5.87      3.13      0.497      0.443

M <sub>1</sub>	30.8	101844	1.95	40.2	6.35	3.23	0.420	0.440
M <sub>2</sub>	31.7	112736	2.14	23.0	4.52	2.87	0.513	0.415
M <sub>3</sub>	30.8	121980	2.24	28.4	4.92	2.82	0.518	0.460
M <sub>4</sub>	31.4	108095	2.19	47.1	7.68	3.60	0.535	0.455

CD at 5%                      NS      7453.1      0.05      6.3      1.0      NS      NS

CV (%)                      4.8      4.7      1.6      12.8      11.7      20.8      5.0

N <sub>1</sub>	31.2	109803	2.14	34.7	6.08	3.26	0.490	0.450
N <sub>2</sub>	31.2	112525	2.12	34.6	5.65	3.00	0.503	0.435

CD at 5%                      NS      NS      NS      NS      NS      NS      NS

CV (%)                      2.9      4.3      3.8      13.0      11.4      14.3      6.0

Table 62: Crop residue management in traditional and emerging maize system in Karimnagar.

Residue management	Nutrient management	Maize grain yield (kg/ha)	Maize stover yield (kg/ha)	Maize stover incorporated (kg/ha)	Days to 50% tasseling	Days to 50% silking	Plant height (cm)
M <sub>1</sub>	N <sub>1</sub>	3851	4236	0	50.7	54.3	171.5
	N <sub>2</sub>	3766	3971	0	49.7	53.0	167.7
	N <sub>3</sub>	3607	3946	0	49.3	52.3	159.0
M <sub>2</sub>	N <sub>1</sub>	4198	4426	4426	49.3	52.7	176.7
	N <sub>2</sub>	3879	4122	4122	50.7	54.0	174.3
	N <sub>3</sub>	3635	4015	4015	49.7	52.7	169.0
M <sub>3</sub>	N <sub>1</sub>	4338	4640	4640	50.7	54.0	172.3
	N <sub>2</sub>	3960	4324	4324	50.3	53.3	168.0
	N <sub>3</sub>	3476	3819	3819	49.3	53.0	167.0
M <sub>4</sub>	N <sub>1</sub>	4081	4432	4432	50.3	53.3	170.7
	N <sub>2</sub>	4076	4413	4413	50.3	53.7	167.7
	N <sub>3</sub>	3634	4009	4009	50.7	54.0	166.3
Location mean		3875.1	4196.1	3183.4	50.1	53.4	169.2
C.D.(5%) AiBj-AiBk		823.2	872.1	763.4	2.2	2.1	24.6
C.D.(5%) AiBk-AjBk		886.1	868.9	740.6	2.2	2.0	21.8
F(5%)		NS	NS	NS	NS	NS	NS
M <sub>1</sub>		3742	4051	0	49.9	53.2	166.1
M <sub>2</sub>		3904	4188	4188	49.9	53.1	173.3
M <sub>3</sub>		3925	4261	4261	50.1	53.4	169.1
M <sub>4</sub>		3930	4285	4285	50.4	53.7	168.2
C.D. (5%) Ai-Aj		580.7	501.2	402.6	1.2	0.9	8.4
C.V. (%) Error A		13.0	10.4	11.0	2.1	1.5	4.3
F (5%)		NS	NS	S	NS	NS	NS
N <sub>1</sub>		4117	4433	3374	50.3	53.6	172.8
N <sub>2</sub>		3920	4208	3215	50.3	53.5	169.4
N <sub>3</sub>		3588	3947	2961	49.8	53.0	165.3
C.D. (5%) Bi-Bj		411.6	436.0	381.7	1.1	1.1	12.3
C.V. (%) Error B		12.3	12.0	13.9	2.6	2.3	8.4
F (5%)		S	NS	NS	NS	NS	NS

**Treatment details:****A. Main plots: Residue management (04)**M<sub>1</sub>: Residue removalM<sub>2</sub>: Residue incorporationM<sub>3</sub>: Residue incorporation + spray of microbial consortium on residueM<sub>4</sub>: Zero-tillage + residue retention and spray of microbial consortia on residue**B. Sub plots: Nutrient management (03)**N<sub>1</sub>: 240:80:80 (100% RDF of NPK)N<sub>2</sub>: 240:80:40 (100% RDN & P and 50% RDK)N<sub>3</sub>: 216:60:60 (90% RDN & 75% RDP & K)

**Table 63: Crop residue management in traditional and emerging maize system in Ambikapur.**

Residue management	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Net returns (Rs./ha)	B:C ratio
M <sub>1</sub>	N <sub>1</sub>	5433	6848	232.4	56.5	54.4	52800	1.17
	N <sub>2</sub>	5253	6571	230.7	55.2	56.7	49548	1.10
M <sub>2</sub>	N <sub>1</sub>	5314	6908	219.9	56.9	55.1	50646	1.13
	N <sub>2</sub>	5422	7612	235.3	56.2	56.5	52596	1.17
M <sub>3</sub>	N <sub>1</sub>	5599	7496	214.7	54.2	55.7	55788	1.24
	N <sub>2</sub>	5501	7368	224.3	57.0	53.0	54012	1.20
M <sub>4</sub>	N <sub>1</sub>	5256	6996	228.0	56.7	54.2	49614	1.10
	N <sub>2</sub>	5351	7128	231.0	55.4	56.0	51318	1.14

Location mean	5391.1	7115.9	227.1	56.0	55.2	52040.3	1.16
C.D.(5%) AiBj-AiBk	854.6	263.0	16.7	5.0	4.0	15382.9	0.34
C.D.(5%) AiBk-AjBk	664.0	327.6	17.6	4.8	3.6	11951.7	0.27
F(5%)	NS	S	NS	NS	NS	NS	NS

M <sub>1</sub>	5343	6710	231.6	55.9	55.6	51174	1.14
M <sub>2</sub>	5368	7260	227.6	56.6	55.8	51621	1.15
M <sub>3</sub>	5550	7432	219.5	55.6	54.3	54900	1.22
M <sub>4</sub>	5304	7062	229.5	56.1	55.1	50466	1.12

C.D. (5%) Ai-Aj	275.5	269.8	13.0	3.3	2.2	4959.4	0.11
C.V. (%) Error A	3.6	2.7	4.1	4.2	2.8	6.7	6.7
F (5%)	NS	S	NS	NS	NS	NS	NS

N <sub>1</sub>	5401	7062	223.8	56.1	54.8	52212	1.16
N <sub>2</sub>	5382	7170	230.4	56.0	55.5	51869	1.15

C.D. (5%) Bi-Bj	427.3	131.5	8.4	2.5	2.0	7691.4	0.17
C.V. (%) Error B	8.4	2.0	3.9	4.7	3.9	15.7	15.7
F (5%)	NS	NS	NS	NS	NS	NS	NS

***Treatment details:*****A. Main plots: Residue management (04)**M<sub>1</sub>: Residue removalM<sub>2</sub>: Residue incorporationM<sub>3</sub>: Residue incorporation + spray of microbial consortium on residueM<sub>4</sub>: Zero -tillage + Residual retention and spray of microbial consortium on residue**B. Sub plots: Nutrient management (02)**N<sub>1</sub>: 100% RDF of NPKN<sub>2</sub>: 100% RDN and P and 50% RDK

**Table 64: Crop residue management in traditional and emerging maize-wheat and maize-soybean system in Banswara.**

Residue management	Nutrient management	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield ('000/ha)	Plant height (cm)	Soybean yield (kg/ha)	Stover yield (kg/ha)	Plant height (cm)
		Maize				Soybean		
M <sub>1</sub>	N <sub>1</sub>	5935	8714	7190	247.0	1700	5100	56.2
	N <sub>2</sub>	5231	7606	6419	243.9	1441	4803	51.9
M <sub>2</sub>	N <sub>1</sub>	6204	9003	7558	251.5	1867	5079	57.9
	N <sub>2</sub>	5765	8337	6932	247.0	1543	4285	55.5
M <sub>3</sub>	N <sub>1</sub>	6515	9332	7918	253.0	2088	6359	58.8
	N <sub>2</sub>	6213	8898	7633	247.9	1887	5841	56.8
M <sub>4</sub>	N <sub>1</sub>	6834	9866	8351	253.9	2200	6003	59.5
	N <sub>2</sub>	6517	9269	8007	251.5	1986	5510	58.8

Location mean	6151.7	8878.1	7501.1	249.5	1839.0	5372.5	56.9
C.D.(5%) AiBj-AiBk	1135.5	1845.8	535.7	5.8	144.3	457.7	0.6
C.D.(5%) AiBk-AjBk	1002.1	1774.1	675.2	7.0	350.2	1057.2	0.7
F(5%)	NS	NS	NS	NS	NS	NS	S

M <sub>1</sub>	5583	8160	6805	245.5	1570	4951	54.0
M <sub>2</sub>	5984	8670	7245	249.2	1705	4682	56.7
M <sub>3</sub>	6364	9115	7775	250.5	1988	6100	57.8
M <sub>4</sub>	6675	9568	8179	252.7	2093	5757	59.1

C.D. (5%) Ai-Aj	600.2	1202.8	559.3	5.7	335.1	1006.6	0.5
C.V. (%) Error A	6.9	9.6	5.3	1.6	12.9	13.3	0.7
F (5%)	S	NS	S	NS	S	S	S

N <sub>1</sub>	6372	9229	7754	251.4	1964	5635	58.1
N <sub>2</sub>	5931	8527	7248	247.6	1714	5110	55.8

C.D. (5%) Bi-Bj	567.8	922.9	267.9	2.9	72.2	228.9	0.3
C.V. (%) Error B	9.8	11.0	3.8	1.2	4.2	4.5	0.6
F (5%)	NS	NS	S	S	S	S	S

**Treatment details:****A. Main plots: Residue management (04)**M<sub>1</sub>: Residue removalM<sub>2</sub>: Residue incorporationM<sub>3</sub>: Residue incorporation + spray of microbial on residueM<sub>4</sub>: Zero-tillage + residue retention and spray of microbial consortia on residue**B. Sub plots: Nutrient management (02)**N<sub>1</sub>: 100% RDF of NPKN<sub>2</sub>: 100% RDN & P and 50% RDK

**Table 65: Crop residue management in traditional and emerging soybean-maize systems in Chhindwara.**

Residue management	Nutrient management	Seed yield (kg/ha)	Stover yield (kg/ha)	Plants (row/meter)	Plant height (cm)	Branches/plant	Leaves/plant
M <sub>1</sub>	N <sub>1</sub>	1627	4171	10.2	57.9	4.01	14.2
	N <sub>2</sub>	2266	4181	11.4	63.7	4.21	15.1
M <sub>2</sub>	N <sub>1</sub>	2185	4393	11.6	68.2	5.14	15.9
	N <sub>2</sub>	2571	4562	11.7	70.5	5.41	16.1
M <sub>3</sub>	N <sub>1</sub>	2710	4594	11.8	71.9	5.87	16.6
	N <sub>2</sub>	2845	4669	11.9	72.1	6.34	17.4
M <sub>4</sub>	N <sub>1</sub>	2329	4216	10.5	64.0	4.27	15.1
	N <sub>2</sub>	2341	4336	11.5	67.9	4.67	15.4

Location mean	2359.0	4390.4	11.3	67.0	4.99	15.7
C.D.(5%) AiBj-AiBk	114.4	425.9	1.1	11.2	0.39	1.6
C.D.(5%) AiBk-AjBk	122.4	546.4	1.7	10.3	0.57	1.8
F(5%)	S	NS	NS	NS	NS	NS

M <sub>1</sub>	1946	4176	10.8	60.8	4.11	14.6
M <sub>2</sub>	2378	4478	11.7	69.4	5.28	16.0
M <sub>3</sub>	2777	4632	11.8	72.0	6.11	17.0
M <sub>4</sub>	2335	4276	11.0	66.0	4.47	15.3

