

Assessing knowledge of gram growers apropos their different package of practices

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ABSTRACT: *The Management of Package of Practices of any crop plays a key role in its production. The important package of practices on which they were having high technological gap were insect management (46.55%) in Jabalpur and (45.77%) in Narsinghpur district, weed management (45.41%) in Jabalpur and (43.19%) in Narsinghpur district, seed treatment (41.80%) in Jabalpur and (41.85%) in Narsinghpur district, disease management (40.33%) in Jabalpur and (40.44%) in Narsinghpur district, seed selection (36.66%) in Jabalpur and (37.40%) in Narsinghpur district. Thus, it was suggested that a separate study on assessment of knowledge and adoption of components of gram production practices may be conducted to give wide predictability and consistency of results.*

Keywords: *Gram Production Technology, Package of Practices,*

I. INTRODUCTION

There is a vital role of different components of gram production technologies and their management in getting optimum or higher crop production. Past researches also showed that the importance of the package of practices in management of yield of any crop production technology. The present study was conducted with objective of determine the extent of adoption of gram technology and its gap in relation to various components of gram production technology in high and low gram productive districts of Madhya Pradesh. Pulses are main crops in India covering a larger area. The area of all crops in India is 132720 thousand hectares and production is 189250 thousand tones. The area of total pulse crops in India is 20050 thousand hectares but production is only 11140 thousand tones. In Madhya Pradesh the area of all crops is 16538 thousand hectares and production is only 13893 thousand tones. The pulses are grown in 4134 thousand hectare which is 4 per cent of the total area of all the crops with production of 2376 thousand tones which is 6 per cent of the total production of all the crops.

II. RESEARCH METHODOLOGY

The study was conducted in Central Madhya Pradesh to assessing the knowledge level of gram growers. The Central Madhya Pradesh comprises seven districts namely Jabalpur, Narsinghpur, Seoni, Damoh, Hoshangabad and Katni. The Jabalpur and Narsinghpur districts of Central Madhya Pradesh were selected purposively for the present study because in rabi season gram is grown by the farmers as main crop and these districts are famous for production of bold and gulabi gram in the country. These two districts viz. Jabalpur and Narsinghpur consist of seven and six blocks respectively. Out of which two blocks from Jabalpur district namely Kundam and Sihora and two blocks from Narsinghpur district namely Babai Chichli and Kareli (Total four blocks) were selected randomly for the present study on account of low production of gram as compare to the other blocks. A list of villages of these four selected blocks in which gram is grown was prepared with the help of Rural Agriculture Extension Officer of these blocks. Three villages from each block was selected on the basis of simple random sampling. Thus, 12 villages were included for the study. Thus, the total 180 respondents were selected from four selected blocks for the present study. Data were collected through personal interview method with the help of structured schedule. Technological gap were categories in to three groups viz (Low (1.00-33.33 %), Medium (33.34-66.66 %) and High (66.67-100.00 %).

III. RESULTS AND DISCUSSION

Table:1: Distribution of farmers according to the technological gap of different package of practices

S. No.	Package of Practices	F	%	F	%	F	%	Total	Mean	Rank
1.	Field Management JBP	55	61.11	19	21.11	16	17.78	90	28.05	VIII
	NRSP	56	62.23	16	17.77	18	20.00	90	30.27	VIII
2.	Seed Selection JBP	57	63.34	27	30.00	6	6.66	90	36.66	V
	NRSP	57	63.33	24	26.67	9	10.00	90	37.40	V
3.	Seed JBP	71	78.89	18	20.00	1	1.11	90	15.55	XII
	NRSP	69	76.67	15	16.67	6	6.66	90	17.50	XII

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4.	Seed Treatment-JBP	42	46.68	24	26.66	24	26.66	90	41.80	III
	NRSP	40	44.46	25	27.77	25	27.77	90	41.85	III
5.	Plant Distance Management JBP	65	72.22	18	20.00	7	7.78	90	22.50	XI
	NRSP	62	68.89	18	20.00	10	11.11	90	22.77	XI
6.	Mixed crop Management JBP	62	68.88	22	24.45	6	6.67	90	35.18	VI
	NRSP	60	66.67	23	25.55	7	7.78	90	34.62	VI
7.	Fertilizer Management JBP	54	60.00	11	12.22	25	27.78	90	34.58	VII
	NRSP	53	58.89	12	13.33	25	27.78	90	33.47	VII
8.	Irrigation Management JBP	63	70.00	13	14.44	14	15.56	90	26.66	IX
	NRSP	63	70.00	13	14.44	14	15.56	90	24.81	IX
9.	Hoing Management JBP	65	72.22	13	14.44	12	13.34	90	24.44	X
	NRSP	63	70.00	14	15.56	13	14.44	90	24.62	X
10.	Weed Management JBP	37	41.11	28	31.12	25	27.77	90	45.41	II
	NRSP	40	44.45	24	26.66	26	28.89	90	43.19	II
11.	Insect Management JBP	37	41.11	26	28.89	27	30.00	90	46.55	I
	NRSP	33	36.67	28	31.11	29	32.22	90	45.77	I
12.	Disease Management JBP	53	58.89	15	16.67	22	24.44	90	40.33	IV
	NRSP	51	56.67	13	14.45	26	28.88	90	40.44	IV
13.	Harvesting Management JBP	86	95.55	4	4.45	00	00.00	90	2.22	XIV
	NRSP	86	95.55	4	4.45	00	00.00	90	2.22	XIV
14.	Storage Management JBP	89	98.89	1	1.11	00	00.00	90	14.44	XIII
	NRSP	80	88.89	9	10.00	1	1.11	90	14.72	XIII