C.D. (5%) Ai-Aj	92.0	456.2	1.5	6.6	0.50	1.4
C.V. (%) Error A	2.8	7.4	9.5	7.0	7.1	6.5
F (5%)	S	NS	NS	S	S	S

N <sub>1</sub>	2213	4344	11.0	65.5	4.83	15.5
N <sub>2</sub>	2506	4437	11.6	68.6	5.16	16.0

C.D. (5%) Bi-Bj	57.2	212.9	0.6	5.6	0.20	0.8
C.V. (%) Error B	2.6	5.2	5.2	8.9	4.2	5.5
F (5%)	S	NS	S	NS	S	NS

***Treatment details:*****A. Main plots: Residue management (04)**M<sub>1</sub>: Residue removalM<sub>2</sub>: Residue incorporationM<sub>3</sub>: Residue incorporation + spray of microbial consortium on residueM<sub>4</sub>: Zero-tillage + residue retention and spray of microbial consortia on residue\***B. Sub plots: Nutrient management (02)**N<sub>1</sub>: 100% RDF of NPKN<sub>2</sub>: 100% RDN & P and 50% RDK**Cont....**



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Residue management	Nutrient management	Pods/plant	Seeds/pod	Seed index (g)	Net returns (Rs./ha)	B:C Ratio
M <sub>1</sub>	N <sub>1</sub>	66.3	2.45	9.6	29732	1.89
	N <sub>2</sub>	77.9	3.03	10.6	31856	1.98
M <sub>2</sub>	N <sub>1</sub>	83.3	3.27	10.7	35961	2.09
	N <sub>2</sub>	84.7	3.28	10.7	37807	2.12
M <sub>3</sub>	N <sub>1</sub>	86.9	3.30	11.7	40794	2.19
	N <sub>2</sub>	90.1	3.35	11.1	41126	2.22
M <sub>4</sub>	N <sub>1</sub>	78.4	3.12	9.6	32117	1.99
	N <sub>2</sub>	80.7	3.13	10.7	34048	2.03

Location mean	81.0	3.12	10.6	35430.1	2.06
C.D.(5%) AiBj-AiBk	9.0	0.42	1.1	5848.8	0.29
C.D.(5%) AiBk-AjBk	11.8	0.34	1.3	4886.0	0.29
F(5%)	NS	NS	NS	NS	NS

M <sub>1</sub>	72.1	2.74	10.1	30794	1.94
M <sub>2</sub>	84.0	3.28	10.7	36884	2.11
M <sub>3</sub>	88.5	3.33	11.4	40960	2.21
M <sub>4</sub>	79.5	3.13	10.1	33082	2.01

C.D. (5%) Ai-Aj	9.9	0.17	1.0	2605.0	0.21
C.V. (%) Error A	8.7	3.9	6.7	5.2	7.2
F (5%)	S	S	NS	S	NS

N <sub>1</sub>	78.7	3.04	10.4	34651	2.04
N <sub>2</sub>	83.3	3.20	10.8	36209	2.09

C.D. (5%) Bi-Bj	4.5	0.21	0.6	2924.4	0.14
C.V. (%) Error B	5.9	7.2	5.7	8.8	7.4
F (5%)	S	NS	NS	NS	NS

Table 66: Enhancing water use efficiency in maize in Srinagar.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)
T <sub>1</sub>	7699	13046	81.7	91.5	218.7	90.3	93.3	23.7
T <sub>2</sub>	7760	13026	82.9	92.0	220.7	90.3	93.7	24.6
T <sub>3</sub>	7847	12829	83.3	94.4	227.3	85.7	89.3	24.5
T <sub>4</sub>	7898	13702	85.5	96.8	226.3	86.3	89.7	25.1
T <sub>5</sub>	8030	14523	83.7	97.6	232.7	90.3	93.3	24.9
T <sub>6</sub>	7317	12664	82.3	90.6	799.3	87.3	90.3	24.8
T <sub>7</sub>	7336	12951	81.5	91.1	213.3	90.0	93.0	24.3
Mean	7698.2	13248.7	83.0	93.4	305.5	88.6	91.8	24.5
CD	787.8	1424.7	3.1	3.9	700.5	3.1	3.0	2.5
CV (%)	5.8	6.0	2.1	2.3	128.9	1.9	1.8	5.6
Significance	NS	NS	NS	S	NS	S	S	NS

Treatments	Net returns (Rs/ha)	B:C ratio	Barrenness in maize (%)	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row
T <sub>1</sub>	115695	0.60	12.5	20.5	11.3	12.3	40.8
T <sub>2</sub>	116602	2.40	45.1	21.6	14.2	15.4	42.4
T <sub>3</sub>	130433	2.52	12.4	22.0	12.7	12.2	42.2
T <sub>4</sub>	131931	2.57	11.5	22.4	14.3	13.3	42.2
T <sub>5</sub>	141767	2.60	11.7	23.3	10.5	12.5	42.0
T <sub>6</sub>	105858	2.84	13.2	19.3	11.7	11.7	40.3
T <sub>7</sub>	106360	2.77	12.7	19.6	14.4	14.8	39.5
Mean	121235.1	2.33	17.0	21.2	12.7	13.2	41.3
CD	23826.5	0.22	39.1	4.3	1.5	1.8	5.2
CV (%)	11.0	5.2	129.0	11.3	6.7	7.9	7.1
Significance	S	S	NS	NS	S	S	NS

**Treatment Detail:**

- T<sub>1</sub> Control (only RDF, No Fasal Amrit)  
 T<sub>2</sub> Fasal Amrit @ 5 kg/ha + RDF  
 T<sub>3</sub> Fasal Amrit @ 10 kg/ha + RDF  
 T<sub>4</sub> Fasal Amrit @ 15 kg/ha + RDF  
 T<sub>5</sub> Fasal Amrit @ 20 kg/ha + RDF  
 T<sub>6</sub> Fasal Amrit @ 15 kg/ha + 85% RDF  
 T<sub>7</sub> Fasal Amrit @ 20 kg/ha + 85% RDF

Table 67: Enhancing water use efficiency in spring maize in Karnal.

Planting method	Residue management	Grain yield of paddy (kg/ha)
P <sub>1</sub>	R <sub>1</sub>	6056
	R <sub>2</sub>	6176
P <sub>2</sub>	R <sub>1</sub>	4351
	R <sub>2</sub>	4485
P <sub>3</sub>	R <sub>1</sub>	6196
	R <sub>2</sub>	6383

Location mean	5607.9
C.D.(5%) AiBj-AiBk	79.9
C.D.(5%) AiBk-AjBk	84.6
F(5%)	NS

P <sub>1</sub> : Conventional till flat planting	6116
P <sub>2</sub> : Zero tillage flat planting	4418
P <sub>3</sub> : Ridge slop planting	6290

C.D. (5%) Ai-Aj	63.2
C.V. (%) Error A	0.7
F (5%)	S

R <sub>1</sub> : Without mulching	5534
R <sub>2</sub> : With paddy mulch	5682

C.D. (5%) Bi-Bj	46.2
C.V. (%) Error B	0.7
F (5%)	S

Table 68: Enhancing water use efficiency in spring maize (Paddy) in Ludhiana.

Planting method	Residue Management	Grain yield (kg/ha)	Tiller/m <sup>2</sup>	Plant height (cm)
M <sub>1</sub>	R <sub>1</sub>	7156	340.0	97.3
	R <sub>2</sub>	7467	359.3	100.0
M <sub>2</sub>	R <sub>1</sub>	6617	334.3	94.0
	R <sub>2</sub>	7247	348.3	101.0
M <sub>3</sub>	R <sub>1</sub>	7450	344.7	99.7
	R <sub>2</sub>	7819	364.0	103.0

Location mean	7292.6	348.4	99.2
C.D.(5%) AiBj-AiBk	603.8	16.3	9.4
C.D.(5%) AiBk-AjBk	1017.5	35.2	8.9
F(5%)	NS	NS	NS

M <sub>1</sub> : Conventional till flat planting	7311	349.7	98.7
M <sub>2</sub> : Zero-till flat planting	6932	341.3	97.5
M <sub>3</sub> : Ridge slope planting (1/2 of ridge height)	7635	354.3	101.3

C.D. (5%) Ai-Aj	925.0	33.2	6.0
C.V. (%) Error A	7.9	6.0	3.8
F (5%)	NS	NS	NS

R <sub>1</sub> : Without mulching	7074	339.7	97.0
R <sub>2</sub> : With organic mulching (6 t/ha)	7511	357.2	101.3

C.D. (5%) Bi-Bj	348.6	9.4	5.4
C.V. (%) Error B	4.1	2.3	4.7
F (5%)	S	S	NS

**Table 69: Enhancing sustainability of baby corn based intensive cropping system in Karnal.**

Treatments	Baby corn equivalent yield (kg/ha)
T <sub>1</sub>	8262
T <sub>2</sub>	8533
T <sub>3</sub>	7654
T <sub>4</sub>	9179
T <sub>5</sub>	9524
T <sub>6</sub>	10027
T <sub>7</sub>	11393
T <sub>8</sub>	12029
T <sub>9</sub>	7548
T <sub>10</sub>	13056
Mean	9720.6
CD	941.5
CV (%)	5.6
Significance	S

**Table 70: Enhancing sustainability of baby corn based intensive cropping system in Kalyani.**

Treatments	Baby corn yield with husk (kg/ha)	Baby corn yield without husk (kg/ha)	Fodder yield (kg/ha)	Plants ('000/ha)	Days to 50% tasseling	Days to 50% silking	No. of picking	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	9963	2539	19460	94.1	52.3	54.3	4.7	260858	5.08
T <sub>2</sub>	10102	2686	21594	95.9	51.3	53.3	4.7	281408	5.77
T <sub>3</sub>	10433	2840	23805	96.9	50.3	52.7	4.7	323004	5.76
T <sub>4</sub>	10985	3387	25613	102.2	49.0	51.0	4.7	383992	5.79
T <sub>5</sub>	11277	3710	27498	107.9	49.7	52.3	4.7	416128	5.83
T <sub>6</sub>	12177	4373	31283	109.4	50.0	52.0	5.0	492912	6.33
T <sub>7</sub>	12198	4603	32297	110.5	51.0	53.7	5.3	512182	6.29
Mean	11019.2	3448.3	25935.5	102.4	50.5	52.8	4.8	381497.8	5.84
CD	1364.4	538.4	2750.8	6.3	1.9	1.8	1.2	70921.3	0.57
CV (%)	7.0	8.8	6.0	3.4	2.2	2.0	13.9	10.4	5.5
Significance	S	S	S	S	S	S	NS	S	S

***Treatment details:***T<sub>1</sub>: Continuous baby corn with famers practiceT<sub>2</sub>: Continuous baby corn with RDFT<sub>3</sub>: Continuous baby corn with RDF + green manuring once a yearT<sub>4</sub>: Continuous baby corn with 5 t/ha FYM/year + RDFT<sub>5</sub>: Continuous baby corn with 10 t/ha FYM/year + RDFT<sub>6</sub>: Continuous baby corn with 15 t/ha FYM/year + RDFT<sub>7</sub>: Continuous baby corn with 20 t/ha FYM/year + RDFT<sub>8</sub>: Short duration paddy: baby corn intercropped with fenugreek: baby corn with 10 t/ha FYM/year + RDFT<sub>9</sub>: Baby corn: wheat: baby corn+/-green manuring with 10 t/ha FYM/year + RDFT<sub>10</sub>: Baby corn: potato: baby corn+/-green manuring with 10 t/ha FYM/year + RDF



**Table 72: Weed management in maize systems in Imphal.**

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000 ha)	Plant height (cm)	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains /row
T <sub>1</sub>	3047	8129	41.9	39.8	133.4	29072	1.75	14.2	10.9	11.5	22.3
T <sub>2</sub>	7478	14509	60.6	62.9	258.3	111251	3.13	18.4	15.1	15.9	41.3
T <sub>3</sub>	6173	12626	58.3	58.1	228.3	88659	2.90	16.7	13.5	13.8	33.7
T <sub>4</sub>	6062	12860	56.7	58.7	232.0	89106	3.02	16.9	14.0	14.1	34.3
T <sub>5</sub>	5697	11552	52.5	52.2	213.3	80816	2.84	15.3	13.4	13.6	33.7
T <sub>6</sub>	6470	13599	56.2	59.3	240.5	98002	3.23	17.1	14.3	15.4	38.7
T <sub>7</sub>	6553	13483	55.2	57.4	245.4	99686	3.26	16.7	14.2	15.7	37.7
T <sub>8</sub>	6347	12943	55.9	57.8	231.3	95096	3.16	16.6	14.3	15.3	36.7
T <sub>9</sub>	5783	11802	54.4	53.6	216.0	82752	2.88	15.3	13.8	14.1	34.0
T <sub>10</sub>	6363	13145	56.5	58.4	232.0	95546	3.17	16.5	14.2	15.0	35.7
T <sub>11</sub>	6182	13381	54.7	57.9	230.0	91874	3.09	16.7	14.4	14.9	36.0
T <sub>12</sub>	6942	13929	59.2	60.7	251.3	108025	3.45	18.0	15.1	16.0	39.3

[illegible]

Treatments	Weeds count/m <sup>2</sup> (at 50 DAS)			Weeds count/m <sup>2</sup> (at harvest)			Dry matter of weeds/m <sup>2</sup> (at 50 DAS)			Dry matter of weeds/m <sup>2</sup> (at harvest)		
	Grassy	Sedges	BLF	Grassy	Sedges	BLF	Grassy	Sedges	BLF	Grassy	Sedges	BLF
T <sub>1</sub>	72.7	32.7	64.0	118.3	70.7	92.0	95.8	45.0	86.7	246.4	145.3	134.0
T <sub>2</sub>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T <sub>3</sub>	27.3	16.3	18.0	51.3	40.3	40.7	31.8	21.0	24.2	92.2	76.9	70.0
T <sub>4</sub>	25.0	17.3	23.7	58.7	43.0	38.7	30.3	22.7	27.4	93.7	78.9	74.6
T <sub>5</sub>	44.7	23.7	26.7	57.7	34.3	39.0	53.9	34.6	36.9	79.5	60.6	85.3
T <sub>6</sub>	16.0	12.3	9.7	21.3	20.3	16.0	22.2	15.8	17.4	35.1	36.6	33.5
T <sub>7</sub>	18.0	13.0	10.3	24.3	21.7	18.0	29.6	17.3	14.7	38.8	36.1	29.2
T <sub>8</sub>	28.3	19.0	19.3	33.7	29.3	25.3	43.8	18.8	36.2	58.1	53.6	60.0
T <sub>9</sub>	35.3	21.0	24.3	51.7	32.0	35.7	52.6	24.1	30.5	87.4	50.8	58.9
T <sub>10</sub>	21.3	17.0	11.3	24.3	24.3	18.0	35.6	23.1	15.8	38.8	40.9	29.9
T <sub>11</sub>	23.3	19.7	12.3	26.0	26.0	17.7	33.3	20.4	21.9	45.1	49.0	40.8
T <sub>12</sub>	13.3	8.7	15.3	19.0	12.3	28.7	20.0	11.9	18.9	31.8	19.7	47.2

[illegible]

Table 73: Weed management in maize based cropping systems in Karnal.

Treatments	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Net returns (Rs./ha)	B:C ratio	Weeds count/m <sup>2</sup> (at 50 DAS)			Dry weight of weeds (g/m <sup>2</sup> ) (at 50 DAS)		
							Grassy	BLF	Sedges	Grassy	BLF	Sedges
T <sub>1</sub>	1414	2687	46.3	25.0	-29914	0.50	136.7	23.0	136.7	118.7	141.8	118.7
T <sub>2</sub>	7337	8873	82.2	81.3	52760	1.56	0.0	0.0	0.0	0.0	0.0	0.0
T <sub>3</sub>	5249	6620	81.7	81.0	32593	1.44	127.7	12.7	127.7	70.2	35.9	70.2
T <sub>4</sub>	5234	6359	82.2	81.9	39394	1.59	125.3	14.7	119.7	68.9	40.9	66.0
T <sub>5</sub>	5908	7179	81.3	80.8	51532	1.76	121.7	12.0	3.0	67.1	33.4	0.4
T <sub>6</sub>	7351	8893	82.4	81.9	79513	2.17	13.3	4.7	6.3	10.6	10.0	0.4
T <sub>7</sub>	7248	8769	81.7	81.0	75833	2.09	10.0	5.0	14.7	5.8	10.8	54.8
T <sub>8</sub>	6104	7380	81.9	81.5	56583	1.85	117.0	7.3	117.0	64.5	15.7	64.5
T <sub>9</sub>	7156	8690	82.2	81.9	71693	1.99	9.0	3.0	2.0	5.1	6.5	0.1
T <sub>10</sub>	7430	8916	81.9	81.5	76898	2.06	12.3	2.0	3.7	6.9	4.3	0.2
T <sub>11</sub>	7353	8826	81.9	81.3	73712	2.00	11.3	3.7	6.3	6.3	7.9	0.9
T <sub>12</sub>	7088	8675	82.4	81.9	71608	2.01	11.0	3.7	121.0	6.0	7.9	49.2
Mean	6239.2	7655.5	79.0	76.8	54350.4	1.75	57.9	7.6	54.8	35.8	26.3	35.4
CD	577.5	705.4	2.6	4.7	11261.9	0.2	5.1	3.1	5.7	14.1	14.7	14.6
CV (%)	5.5	5.4	1.9	3.6	12.2	5.3	5.2	24.2	6.1	23.2	33.1	24.3
Significance	S	S	S	S	S	S	S	S	S	S	S	S

Table 74: Weed management in maize system in Ludhiana.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Barren plant/plot	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3032	3487	49.8	46.8	160.0	61.0	64.0	4.33	18000	0.39
T <sub>2</sub>	7301	9491	80.3	79.2	190.0	58.7	60.7	1.67	105520	2.15
T <sub>3</sub>	5845	7014	75.9	74.1	179.3	59.3	62.3	2.67	75680	1.60
T <sub>4</sub>	6104	7386	76.4	74.3	181.0	59.7	62.7	3.00	77763	1.53
T <sub>5</sub>	6266	7560	76.9	74.8	171.0	59.7	62.7	3.00	82647	1.67
T <sub>6</sub>	6810	8581	78.9	77.3	187.7	59.0	62.0	2.33	92799	1.82
T <sub>7</sub>	6664	8330	78.2	76.6	187.7	59.7	62.7	2.33	90037	1.78
T <sub>8</sub>	6574	7645	76.9	75.0	187.3	59.0	62.0	2.67	86543	1.68
T <sub>9</sub>	6627	8218	77.3	75.5	184.7	59.3	62.3	2.67	86271	1.61
T <sub>10</sub>	7118	9111	79.9	78.5	189.3	59.0	61.0	2.00	96226	1.77
T <sub>11</sub>	6938	8811	78.9	77.5	188.3	59.0	61.0	2.00	91723	1.67
T <sub>12</sub>	6611	8198	77.1	75.2	185.0	59.7	62.7	2.67	83683	1.50
Mean	6324.3	7819.3	75.5	73.7	182.6	59.4	62.2	2.61	82241.0	1.60
CD	837.9	1053.7	3.2	5.1	16.0	2.4	2.4	1.04	17644.9	0.35
CV (%)	7.8	8.0	2.5	4.1	5.2	2.4	2.3	23.5	12.7	12.9
Significance	S	S	S	S	S	NS	NS	S	S	S

Cont....



# A-161

Treatments	Weeds count/m <sup>2</sup> (at 50 DAS)			Dry weight of weed (g/m <sup>2</sup> ) at 50 DAS			Weeds count/m <sup>2</sup> (at harvest)			Dry weight of weed (g/m <sup>2</sup> ) at harvest		
	Grasses	BLF	Sedges	Grasses	BLF	Sedges	Grasses	BLF	Sedges	Grasses	BLF	Sedges
T <sub>1</sub>	124.7	20.0	54.7	49.9	110.2	45.8	128.3	16.3	58.0	53.2	114.7	48.7
T <sub>2</sub>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T <sub>3</sub>	52.7	9.7	51.1	18.4	43.6	28.1	56.3	7.0	54.8	22.1	46.8	30.6
T <sub>4</sub>	50.3	11.7	47.9	17.6	52.6	25.7	52.7	8.7	50.5	21.3	55.8	28.2
T <sub>5</sub>	46.7	9.0	5.0	16.3	40.6	1.4	48.0	6.3	6.7	20.0	43.8	3.0
T <sub>6</sub>	10.0	3.7	8.3	3.2	9.2	1.9	11.3	2.3	10.0	5.7	12.0	3.4
T <sub>7</sub>	9.3	4.0	16.7	3.0	10.1	21.9	10.7	3.3	19.0	5.5	12.8	24.3
T <sub>8</sub>	42.0	5.3	46.8	14.7	24.1	24.4	44.3	3.7	50.4	18.4	27.2	26.8
T <sub>9</sub>	10.3	3.0	4.0	3.8	7.4	1.1	12.0	2.3	5.7	5.6	9.2	2.6
T <sub>10</sub>	7.0	2.0	5.7	2.2	5.0	1.4	8.7	1.7	7.3	4.1	6.7	2.9
T <sub>11</sub>	8.0	3.7	8.3	2.6	8.8	1.5	9.7	3.0	10.7	4.4	10.5	2.9
T <sub>12</sub>	11.3	3.7	47.7	3.6	9.1	22.2	13.3	3.3	51.1	7.1	10.8	24.6
Mean	31.0	6.3	24.7	11.3	26.7	14.6	32.9	4.8	27.0	13.9	29.2	16.5
CD	8.3	2.8	7.1	3.7	9.6	5.3	8.2	2.5	6.6	4.3	9.6	5.3
CV (%)	15.7	26.3	17.0	19.6	21.2	21.5	14.7	30.3	14.5	18.3	19.4	19.1
Significance	S	S	S	S	S	S	S	S	S	S	S	S

**Table 75: Weed management in maize system in Pantnagar.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Cob length (cm)	Cob girth (cm)	100-seed weight (g)
T <sub>1</sub>	2401	5111	65.9	65.9	146.5	54.7	58.0	12.9	11.2	20.8
T <sub>2</sub>	6032	8481	66.7	66.7	166.2	54.0	57.0	16.4	13.4	26.4
T <sub>3</sub>	5545	8444	65.9	65.9	164.9	54.3	57.7	16.1	13.2	26.3
T <sub>4</sub>	5752	8222	64.4	64.4	161.6	54.7	57.7	16.2	13.2	26.1
T <sub>5</sub>	2819	5444	65.2	65.2	150.8	54.3	57.7	14.4	12.3	23.3
T <sub>6</sub>	5605	8185	65.9	65.9	162.0	54.0	57.0	16.2	13.3	26.0
T <sub>7</sub>	5415	8407	65.2	65.2	164.5	54.0	57.0	16.4	13.3	26.1
T <sub>8</sub>	5569	8444	64.4	64.4	165.9	54.7	57.7	16.0	13.2	26.4
T <sub>9</sub>	5627	8222	65.2	65.2	162.8	54.3	57.7	15.9	13.4	26.2
T <sub>10</sub>	5670	8259	65.9	65.9	164.9	54.3	57.7	16.1	13.2	26.1
T <sub>11</sub>	5764	8074	63.7	63.7	166.7	54.3	57.3	16.1	13.2	26.2
T <sub>12</sub>	5862	8407	65.2	65.2	165.5	54.7	57.7	16.0	13.2	26.4
Mean	5171.8	7808.6	65.3	65.3	161.8	54.4	57.5	15.7	13.0	25.5
CD	920.0	1280.3	3.1	3.1	10.4	0.9	0.8	1.2	0.9	1.1
CV (%)	10.5	9.7	2.8	2.8	3.8	0.9	0.8	4.5	3.9	2.5
Significance	S	S	NS	NS	S	NS	NS	S	S	S

Cont....