JBP= Jabalpur, NRSP= Narsinghpur

The data in the table show the distribution of farmers according to the technological gap of different package of practices with their rank order. The important package of practices on which they were having high technological gap were insect management (46.55%) in Jabalpur and (45.77%) in Narsinghpur district, weed management (45.41%) in Jabalpur and (43.19%) in Narsinghpur district, seed treatment (41.80%) in Jabalpur and (41.85%) in Narsinghpur district, disease management (40.33%) in Jabalpur and (40.44%) in Narsinghpur district, seed selection (36.66%) in Jabalpur and (37.40%) in Narsinghpur district, mixed crop management (35.18%) in Jabalpur and (34.62%) in Narsinghpur district, fertilizer management (34.58%) in Jabalpur and (33.45%) in Narsinghpur district, field management (28.05%) in Jabalpur and (30.27%) in Narsinghpur district, irrigation management (26.66%) in Jabalpur and (24.81%) in Narsinghpur district, hoeing management (24.44%) in Jabalpur and (24.62%) in Narsinghpur district.

1. Field Management: In the context of field management the mean technological gap was found to be higher in Jabalpur district rather than Narsinghpur district. It was because of the farmers in Jabalpur district did not want to adopt the new technology having traditional method for the field management. However, in Narsinghpur district farmers having more awareness along with the more education regarding the field management. There is 25 % more technological gap in Jabalpur district as compared to Narsinghpur district.

2. Seed Selection: With respect to seed selection the farmers living in Narsinghpur district were more interested to adopt the new technology specially with the seed selection to get the high yield of gram as compared to Jabalpur district. In this case there was almost 38 % technological gap in Jabalpur district as compared to Narsinghpur district.

3. Sowing Time and Method: With regard to sowing time and method there was a less technological gap (mean) in Narsinghpur district (18.05%) as compared to Jabalpur district (25.83%). There was almost 30% less technological gap in Narsinghpur district rather than Jabalpur. The reason was that the farmers in Narsinghpur district were more inclined towards method of sowing using the improved agricultural implements in comparison to Jabalpur district. However, the sowing time at both the places (districts) may be the same but it differed from sowing method and that's why the mean technological gap was higher in Jabalpur district.

4. Seed Treatment: With respect to seed treatment practices the farmers in Narsinghpur district were more interested to get the higher yield of gram using improved quality of seed giving the better seed treatment in comparison to Jabalpur district. However there was 40% less technological gap in Narsinghpur district.

5. Plant Distance and Maintenance: In this package of practice again there was more mean technological gap in Jabalpur district rather than Narsinghpur district but it was almost 17 % more in Jabalpur that indicated that the farmers living in these two districts utilized almost equal plant distance and maintenance.

6. Fertilizer Management: In this practice the mean technological gap was higher in Jabalpur (48.05%) rather than Narsinghpur (42.91%) again there was a 30% less technological gap in Narsinghpur district. The reason behind that the farmers in Narsinghpur district took the interest for the fertilizer management to get the higher yield of gram as compared to Jabalpur district.

7. Irrigation Management: In this package of practice there was almost less technological gap in Narsinghpur district rather than Jabalpur district, it was similar to fertilizer management package of practice because the fertilizer and irrigation these were related to each other but the similar pattern was found in both the districts.

8. Hoeing, Weed, Insect: As far as these three package of practices were concerned the farmers in Narsinghpur district done better management than Jabalpur district because the mean socio-economic status of Narsinghpur district was higher. They invested more money to take care about these practices, however there was 27% less mean technological gap in Narsinghpur district.

9. Disease Management: In this package of practices there was 35% more technological gap in Jabalpur district did not want to invest more money to take care about the disease management having the poor socio-economic status and least interest in comparison to Narsinghpur district.

10. Harvesting and Storage Management: In these two package of practice there is a reverse trend in these two districts as compared to other package of practices that is there almost is 10% less technological gap in Jabalpur district rather than Narsinghpur it may be due to the fact that in Jabalpur district there are more warehouses available than Narsinghpur district that's why there is less technological gap in Jabalpur district than Narsinghpur because the farmers in Narsinghpur were also involved in other occupations like poultry, dairy, mushroom, beekeeping etc. as well as they did not want to invest more money to give the big implements of the harvesting and on the labours because of the labour problem in Narsinghpur district.

IV. CONCLUSION

Thus, it can be concluded that majority of the gram growers were having high technological gap with respect to insect management (46.55%) in Jabalpur and (45.77%) in Narsinghpur district, weed management (45.41%) in Jabalpur and (43.19%) in Narsinghpur district, seed treatment (41.80%) in Jabalpur and (41.85%) in Narsinghpur district, disease management (40.33%) in Jabalpur and (40.44%) in Narsinghpur district, whereas, hoeing management (24.44%) in Jabalpur and (24.62%) in Narsinghpur district. were having low technological gap with respect to field management. Which require careful attention of extension workers on the complex technologies. The similar finding supported with the work of Prajapati (2006). Hence, there Need to provide proper timely guidance and training in these four package of practices viz Insect Management, Weed Management, Seed Treatment and Disease Management on Priority basis.

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