**A-162**

[illegible][illegible]

## A-163

**Table 76: Weed management in maize systems in Bahraich.**

Treatment	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Net returns (Rs./ha)	B:C ratio	Weeds/m <sup>2</sup> (at 50 DAS)	Weed dry weight (g/m <sup>2</sup> ) (at 50 DAS)	Weed/m <sup>2</sup> (at harvest)	Weed dry weight (g/m <sup>2</sup> ) (at harvest)
T <sub>1</sub>	4820	6245	64.7	65855	1.89	486.3	630.0	229.7	195.0
T <sub>2</sub>	6968	9216	73.1	100687	2.24	0.0	0.0	0.0	0.0
T <sub>3</sub>	6799	9037	69.6	100275	2.40	300.3	100.3	124.0	106.7
T <sub>4</sub>	5513	7223	60.1	70571	1.58	152.7	50.0	61.0	53.3
T <sub>5</sub>	6531	8708	68.4	95641	2.34	323.0	250.0	94.0	113.3
T <sub>6</sub>	5211	6793	64.9	70906	1.87	367.7	216.7	218.3	148.3
T <sub>7</sub>	5876	7677	64.0	84717	2.22	348.3	191.7	193.3	143.3
T <sub>8</sub>	6372	8156	68.9	96528	2.63	334.7	186.7	164.7	133.3
T <sub>9</sub>	5638	7643	61.6	75229	1.77	96.7	58.3	80.3	60.0
T <sub>10</sub>	6010	7815	62.2	83109	1.96	182.0	91.7	97.0	78.3
T <sub>11</sub>	6452	8560	64.0	92241	2.17	171.7	75.0	75.7	69.3
T <sub>12</sub>	6227	8268	63.1	88999	2.16	121.7	58.3	87.0	76.7
Mean	6034.7	7945.1	65.4	85396.5	2.10	240.4	159.1	118.8	98.1
CD	734.5	763.1	11.9	15350.6	0.38	144.2	97.1	11.3	10.5
CV (%)	7.2	5.7	10.7	10.6	10.7	35.4	36.0	5.6	6.3
Significance	S	S	NS	S	S	S	S	S	S

**Table 77: Weed management in maize systems in Bhubaneswar.**

Treatment	Grain yield (kg/ha)	Cob yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Plant height (cm)	Days to 50% pollen shed
T <sub>1</sub>	3561	4177	7738	79.9	147.9	50.7
T <sub>2</sub>	7416	8737	16186	78.8	163.1	51.3
T <sub>3</sub>	7065	8253	15318	73.6	177.3	52.0
T <sub>4</sub>	5149	6040	11189	80.6	173.0	51.7
T <sub>5</sub>	6979	8070	14950	79.2	177.5	51.7
T <sub>6</sub>	6844	7816	14522	77.2	180.4	51.3
T <sub>7</sub>	7099	8284	15346	81.0	175.0	51.3
T <sub>8</sub>	5418	6356	11774	79.2	179.0	51.7
T <sub>9</sub>	5467	6413	11881	80.1	167.5	52.0
T <sub>10</sub>	6003	7075	13079	77.9	161.2	51.7
T <sub>11</sub>	6616	7475	14024	80.6	162.9	51.0
T <sub>12</sub>	6029	7072	13102	80.2	156.7	51.0
Mean	6137.3	7147.3	13258.9	79.0	168.5	51.4
CD	862.6	996.0	1845.1	5.3	15.0	1.1
CV (%)	8.3	8.2	8.2	4.0	5.3	1.3
Significance	S	S	S	NS	S	NS

**Cont....**

# A-164

Treatment	Days to 50% silking	Days to 50% maturity	Net returns (Rs./ha)	B:C ratio	Weed count/m <sup>2</sup> (at 50 DAS)		
					Broadleaf	Grassy	Sedges
T <sub>1</sub>	54.0	91.3	36776	0.97	156.7	64.3	36.3
T <sub>2</sub>	54.9	91.7	104425	2.01	0.0	0.0	0.0
T <sub>3</sub>	55.4	91.7	100368	2.09	48.3	19.0	6.8
T <sub>4</sub>	55.0	92.3	63130	1.40	14.0	39.0	2.0
T <sub>5</sub>	55.3	91.7	97475	2.07	17.3	30.0	1.3
T <sub>6</sub>	54.5	91.7	95832	2.13	11.3	13.0	0.7
T <sub>7</sub>	54.5	91.0	103303	2.30	32.3	16.0	3.0
T <sub>8</sub>	55.0	92.0	69784	1.59	13.3	4.3	1.0
T <sub>9</sub>	55.4	92.3	69815	1.55	8.3	4.3	0.3
T <sub>10</sub>	55.0	92.0	81073	1.93	19.0	1.0	0.0
T <sub>11</sub>	54.4	92.7	92526	2.06	40.0	46.7	5.3
T <sub>12</sub>	54.4	91.7	81614	1.81	18.7	1.3	1.0
Mean	54.8	91.8	83010.2	1.83	31.6	19.9	4.8
CD	1.0	1.5	18174.7	0.40	29.5	20.5	6.0
CV (%)	1.1	1.0	12.9	13.0	55.0	60.8	74.1
Significance	NS	NS	S	S	S	S	S

**Table 78: Weed management in maize system in Chitrakoot.**

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Cob length (cm)	Cob girth (cm)	Grains/ cob	Grain weight/ cob (g)	100-seed weight (g)
T <sub>1</sub>	5453	6541	7782	97.8	97.8	13.5	12.0	331.3	120.0	18.7
T <sub>2</sub>	9103	11657	13530	97.8	99.4	15.2	15.0	372.6	127.3	19.6
T <sub>3</sub>	7027	8865	10834	97.8	108.4	15.6	13.6	366.5	124.0	20.3
T <sub>4</sub>	8714	12935	13224	94.1	108.1	16.7	13.5	368.7	127.0	20.3
T <sub>5</sub>	8162	11841	13285	93.9	97.2	16.0	13.7	369.9	126.3	20.3
T <sub>6</sub>	9359	11931	16222	92.2	95.6	15.2	13.5	365.2	132.7	19.3
T <sub>7</sub>	9722	13604	18420	92.2	93.9	14.2	12.9	357.3	124.3	18.2
T <sub>8</sub>	7597	9324	11916	92.2	102.6	16.4	13.1	356.7	140.0	20.7
T <sub>9</sub>	9748	11473	15316	99.4	107.3	15.9	12.6	371.4	138.7	21.0
T <sub>10</sub>	11716	12081	15392	101.1	106.4	16.1	12.3	364.9	129.3	20.4
T <sub>11</sub>	10797	12285	16499	95.6	101.8	16.9	12.4	360.7	129.7	21.3
T <sub>12</sub>	9240	10860	14307	99.4	107.3	14.9	12.9	298.5	123.0	19.6
Mean	8886.6	11116.4	13894.0	96.1	102.2	15.6	13.1	357.0	128.5	20.0
CD	3020.9	2473.5	3512.2	14.7	18.3	1.6	1.3	44.6	12.9	1.7
CV (%)	20.1	13.1	14.9	9.1	10.6	6.1	5.8	7.4	5.9	5.0
Significance	S	S	S	NS	NS	S	S	NS	NS	S

Cont....

## A-165

Treatments	Shelling (%)	Grain moisture (%)	Net returns (Rs./ha)	B:C ratio	Weed count/m <sup>2</sup>			Weed dry weight (g/m <sup>2</sup> )		
					25 DAS	50 DAS	at harvest	25 DAS	50 DAS	at harvest
T <sub>1</sub>	80.7	26.0	95522	4.59	55.0	55.3	73.3	24.9	26.6	56.6
T <sub>2</sub>	74.4	23.9	170011	5.81	0.0	0.0	0.0	0.0	0	0
T <sub>3</sub>	76.1	27.8	128009	5.23	36.0	28.3	28.0	13.9	20.6	13.8
T <sub>4</sub>	75.1	25.4	166988	6.04	44.3	26.0	21.7	21.7	15.7	12.5
T <sub>5</sub>	74.8	31.2	155656	5.98	43.3	34.7	31.0	24.8	21.7	20.1
T <sub>6</sub>	71.8	31.4	179070	6.60	45.0	32.7	40.7	17.4	19.0	23.8
T <sub>7</sub>	64.4	29.3	188345	6.65	38.3	34.7	28.7	17.9	23.1	15.6
T <sub>8</sub>	77.8	27.1	140709	5.71	42.7	31.0	27.0	17.8	16.1	19.2
T <sub>9</sub>	76.9	26.3	183751	6.38	42.0	32.7	33.7	21.0	17.0	19.7
T <sub>10</sub>	89.5	26.4	223549	7.40	36.7	32.0	27.7	11.8	14.5	20.1
T <sub>11</sub>	76.9	27.0	204298	6.64	32.7	26.7	31.3	17.3	20.5	16.4
T <sub>12</sub>	72.8	25.2	173740	6.30	42.7	25.0	30.3	13.5	15.7	21.3
Mean	75.9	27.3	167470.8	6.11	38.2	29.9	31.1	16.8	17.5	19.9
CD	16.3	9.0	62055.7	1.92	20.0	9.8	9.0	9.0	10.7	8.9
CV (%)	12.7	19.4	21.9	18.6	30.9	19.3	17.0	31.6	36.1	26.4
Significance	NS	NS	S	NS	S	S	S	S	S	S

**Table 79: Weed management in maize systems in Dholi.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Stone yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)
T <sub>1</sub>	3055	5942	4002	939	70.2	68.9	170.0
T <sub>2</sub>	5598	8399	6746	1148	80.0	81.4	202.0
T <sub>3</sub>	4895	8664	6016	1121	76.4	77.2	180.0
T <sub>4</sub>	5032	8635	6099	1066	77.4	79.0	183.0
T <sub>5</sub>	4967	8824	6125	1158	77.7	78.8	184.0
T <sub>6</sub>	5047	8469	6182	1135	77.9	78.0	185.0
T <sub>7</sub>	5161	8445	6269	1108	76.6	78.6	186.0
T <sub>8</sub>	5169	8600	6267	1098	78.6	79.9	187.0
T <sub>9</sub>	5225	8513	6329	1105	80.1	80.3	189.0
T <sub>10</sub>	5298	8463	6413	1115	78.4	80.0	190.0
T <sub>11</sub>	5434	8533	6565	1131	78.2	79.4	191.0
T <sub>12</sub>	5229	8566	6335	1106	76.6	77.7	191.3
Mean	5009.1	8337.6	6112.3	1102.6	77.3	78.3	186.5
CD	726.7	1281.1	895.4	205.2	6.9	7.0	40.3
CV (%)	8.6	9.1	8.7	11.0	5.3	5.3	12.8
Significance	S	S	S	NS	NS	NS	NS

Cont....

# A-166

Treatment	Ear height (cm)	Days of 50% tasseling	Days of 50% silking	Days of maturity	Cob length (cm)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	82.6	62.0	64.7	108.3	15.3	33314	0.95
T <sub>2</sub>	92.7	60.0	63.0	115.7	20.2	71923	1.40
T <sub>3</sub>	81.5	61.3	64.7	114.3	18.3	67834	1.66
T <sub>4</sub>	88.5	61.0	64.3	115.3	18.4	67459	1.53
T <sub>5</sub>	88.1	61.0	63.7	115.7	18.4	69801	1.72
T <sub>6</sub>	81.3	62.0	65.0	115.0	18.4	71485	1.77
T <sub>7</sub>	81.6	61.0	64.0	115.0	18.5	74251	1.86
T <sub>8</sub>	88.2	60.7	64.0	115.3	18.5	76572	2.02
T <sub>9</sub>	82.0	60.3	63.7	115.3	19.0	71728	1.64
T <sub>10</sub>	83.2	60.0	63.3	115.0	19.1	73496	1.69
T <sub>11</sub>	89.1	60.7	64.0	116.0	19.5	76798	1.78
T <sub>12</sub>	85.5	61.0	64.3	115.0	18.6	74581	1.81
Mean	85.4	60.9	64.1	114.7	18.5	69103.4	1.65
CD	20.5	8.1	8.4	10.1	4.4	15997.3	0.38
CV (%)	14.2	7.8	7.8	5.2	14.0	13.7	13.6
Significance	NS	NS	NS	NS	NS	S	S

**Table 80: Weed management in maize system (Performance of Rice without treatment variation) in Kalyani.**

Treatments	Grain yield (kg/ha)
T <sub>1</sub>	2878
T <sub>2</sub>	2822
T <sub>3</sub>	2880
T <sub>4</sub>	2811
T <sub>5</sub>	2778
T <sub>6</sub>	3093
T <sub>7</sub>	3007
T <sub>8</sub>	2929
T <sub>9</sub>	2809
T <sub>10</sub>	3047
T <sub>11</sub>	3242
T <sub>12</sub>	3231
Mean	2960.6
CD	359.2
CV (%)	7.2
Significance	NS

Table 81: Weed management in maize systems in Ranchi.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	1000-grain weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3142	5913	4084	62.8	53.1	159.5	266.4	28100	0.80
T <sub>2</sub>	7079	10883	8528	67.5	66.8	215.1	294.7	77189	1.19
T <sub>3</sub>	6051	9822	7462	67.2	66.2	203.4	284.4	77304	1.75
T <sub>4</sub>	4806	8318	6056	65.8	62.8	194.3	270.9	48830	1.02
T <sub>5</sub>	6293	10094	7740	67.9	67.0	206.1	287.0	88432	2.34
T <sub>6</sub>	6556	10296	7985	66.3	65.3	210.6	291.3	94732	2.58
T <sub>7</sub>	6480	10280	7925	66.7	65.6	209.3	289.1	93103	2.53
T <sub>8</sub>	6747	10479	8178	66.5	65.8	212.2	292.7	99717	2.81
T <sub>9</sub>	5180	8795	6484	66.3	64.3	189.7	274.6	64155	1.61
T <sub>10</sub>	5580	9255	6957	66.7	64.8	196.0	279.2	72453	1.83
T <sub>11</sub>	5366	8997	6679	66.3	64.3	194.2	277.3	68034	1.71
T <sub>12</sub>	5769	9467	7143	66.5	64.8	198.8	282.3	77406	2.02
Mean	5754.0	9383.2	7101.7	66.4	64.2	199.1	282.5	74121.3	1.85
CD	932.4	1492.6	1131.6	8.5	9.2	20.7	24.3	18529.3	0.48
CV (%)	9.6	9.4	9.4	7.6	8.5	6.2	5.1	14.8	15.2
Significance	S	S	S	NS	NS	S	NS	S	S

Treatment	Cob length (cm)	Cob girth (cm)	Grains/row	Grain rows/cob	Grains/cob	Weeds/m <sup>2</sup> (at 50 DAS)		
						Grassy	Broadleaf	Sedges
T <sub>1</sub>	15.5	13.8	31.9	13.1	374.8	541.3	310.0	105.7
T <sub>2</sub>	18.9	15.9	39.5	15.5	550.6	0.0	0.0	0.0
T <sub>3</sub>	17.8	15.2	36.9	14.7	487.5	176.3	114.3	54.3
T <sub>4</sub>	16.9	14.5	34.8	13.7	428.1	142.7	86.3	42.0
T <sub>5</sub>	17.9	15.4	37.3	14.7	494.2	188.7	57.0	19.3
T <sub>6</sub>	18.4	15.7	38.4	15.1	522.9	21.3	38.7	15.7
T <sub>7</sub>	18.2	15.5	38.0	14.9	511.7	48.7	23.7	12.0
T <sub>8</sub>	18.6	15.8	38.9	15.3	534.3	55.0	5.7	8.7
T <sub>9</sub>	17.0	14.6	35.1	13.9	438.9	148.7	36.0	14.3
T <sub>10</sub>	17.5	14.9	36.2	14.3	465.3	29.3	16.7	11.7
T <sub>11</sub>	17.3	14.8	35.7	14.1	451.7	40.7	10.3	9.3
T <sub>12</sub>	17.6	15.1	36.5	14.5	474.3	45.7	3.3	5.0
Mean	17.6	15.1	36.6	14.5	477.9	119.9	58.5	24.8
CD	1.6	1.3	3.3	0.6	66.0	35.1	21.7	10.0
CV (%)	5.3	5.2	5.4	2.5	8.2	17.3	21.9	23.9
Significance	S	NS	S	S	S	S	S	S

Cont....

Treatment	Weeds/m <sup>2</sup> (at harvest)			Weeds dry matter (g/m <sup>2</sup> ) at 50 DAS			Weeds dry matter (g/m <sup>2</sup> ) at harvest		
	Grassy	Broadleaf	Sedges	Grassy	Broadleaf	Sedges	Grassy	Broadleaf	Sedges
T <sub>1</sub>	375.3	216.7	68.3	134.1	146.3	54.6	181.2	187.4	36.7
T <sub>2</sub>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T <sub>3</sub>	137.7	104.3	42.3	44.0	53.3	28.6	66.5	90.2	22.8
T <sub>4</sub>	108.3	90.7	34.3	34.4	40.2	21.9	52.4	78.4	18.4
T <sub>5</sub>	112.7	73.0	26.0	46.2	26.2	10.2	54.4	63.2	14.0
T <sub>6</sub>	38.3	47.3	20.0	5.3	18.0	8.2	18.6	41.0	10.7
T <sub>7</sub>	68.7	33.7	14.7	11.9	11.0	6.3	33.3	29.1	7.9
T <sub>8</sub>	78.7	15.0	10.0	13.7	2.6	4.5	38.1	13.0	5.4
T <sub>9</sub>	97.0	50.3	22.3	36.3	16.8	7.5	46.9	43.5	12.0
T <sub>10</sub>	43.0	34.7	16.3	7.2	7.7	6.1	20.8	30.0	8.8
T <sub>11</sub>	54.0	20.0	12.0	10.0	4.8	4.9	26.2	17.3	6.4
T <sub>12</sub>	69.3	10.0	6.7	11.2	1.6	2.6	33.6	8.7	3.6
Mean	98.6	58.0	22.8	29.5	27.4	12.9	47.6	50.1	12.2
CD	33.8	16.9	8.2	9.2	10.1	5.2	15.1	14.7	4.5
CV (%)	20.3	17.3	21.3	18.4	21.8	23.9	18.7	17.4	21.9
Significance	S	S	S	S	S	S	S	S	S

Table 82: Weed management in maize system in Varanasi.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ( <sup>000</sup> /ha)	Cobs ( <sup>000</sup> /ha)	Plant height (cm)	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3033	5308	66.7	66.7	175.0	18.5	53893	1.50
T <sub>2</sub>	5863	8208	80.0	80.0	224.7	35.4	111521	2.14
T <sub>3</sub>	5513	8104	77.2	77.2	208.1	29.4	118291	3.16
T <sub>4</sub>	5614	8140	78.1	78.1	215.0	21.6	120741	3.24
T <sub>5</sub>	4707	7954	72.4	72.4	180.0	21.2	97226	2.38
T <sub>6</sub>	4800	8112	73.1	73.1	184.0	25.0	102052	2.63
T <sub>7</sub>	4923	8304	74.4	74.4	186.5	25.6	106723	2.84
T <sub>8</sub>	5305	8117	77.1	77.1	204.0	26.5	112929	2.93
T <sub>9</sub>	5030	8300	75.3	75.3	189.7	25.4	104842	2.51
T <sub>10</sub>	5103	8268	76.3	76.3	193.0	26.4	108279	2.73
T <sub>11</sub>	5205	8275	79.3	79.3	197.3	26.7	111723	2.91
T <sub>12</sub>	5412	8118	77.4	77.4	206.0	29.0	113878	2.86
Mean	5042.3	7934.0	75.6	75.6	196.9	25.9	105174.9	2.65
CD	530.6	804.0	9.4	9.4	2.8	7.3	68.5	0.01
CV (%)	6.2	6.0	7.3	7.3	0.8	16.6	0.0	0.1
Significance	S	S	NS	NS	S	S	S	S

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[illegible][illegible]



Table 84: Weed management in maize-chickpea system in Dharwad.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days 50% tasseling	Days to 50% silking	100-grain weight (g)
T <sub>1</sub>	4087	6230	5663	76.1	71.7	177.3	50.3	54.7	21.8
T <sub>2</sub>	6917	7953	8333	79.6	73.4	220.5	51.0	55.3	28.2
T <sub>3</sub>	6677	8283	8083	80.3	72.1	209.1	50.3	56.0	29.2
T <sub>4</sub>	7080	8540	8530	80.6	73.7	206.3	50.0	56.0	29.5
T <sub>5</sub>	6593	7683	8043	81.4	74.8	217.0	51.7	55.3	30.6
T <sub>6</sub>	6543	9020	8900	81.0	73.7	209.5	51.0	55.0	30.3
T <sub>7</sub>	6910	8790	8477	80.5	72.5	212.6	50.3	56.0	30.1
T <sub>8</sub>	6870	9033	8377	81.0	72.8	209.5	50.3	55.7	30.4
T <sub>9</sub>	6577	8387	7827	80.4	73.2	220.6	51.3	55.3	30.4
T <sub>10</sub>	6797	8527	8270	80.9	74.8	215.3	50.7	57.0	30.5
T <sub>11</sub>	6630	8897	8657	79.6	77.6	200.3	50.7	57.3	30.4
T <sub>12</sub>	6990	8973	7417	80.5	78.1	218.9	50.7	56.7	30.9
Mean	6555.8	8359.7	8048.1	80.2	74.0	209.7	50.7	55.9	29.4
CD	869.8	1302.4	1269.9	2.1	3.5	14.2	1.2	1.5	1.8
CV (%)	7.8	9.2	9.3	1.6	2.8	4.0	1.4	1.5	3.7
Significance	S	S	S	S	S	S	NS	S	S

Treatments	Net returns (Rs./ha)	B:C ratio	Weeds count /m <sup>2</sup> (at 50 DAS)			Total weeds/m <sup>2</sup> (at 50 DAS)	Weeds count/m <sup>2</sup> (at harvest)			Total weeds/m <sup>2</sup> (at harvest)
			Grass	BLF	Sedges		Grass	BLF	Sedges	
T <sub>1</sub>	32820	1.62	31.2	21.8	5.7	49.7	37.5	22.7	8.4	69.0
T <sub>2</sub>	80000	2.23	1.4	1.2	0.5	3.0	1.8	1.2	0.4	2.9
T <sub>3</sub>	80460	2.35	4.6	3.8	3.0	11.5	8.1	4.7	3.9	16.7
T <sub>4</sub>	86930	2.41	5.1	3.8	3.4	12.5	8.3	4.8	4.7	17.8
T <sub>5</sub>	78210	2.30	5.0	4.6	1.8	11.6	6.1	5.2	3.1	14.4
T <sub>6</sub>	77160	2.28	5.4	4.7	3.2	13.6	8.3	4.9	4.0	17.2
T <sub>7</sub>	85360	2.43	6.6	3.7	2.7	13.0	8.0	4.1	4.1	16.2
T <sub>8</sub>	84520	2.41	7.6	4.8	3.2	15.9	7.0	4.2	3.8	14.9
T <sub>9</sub>	73860	2.15	7.4	2.8	1.8	12.5	6.1	3.9	2.7	12.7
T <sub>10</sub>	78480	2.22	4.2	3.5	3.5	11.4	4.7	3.8	3.6	12.1
T <sub>11</sub>	74980	2.17	5.0	3.9	3.9	13.0	5.5	4.1	4.0	13.6
T <sub>12</sub>	83040	2.30	5.5	3.7	3.1	12.7	4.7	3.8	4.3	12.8
Mean	76318.3	2.24	7.4	5.2	3.0	15.1	8.9	5.6	3.9	18.4
CD	18266.2	0.31	4.3	3.4	1.5	6.2	4.0	1.4	1.1	3.9
CV (%)	14.1	8.2	33.8	39.0	28.8	24.4	26.8	14.3	16.7	12.6
Significance	S	S	S	S	S	S	S	S	S	S

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Treatments	Weed dry weight (g/m <sup>2</sup> ) (at 50 DAS)			Total weeds dry weight (g/m <sup>2</sup> ) (at 50 DAS)	Weed dry weight (g/m <sup>2</sup> ) (at harvest)			Total weeds dry weight (g/m <sup>2</sup> ) (at harvest)
	Grass	BLF	Sedges		Grass	BLF	Sedges	
T <sub>1</sub>	8.33	6.47	3.60	18.40	30.37	15.93	12.60	58.9
T <sub>2</sub>	0.40	0.23	0.27	0.90	0.60	0.30	0.53	1.4
T <sub>3</sub>	2.67	2.93	2.07	7.67	5.40	5.80	3.53	14.7
T <sub>4</sub>	2.47	2.90	2.10	7.47	4.43	3.67	3.83	11.9
T <sub>5</sub>	3.03	3.00	1.67	7.70	5.23	3.13	2.00	10.4
T <sub>6</sub>	2.53	2.27	2.17	6.97	4.50	3.27	3.90	11.7
T <sub>7</sub>	3.60	3.00	2.13	8.73	5.00	3.53	3.60	12.1
T <sub>8</sub>	3.93	2.53	2.20	8.67	3.60	3.47	4.27	11.3
T <sub>9</sub>	3.87	2.73	1.80	8.40	3.93	4.67	3.07	11.7
T <sub>10</sub>	2.57	2.20	1.93	6.70	2.73	3.90	2.93	9.6
T <sub>11</sub>	2.87	2.47	1.47	6.80	3.30	4.53	3.67	11.5
T <sub>12</sub>	2.53	2.33	1.60	6.47	3.27	3.13	3.53	9.9
Mean	3.2	2.8	1.9	7.9	6.0	4.6	4.0	14.6
CD	1.4	0.8	0.9	2.3	2.5	3.4	3.4	8.3
CV (%)	25.2	18.2	26.8	17.3	24.9	43.4	50.4	33.4
Significance	S	S	S	S	S	S	S	S

Table 85: Weed management in maize systems in Hyderabad.

Treatments	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ ha)	Cobs ('000/ ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Cob length (cm)	Cob girth (cm)	Grain rows/ cob	Grains/ row	100- seed weight (g)
T <sub>1</sub>	4001	4857	77.0	76.2	145.7	61.0	63.7	11.0	11.7	12.0	22.6	31.5
T <sub>2</sub>	8589	9516	77.1	76.4	175.0	61.3	64.0	17.2	14.0	14.3	35.8	35.4
T <sub>3</sub>	8407	9536	78.4	77.9	171.4	62.0	64.7	16.4	13.5	13.9	31.3	33.6
T <sub>4</sub>	8528	9598	77.9	77.4	173.2	61.3	64.0	17.0	13.9	14.2	35.6	35.3
T <sub>5</sub>	7711	8713	79.2	78.6	165.3	61.0	63.7	14.5	12.7	13.0	27.0	32.1
T <sub>6</sub>	8033	9163	77.7	77.0	166.1	61.3	64.3	15.2	12.8	13.2	28.1	32.3
T <sub>7</sub>	8011	9128	77.6	77.1	166.6	61.7	64.3	15.0	12.9	13.1	28.1	32.0
T <sub>8</sub>	8089	9237	76.6	76.1	167.5	61.3	64.3	15.6	13.1	13.5	29.0	33.3
T <sub>9</sub>	8189	9280	78.3	77.8	170.3	61.7	64.3	15.7	13.3	13.5	29.1	32.9
T <sub>10</sub>	8493	9589	78.2	77.7	171.4	61.3	64.0	16.6	13.5	13.8	31.6	34.4
T <sub>11</sub>	8478	9539	76.5	75.9	171.6	61.0	64.0	16.5	13.6	13.9	31.4	34.1
T <sub>12</sub>	8500	9547	77.9	77.5	172.3	61.3	64.0	17.0	13.9	14.2	35.5	35.3
Mean	7919.0	8975.3	77.7	77.1	168.0	61.4	64.1	15.6	13.3	13.6	30.4	33.5
CD	1147.6	1176.0	2.9	3.0	15.0	1.1	1.3	1.5	0.9	1.4	4.1	4.4
CV (%)	8.6	7.7	2.2	2.3	5.3	1.0	1.2	5.7	4.2	6.2	8.0	7.7
Significance	S	S	NS	NS	NS	NS	NS	S	S	NS	S	NS

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Treatments	Net returns (Rs./ha)	B:C Ratio	Weeds count/m <sup>2</sup> (at 50 DAS)				Total dry matter/m <sup>2</sup> (at 50 DAS)	Weeds count/m <sup>2</sup> (at harvest)				Total dry matter/m <sup>2</sup> (at harvest)
			Grasses	Sedges	BLF	Total		Grasses	Sedges	BLF	Total	
T <sub>1</sub>	42029	1.90	113.3	84.0	106.3	303.7	250.1	133.3	83.0	135.7	352.0	445.3
T <sub>2</sub>	119096	2.70	2.7	3.3	3.3	9.3	12.0	23.3	12.7	32.7	68.7	87.7
T <sub>3</sub>	124859	3.07	14.0	18.7	24.7	57.3	45.3	45.7	51.7	51.0	148.3	321.7
T <sub>4</sub>	121934	2.85	8.7	8.7	10.7	28.0	23.9	39.0	40.3	39.3	118.7	237.3
T <sub>5</sub>	114181	3.05	25.7	22.9	45.3	93.9	84.8	53.0	52.3	71.3	176.7	376.0
T <sub>6</sub>	120315	3.12	18.0	23.8	30.7	72.4	58.5	48.0	57.3	60.0	165.3	331.3
T <sub>7</sub>	119691	3.10	18.7	25.0	38.7	82.3	72.7	48.7	57.4	66.0	172.0	348.0
T <sub>8</sub>	121300	3.13	15.3	22.0	29.3	66.7	55.9	46.7	52.0	57.7	156.3	326.3
T <sub>9</sub>	117361	2.86	14.7	12.7	28.7	56.0	55.6	46.0	43.3	57.3	146.7	293.0
T <sub>10</sub>	122972	2.92	12.0	17.0	16.0	45.0	30.3	44.7	45.3	42.7	132.7	253.3
T <sub>11</sub>	122483	2.91	13.3	17.7	16.7	47.7	31.9	45.3	49.3	46.7	141.3	259.7
T <sub>12</sub>	122837	2.91	9.3	10.7	15.3	35.3	30.0	39.3	41.3	40.0	120.7	239.7
Mean	114088.2	2.88	22.1	22.2	30.5	74.8	62.6	51.1	48.8	58.4	158.3	293.3
CD	25141.0	0.41	10.4	7.3	9.6	15.7	7.4	10.6	9.9	10.3	11.9	45.3
CV (%)	13.0	8.5	27.8	19.4	18.7	12.4	7.0	12.3	12.0	10.4	4.4	9.1
Significance	S	S	S	S	S	S	S	S	S	S	S	S

**Table 86: Pre and post-emergence herbicide based weed management in maize-mustard cropping system in Karimnagar.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Ear height (cm)	Shelling (%)
T <sub>2</sub>	7873	8455	9056	77.5	76.0	175.0	72.0	78.2
T <sub>3</sub>	7302	7899	7233	77.5	76.2	163.0	69.3	77.1
T <sub>4</sub>	7552	8194	8665	76.7	76.1	167.7	69.9	76.7
T <sub>5</sub>	5249	6076	6183	77.0	76.5	144.0	54.3	77.4
T <sub>6</sub>	6076	7118	6980	77.3	76.2	151.3	64.0	77.5
T <sub>7</sub>	5816	6493	6670	77.0	75.8	148.0	62.0	76.3
T <sub>8</sub>	5338	6163	6344	77.7	76.3	145.7	61.3	75.5
T <sub>9</sub>	6198	6875	7124	78.2	77.2	152.3	66.0	78.0
T <sub>10</sub>	7240	7760	8327	77.0	76.5	163.3	68.7	78.1
T <sub>11</sub>	7066	7691	8110	77.4	76.1	161.7	68.0	77.0
T <sub>12</sub>	6736	7378	7729	75.7	74.8	161.0	67.7	76.9
Mean	6290.4	6982.1	7158.9	77.2	76.2	156.1	64.3	77.1
CD	1522.8	1539.3	2075.9	1.9	1.9	20.2	9.6	3.5
CV (%)	14.3	13.0	17.1	1.5	1.5	7.6	8.8	2.7
Significance	S	S	S	NS	NS	S	S	NS

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Treatment	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob diameter (mm)	Grain rows/cob	Grains/row
T <sub>2</sub>	28.2	102016	2.44	14.8	43.7	14.3	28.7
T <sub>3</sub>	29.5	96378	2.50	14.0	42.2	14.7	28.1
T <sub>4</sub>	28.5	97648	2.43	14.3	43.1	14.1	28.3
T <sub>5</sub>	27.3	56792	1.96	10.8	37.8	13.1	22.3
T <sub>6</sub>	28.6	74960	2.27	12.2	39.8	13.3	23.3
T <sub>7</sub>	26.9	67892	2.13	12.0	39.5	13.2	23.4
T <sub>8</sub>	29.8	57451	1.95	11.9	39.4	12.8	21.5
T <sub>9</sub>	27.4	73181	2.16	12.5	40.4	13.9	24.7
T <sub>10</sub>	28.7	95663	2.51	13.9	42.0	13.9	27.6
T <sub>11</sub>	28.9	90965	2.41	13.6	41.5	13.6	27.4
T <sub>12</sub>	28.8	83633	2.30	12.9	40.3	13.7	24.2
Mean	28.2	76001.5	2.20	12.6	40.5	13.6	24.7
CD	3.9	33329.9	0.54	2.4	4.3	1.8	5.0
CV (%)	8.1	25.9	14.4	11.2	6.3	7.8	11.9
Significance	NS	S	S	S	S	NS	S

[illegible]

**Table 87: Weed management in maize systems in Kolhapur.**

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Pest incidence	Weeds count/m <sup>2</sup> (at 50 DAS)		
							Grassy	Sedges	Broadleaf
T <sub>1</sub>	3849	3940	60.1	37.1	148.7	6.00	11.67	9.00	14.67
T <sub>2</sub>	5982	6361	62.2	53.5	192.0	1.00	0.00	0.67	0.33
T <sub>3</sub>	4467	4677	63.8	40.3	170.3	1.00	3.00	2.67	1.67
T <sub>4</sub>	4978	5282	63.1	44.3	170.7	1.00	2.67	1.67	1.67
T <sub>5</sub>	5404	5656	63.4	48.2	181.7	1.00	1.33	1.33	2.00
T <sub>6</sub>	5269	5560	61.4	47.9	182.7	1.00	1.33	2.00	2.33
T <sub>7</sub>	5267	5589	63.1	45.2	172.3	1.00	2.00	1.67	1.67
T <sub>8</sub>	6065	6458	62.3	53.6	192.3	1.00	0.00	0.33	0.00
T <sub>9</sub>	5767	6075	63.1	51.2	182.7	1.00	0.00	0.00	1.00
T <sub>10</sub>	5292	5608	64.0	47.8	180.0	0.67	1.00	0.00	2.00
T <sub>11</sub>	5155	5467	64.2	45.2	178.7	0.00	1.33	1.33	0.67
T <sub>12</sub>	6259	6674	64.0	58.0	198.3	0.67	0.00	0.00	0.00
Mean	5312.8	5612.3	62.9	47.7	179.2	1.28	2.03	1.72	2.33
CD	710.5	750.7	2.5	8.3	8.3	1.05	0.88	1.27	1.54
CV (%)	7.9	7.9	2.4	10.3	2.7	48.5	25.6	43.4	38.9
Significance	S	S	NS	S	S	S	S	S	S

[illegible]

Table 88: Weed management in maize systems in Vagarai.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio	Cob length (cm)	Cob girth (cm)
T <sub>1</sub>	5459	8144	64.7	63.6	160.1	33.7	44119	1.58	15.7	13.3
T <sub>2</sub>	8718	12234	64.4	63.3	212.2	35.4	71810	1.60	19.9	16.2
T <sub>3</sub>	8632	12218	64.5	63.3	207.3	35.2	91932	1.94	19.7	16.0
T <sub>4</sub>	8386	12076	64.0	62.7	204.1	34.9	86506	1.88	19.3	15.9
T <sub>5</sub>	8246	11526	64.7	63.6	201.3	34.8	100226	2.23	18.9	15.8
T <sub>6</sub>	8337	12011	64.8	63.9	201.8	34.9	102228	2.26	19.2	15.8
T <sub>7</sub>	8145	11367	64.5	63.3	199.5	34.7	98004	2.21	18.4	15.7
T <sub>8</sub>	8040	11325	64.5	63.3	198.8	34.6	95694	2.18	18.1	15.7
T <sub>9</sub>	7677	10844	64.7	63.6	189.2	34.4	87715	2.08	17.7	15.5
T <sub>10</sub>	7807	11022	64.0	62.7	190.5	34.6	90568	2.12	17.9	15.5
T <sub>11</sub>	7642	10547	64.4	63.3	186.8	34.3	86945	2.07	17.4	15.4
T <sub>12</sub>	7983	11256	64.8	63.9	191.7	34.6	94447	2.16	18.0	15.6
Mean	7922.5	11214.2	64.5	63.3	195.3	34.7	87516.0	2.03	18.4	15.5
CD	1092.2	1989.9	0.9	0.9	20.9	2.0	24029.4	0.28	1.6	1.1
CV (%)	8.1	10.5	0.8	0.8	6.3	3.4	16.2	8.2	5.3	4.1
Significance	S	S	NS	NS	S	NS	S	S	S	S

Treatment	Grains row/cob	Grains/row	Weeds count/m <sup>2</sup> (at 50 DAS)				Weeds count/m <sup>2</sup> (harvest)			
			Grassy	Sedges	Broadleaf	Total	Grassy	Sedges	Broadleaf	Total
T <sub>1</sub>	13.2	23.5	22.7	14.7	25.3	62.7	20.0	16.0	22.7	58.7
T <sub>2</sub>	14.9	32.1	1.3	0.0	1.3	2.7	4.0	2.7	1.3	8.0
T <sub>3</sub>	14.9	31.9	1.3	1.3	9.3	12.0	2.7	4.0	9.3	16.0
T <sub>4</sub>	14.8	31.7	4.0	1.3	10.7	16.0	4.0	4.0	10.7	18.7
T <sub>5</sub>	14.7	31.1	5.3	5.3	13.3	24.0	6.7	6.7	14.7	28.0
T <sub>6</sub>	14.8	31.2	6.7	5.3	13.3	25.3	6.7	8.0	13.3	28.0
T <sub>7</sub>	14.7	31.0	8.0	6.7	14.7	29.3	5.3	9.3	13.3	28.0
T <sub>8</sub>	14.5	30.9	10.7	5.3	14.7	30.7	10.7	9.3	16.0	36.0
T <sub>9</sub>	14.3	30.1	13.3	10.7	17.3	41.3	14.7	10.7	18.7	44.0
T <sub>10</sub>	14.4	30.5	13.3	8.0	16.0	37.3	12.0	10.7	16.0	38.7
T <sub>11</sub>	14.3	30.0	14.7	10.7	17.3	42.7	12.0	10.7	17.3	40.0
T <sub>12</sub>	14.5	30.7	12.0	8.0	16.0	36.0	10.7	9.3	14.7	34.7
Mean	14.5	30.4	9.4	6.4	14.1	30.0	9.1	8.4	14.0	31.6
CD	0.7	3.4	4.9	5.3	9.6	12.4	4.8	5.3	7.4	10.8
CV (%)	3.0	6.6	30.8	48.2	40.2	24.5	31.2	36.8	31.4	20.2
Significance	S	S	S	S	S	S	S	S	S	S

Cont....



Treatment	Weeds dry matter (g/m <sup>2</sup> ) (at 50 DAS)				Weeds dry matter (g/m <sup>2</sup> ) (at harvest)			
	Grassy	Sedges	Broadleaf	Total	Grassy	Sedges	Broadleaf	Total
T <sub>1</sub>	62.8	36.5	47.0	146.3	47.9	39.6	48.9	136.4
T <sub>2</sub>	3.3	0.0	3.2	6.5	10.1	7.0	2.7	19.7
T <sub>3</sub>	3.9	3.4	23.7	31.0	6.7	10.9	20.8	38.4
T <sub>4</sub>	10.4	3.4	25.1	38.9	10.1	10.6	23.9	44.6
T <sub>5</sub>	13.7	13.5	31.8	59.1	16.1	16.1	29.2	61.5
T <sub>6</sub>	16.9	12.8	28.9	58.6	16.8	20.0	28.3	65.1
T <sub>7</sub>	20.5	16.0	33.9	70.4	13.0	23.9	28.8	65.7
T <sub>8</sub>	27.5	13.5	35.5	76.5	26.4	23.7	35.9	86.1
T <sub>9</sub>	33.2	26.9	40.9	101.0	36.2	30.1	34.0	100.3
T <sub>10</sub>	34.7	19.8	40.2	94.7	30.0	27.1	34.9	92.0
T <sub>11</sub>	39.6	27.0	41.8	108.5	30.1	30.9	38.1	99.1
T <sub>12</sub>	31.7	19.3	38.4	89.3	26.6	24.1	31.0	81.6
Mean	24.8	16.0	32.5	73.4	22.5	22.0	29.7	74.2
CD	12.9	13.4	21.4	28.7	12.4	14.4	17.5	27.2
CV (%)	30.7	49.3	38.9	23.1	32.5	38.6	34.8	21.6
Significance	S	S	S	S	S	S	S	S

Table 89: Weed management in maize system in Ambikapur.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	2357	3064	170.0	53.3	52.4	10052	0.26
T <sub>2</sub>	6450	8166	220.7	54.0	53.9	69585	1.17
T <sub>3</sub>	5367	6809	216.7	57.2	52.7	57689	1.16
T <sub>4</sub>	5483	6943	217.0	53.3	53.7	57452	1.10
T <sub>5</sub>	4480	5686	203.3	52.7	52.5	42879	0.92
T <sub>6</sub>	5687	6924	219.1	53.1	53.6	71077	1.67
T <sub>7</sub>	5659	6971	215.3	51.9	53.3	69429	1.59
T <sub>8</sub>	5549	5598	206.7	52.8	53.4	70615	1.75
T <sub>9</sub>	4555	5764	201.0	52.3	52.1	44258	0.94
T <sub>10</sub>	5816	6770	214.3	53.3	53.5	72714	1.67
T <sub>11</sub>	5603	7100	221.0	54.2	54.6	67845	1.53
T <sub>12</sub>	4655	5890	202.7	55.3	55.1	62098	1.45
Mean	5138.4	6307.0	209.0	53.6	53.4	57974.4	1.27
CD	529.0	730.4	17.8	4.0	3.0	10658.1	0.23
CV (%)	6.1	6.8	5.0	4.4	3.3	10.9	10.6
Significance	S	S	S	NS	NS	S	S

Cont....

Treatment	Weed density/m <sup>2</sup> (At 30 DAS)			Weed density/m <sup>2</sup> (At 60 DAS)			Weed density/m <sup>2</sup> (At harvest)		
	Grassy	Broadleaf	Sedges	Grassy	Broadleaf	Sedges	Grassy	Broadleaf	Sedges
T <sub>1</sub>	15.0	1.7	5.0	17.7	13.0	9.0	17.7	13.0	9.0
T <sub>2</sub>	0.0	0.0	3.4	5.3	5.0	5.3	5.3	5.0	5.3
T <sub>3</sub>	8.0	3.7	11.3	14.0	13.0	13.7	14.0	13.0	13.7
T <sub>4</sub>	10.0	2.3	8.7	14.3	10.3	10.0	14.3	10.3	10.0
T <sub>5</sub>	9.0	5.7	11.0	19.0	16.0	15.0	15.7	16.0	11.7
T <sub>6</sub>	14.7	2.7	11.7	9.0	11.7	11.7	9.0	11.7	11.7
T <sub>7</sub>	15.3	5.0	6.7	11.7	13.7	7.7	11.7	13.7	7.7
T <sub>8</sub>	7.7	2.0	10.3	12.3	16.7	7.3	12.3	16.7	7.3
T <sub>9</sub>	8.7	5.3	5.7	16.7	12.3	13.3	13.3	12.3	10.0
T <sub>10</sub>	10.3	4.0	8.3	9.3	15.3	12.3	9.3	15.3	12.3
T <sub>11</sub>	8.3	3.3	11.3	11.3	14.0	9.0	11.3	14.0	9.0
T <sub>12</sub>	9.3	4.3	9.7	14.7	17.3	14.7	14.7	17.3	11.7
Mean	9.7	3.3	8.6	12.9	13.2	10.8	12.4	13.2	9.9
CD	7.6	4.4	7.6	5.4	6.0	5.8	3.8	6.0	5.2
CV (%)	46.2	77.9	52.4	24.8	26.8	31.6	18.3	26.8	30.7
Significance	S	NS	NS	S	S	S	S	S	NS

Table 90: Weed management in maize systems (Maize-Soybean) at Banswara.

Treatments	Soybean yield (kg/ha)
T <sub>1</sub>	2333
T <sub>2</sub>	2433
T <sub>3</sub>	2322
T <sub>4</sub>	2367
T <sub>5</sub>	2422
T <sub>6</sub>	2144
T <sub>7</sub>	2367
T <sub>8</sub>	2322
T <sub>9</sub>	2489
T <sub>10</sub>	2389
T <sub>11</sub>	2211
T <sub>12</sub>	2233
Mean	2336.1
CD	317.9
CV (%)	8.0
Significance	NS

Table 91: Weed management in maize-mustard systems in Chhindwara.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling
T <sub>1</sub>	4678	13159	67.6	52.3	120.8	52.7
T <sub>2</sub>	9892	23319	77.3	83.8	153.0	60.1
T <sub>3</sub>	9477	21896	75.6	78.5	148.5	59.6
T <sub>4</sub>	9732	22808	76.0	80.6	151.7	60.1
T <sub>5</sub>	7495	14597	69.1	58.8	122.2	58.5
T <sub>6</sub>	7952	16378	69.8	68.3	137.0	56.5
T <sub>7</sub>	9088	20452	75.1	75.1	142.7	58.6
T <sub>8</sub>	7662	15157	69.1	66.9	134.3	58.6
T <sub>9</sub>	8129	16748	71.2	70.4	138.6	58.5
T <sub>10</sub>	8489	18214	72.7	71.6	140.2	58.6
T <sub>11</sub>	8770	19276	73.7	73.8	141.6	58.6
T <sub>12</sub>	9651	21514	75.6	76.3	147.1	59.2
Mean	8417.9	18626.4	72.7	71.4	139.8	58.3
CD	776.0	1961.8	7.6	7.2	14.3	6.9
CV (%)	5.4	6.2	6.2	6.0	6.0	7.0
Significance	S	S	NS	S	S	NS

Treatment	Days to 50% silking	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grain/row	Net returns (Rs./ha)	B: C ratio
T <sub>1</sub>	58.7	14.0	13.9	14.7	36.2	73649	1.45
T <sub>2</sub>	60.9	18.3	18.0	18.4	46.6	100133	2.12
T <sub>3</sub>	60.4	17.8	17.1	17.1	44.6	99302	2.10
T <sub>4</sub>	60.9	18.1	17.5	18.1	45.3	99302	2.10
T <sub>5</sub>	59.4	14.5	14.5	14.8	39.8	77121	1.54
T <sub>6</sub>	58.1	16.0	15.6	15.6	42.0	81817	1.66
T <sub>7</sub>	59.4	17.0	16.3	16.5	44.1	93509	1.95
T <sub>8</sub>	59.4	15.5	15.2	15.3	40.8	78833	1.58
T <sub>9</sub>	59.4	16.2	15.7	15.8	42.3	83640	1.70
T <sub>10</sub>	59.4	16.6	15.9	16.2	42.4	87344	1.80
T <sub>11</sub>	59.4	16.8	16.1	16.3	43.6	90236	1.87
T <sub>12</sub>	60.0	17.5	16.7	16.9	44.5	97507	2.05
Mean	59.6	16.5	16.1	16.3	42.7	88532.7	1.83
CD	6.6	1.9	1.7	1.2	4.1	8929.5	0.17
CV (%)	6.5	6.9	6.1	4.3	5.7	6.0	5.6
Significance	NS	S	S	S	S	S	S

Table 92: Weed management in maize systems in Udaipur.

Treatment	Grain yield (kg/ha)	Stover yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days to 50% tasseling	Days to 50% silking	100-seed weight (g)	Net returns (Rs./ha)	B:C ratio
T <sub>1</sub>	3144	4984	50.3	51.3	151.3	56.0	59.0	29.7	51270	1.83
T <sub>2</sub>	5965	7687	61.7	69.0	215.7	54.3	59.0	34.8	106702	2.89
T <sub>3</sub>	4947	7314	62.0	67.0	187.0	55.0	58.0	32.7	90214	2.78
T <sub>4</sub>	4858	6973	60.3	67.7	199.7	54.0	59.0	32.6	82828	2.25
T <sub>5</sub>	4940	5133	62.1	68.7	190.7	55.0	58.3	32.7	82745	2.62
T <sub>6</sub>	5002	6002	61.1	67.7	197.7	54.3	57.3	32.7	86442	2.67
T <sub>7</sub>	5076	5940	62.1	68.7	201.3	55.3	57.3	32.8	87036	2.64
T <sub>8</sub>	5520	6713	61.3	68.7	205.2	55.3	58.7	32.8	97994	2.93
T <sub>9</sub>	5491	6805	61.7	68.3	216.3	53.0	56.0	33.5	95223	2.65
T <sub>10</sub>	5790	7279	61.7	68.0	214.0	54.3	54.3	34.8	102002	2.78
T <sub>11</sub>	5842	7356	61.3	67.3	215.4	52.0	54.3	34.7	102688	2.75
T <sub>12</sub>	5792	7077	62.6	68.3	212.3	53.0	57.3	34.7	100190	2.65
Mean	5197.3	6605.2	60.7	66.7	200.5	54.3	57.4	33.2	90444.5	2.62
CD	682.1	846.4	2.2	2.1	12.5	1.4	1.8	1.5	12226.0	0.37
CV (%)	7.7	7.6	2.1	1.8	3.7	1.5	1.8	2.7	8.0	8.3
Significance	S	S	S	S	S	S	S	S	S	S

Treatment	Grain uptake (kg/ha)			Weeds count/m <sup>2</sup> (at 50 DAS)			
	N	P	K	Grassy	Broadleaf	Sedges	Total
T <sub>1</sub>	54.1	12.4	14.2	89.0	29.0	13.7	131.7
T <sub>2</sub>	104.8	23.6	27.6	0.0	0.0	0.0	0.0
T <sub>3</sub>	87.0	19.6	22.6	45.7	12.7	8.7	67.0
T <sub>4</sub>	85.3	19.2	22.0	38.3	13.0	8.3	59.7
T <sub>5</sub>	86.4	19.6	22.6	43.7	10.0	4.3	58.0
T <sub>6</sub>	88.1	20.0	22.5	33.7	9.7	5.7	49.0
T <sub>7</sub>	89.3	20.1	23.0	35.0	8.3	5.3	48.7
T <sub>8</sub>	96.8	21.9	24.9	39.3	7.7	5.0	52.0
T <sub>9</sub>	96.6	21.9	24.4	27.7	7.0	2.3	37.0
T <sub>10</sub>	101.9	22.7	26.4	30.7	5.3	3.7	39.7
T <sub>11</sub>	102.7	23.1	26.6	31.0	5.0	4.0	40.0
T <sub>12</sub>	101.9	23.0	26.5	25.7	4.7	2.7	33.0
Mean	91.3	20.6	23.6	36.6	9.4	5.3	51.3
CD	10.6	2.5	3.3	6.2	2.7	1.9	7.9
CV (%)	6.9	7.2	8.2	9.9	17.3	20.7	9.1
Significance	S	S	S	S	S	S	S

Cont....

Treatment	Weeds count/m <sup>2</sup> (at harvest)				Dry matter (g/m <sup>2</sup> ) ( at harvest)			
	Grassy	Broadleaf	Sedges	Total	Grassy	Broadleaf	Sedges	Total
T <sub>1</sub>	82.7	21.7	9.7	114.0	85.8	22.5	10.5	118.8
T <sub>2</sub>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
T <sub>3</sub>	42.0	13.0	8.0	63.0	41.0	13.9	7.9	62.7
T <sub>4</sub>	33.3	12.0	6.3	51.7	31.8	12.9	6.2	51.0
T <sub>5</sub>	36.0	10.0	3.0	49.0	34.5	10.9	2.9	48.4
T <sub>6</sub>	30.7	9.7	5.0	45.3	28.9	10.6	4.9	44.4
T <sub>7</sub>	30.0	8.3	3.7	42.0	28.1	9.3	3.6	41.0
T <sub>8</sub>	36.0	6.3	4.3	46.7	34.6	7.3	4.2	46.1
T <sub>9</sub>	24.7	6.0	1.7	32.3	22.2	7.0	1.6	30.8
T <sub>10</sub>	28.3	5.0	3.3	36.7	26.3	5.7	3.3	35.3
T <sub>11</sub>	28.7	4.7	3.3	36.7	26.7	5.7	3.3	35.6
T <sub>12</sub>	19.7	4.3	2.0	26.0	16.9	5.2	1.9	24.0
Mean	32.7	8.4	4.2	45.3	31.4	9.3	4.2	44.8
CD	5.1	2.5	1.5	6.8	5.4	2.3	1.5	6.3
CV (%)	9.3	17.9	21.5	8.9	10.2	14.4	20.8	8.3
Significance	S	S	S	S	S	S	S	S

***Treatment details:***

- T<sub>1</sub> Weedy check  
 T<sub>2</sub> Weed-free check  
 T<sub>3</sub> Atrazine 500 g/ha + hand weeding at 25-30 DAS  
 T<sub>4</sub> Pyroxasulfone @ 127 g/ha + hand weeding at 25-30 DAS  
 T<sub>5</sub> Atrazine 500 g/ha fb Halosulfuron methyl @ 67 g/ha at 25-30 DAS  
 T<sub>6</sub> Atrazine 500 g/ha fb tembotrione @ 120 g/ha at 25-30 DAS  
 T<sub>7</sub> Atrazine 500 g/ha fb topramezone @ 25 g/ha at 25-30 DAS  
 T<sub>8</sub> Atrazine 500 g/ha fb mesotrione + atrazine @ 300 g/ha at 25-30 DAS  
 T<sub>9</sub> Pyroxasulfone @ 127 g/ha fb Halosulfuron methyl @ 67 g/ha at 25-30 DAS  
 T<sub>10</sub> Pyroxasulfone @ 127 g/ha fb tembotrione @ 120 g/ha at 25-30 DAS  
 T<sub>11</sub> Pyroxasulfone @ 127 g/ha fb topramezone @ 25 g/ha at 25-30 DAS  
 T<sub>12</sub> Pyroxasulfone @ 127 g/ha fb mesotrione + atrazine @ 300 g/ha at 25-30 DAS





Treatments	Weed count/m <sup>2</sup> (at 42 DAS)			Weed count/m <sup>2</sup> (at 56 DAS)			Weed dry matter (g/m <sup>2</sup> )		
	Grasses	Sedges	BLW	Grasses	Sedges	BLW	Grasses	Sedges	BLW
T <sub>1</sub>	118.1	86.9	105.2	127.0	95.3	117.1	158.4	129.0	177.0
T <sub>2</sub>	3.3	2.5	3.5	15.4	14.3	16.2	16.7	14.9	17.0
T <sub>3</sub>	3.2	2.3	3.2	14.4	14.4	16.0	15.9	14.4	17.2
T <sub>4</sub>	4.1	3.2	5.4	16.6	15.9	17.4	18.5	18.5	21.8
T <sub>5</sub>	3.6	2.6	4.4	16.1	15.3	17.3	18.3	17.9	21.1
T <sub>6</sub>	0.4	0.3	0.2	2.2	4.1	2.2	1.4	2.6	1.4
Mean	22.1	16.3	20.3	31.9	26.5	31.0	38.2	32.9	42.6
CD	7.2	4.8	3.7	6.9	6.4	3.9	13.5	12.8	14.5
CV (%)	21.6	19.7	12.1	14.4	16.0	8.4	23.5	26.0	22.6
Significance	S	S	S	S	S	S	S	S	S

Treatments	Weed control efficiency			Weed Index
	Grasses	Sedges	BLW	
T <sub>1</sub>	0.0	0.0	0.0	56.3
T <sub>2</sub>	89.4	88.3	90.4	6.6
T <sub>3</sub>	89.7	88.9	90.1	6.0
T <sub>4</sub>	88.0	85.2	87.6	9.7
T <sub>5</sub>	88.1	85.6	87.7	9.3
T <sub>6</sub>	100.0	100.0	100.0	0.0
Mean	75.9	74.7	76.0	14.7
CD	3.2	4.3	3.5	8.7
CV (%)	2.8	3.8	3.0	39.6
Significance	S	S	S	S

**Treatment details:**

- T<sub>1</sub> Untreated Control
- T<sub>2</sub> Isoxaflutole 225 g/L + Thiencarbazone-methyl 90 g/L SC (Adengo), 73.12 + 29.25 a.i.(g), 325 ml, Single application as pre- emergence (0-3 Days After Sowing), 375-500 lit/ha
- T<sub>3</sub> Isoxaflutole 225 g/L + Thiencarbazone-methyl 90 g/L SC (Adengo), 90+36 a.i.(g), 400 ml, Single application as pre- emergence (0-3 Days After Sowing), 375-500 lit/ha
- T<sub>4</sub> Isoxaflutole 225 g/L + Thiencarbazone-methyl 90 g/L SC (Adengo), 73.12 + 29.25 a.i.(g), 325 ml, Single application as early post-emergence at 1 to 2 leaf stage of weeds i.e., between 7 to 10 DAS, 375-500 lit/ha
- T<sub>5</sub> Isoxaflutole 225 g/L + Thiencarbazone-methyl 90 g/L SC (Adengo), 90+36 a.i.(g), 400 ml, Single application as early post-emergence at 1 to 2 leaf stage of weeds i.e., between 7 to 10 DAS, 375-500 lit/ha
- T<sub>6</sub> Weed Free