

TECHNOLOGICAL GAP IN ADOPTION OF CROP PRODUCTION TECHNOLOGY OF URDBEAN

G. J. Patel¹, D. B. Ramjiyani² and G. N. Thorat³

1 Professor Tribal Research cum Training Centre, AAU, Devgadhi Baria - 389 380.

2 Research Associate, Tribal Research cum Training Centre, AAU, Devgadhi Baria - 389 380

3 Assistant Professor, Pashu Vigyan Kendra, AAU, Devgadhi Baria - 389 380.

Email : girish_agri2005@yahoo.in

ABSTRACT

The present investigation was an effort to identify the gap in the recommended practices of urdbean production technology in operational area of tribal farm women training centre of Dahod district, making the total sample of 100 urdbean growers. A well structured pre tested Gujarati version Interview schedule was prepared in light of the objectives. The data were collected through personal interview method. The study revealed that majority of urdbean growers belonged to middle age group joint type of family with medium size of family. Majority of urdbean growers were illiterate, had membership in one organization. Further concluded that majority of urdbean growers having small size land holding and having agriculture with animal husbandry as an occupation with annual income `30,001 to `60,000 Rs and had mix type house with up to 15 year of farming experience. Great majority 95.00 per cent of urdbean growers were done sowing as per recommendation time of sowing of urdbean, while 92.00 per cent of urdbean growers not adopted recommendation of seed treatment. Whereas 93.00 per cent technological gap in adoption of recommended seed treatment in urdbean crop.

Keywords : technological gap, adoption, crop production, urdbean

INTRODUCTION

Black gram or Urdbean is one of the important pulse crop in India. Blackgram is a rich protein food. It contains about 26 percent protein, which is almost three times that of cereals. Black gram supplies a major share of protein requirement of vegetarian population of the country. In addition, being an important source of human food and animal feed, it also plays an important role in sustaining soil fertility by improving soil physical properties and fixing atmospheric nitrogen. Black Gram is grown in an area of about 47 lakh hectares in India. India annually produces around 13-15 lakh tones of Uradbean which is normally 10% of India's total pulses production of 120-150 lakh tones. In Gujarat it is grown in area of 1.8 lakh hectares with production of 0.713 lakh tones with productivity of 663 kg/ha.

However there is still a wide gap between the production potential and the actual production realized by the urdbean growers. This may be due to partial adoption of improved cultivation practices by urdbean growers. Technological gap is a major problem in increase urdbean production. No systematic effort was made to study the

technological gap existing in various components of urdbean production. Therefore, the present study was undertaken with following objectives.

OBJECTIVES

- (1) To study the profile of the by urdbean growers.
- (2) To identify the technological gap in adoption of by urdbean production technology by urdbean growers.

METHODOLOGY

The present study was conducted in operational area of tribal farm women training centre in Dahod districts was selected for the study. Two talukas namely Devgadhi Baria and Limkheda were selected for the study. Five villages were selected randomly from each Taluka and 10 urdbean growers were randomly selected from each village, thus making the total sample of 100 urdbean growers. A well structured pre tested Gujarati version Interview schedule was prepared in light of the objectives. The data were collected through personal interview method. The statistical technique like Percentage and Technological Gap Index (TGI) were used in study.

RESULTS AND DISCUSSION

Profile of the urdbean growers

The Study indicated that vast majority (82.00 per cent) of the Urdbean grower belonged to middle age group followed by 23.00 per cent belonged to young age group and only 4.00 per cent belonged to old age group. Majority (70.00 per cent) of urdbean grower had joint family with possessing medium size of family i.e. in between 5 to 8 family members and more than half (56.00 per cent) of urdbean grower possessed mix house followed by 22.00 per cent with kachaa and pakka house. 39.00 per cent of urdbean grower were illiterate followed by 22.00 per cent and 19.00 per cent had a primary and secondary school education, respectively. Less than half of urdbean grower had membership in one

organization while 26.00 per cent 25.00 per cent had no membership in any organization and membership with position holder in organization, respectively. Majority (66.00 per cent) of urdbean grower having agriculture with animal husbandry occupation and possessed 15 years experience in farming. More than half (55.00 per cent) of urdbean grower were having small size of land holding followed by 39.00 per cent and only 6.00 per cent having marginal and medium size of land holding, respectively. Majority (57.00 per cent) of the respondents had annual income ₹30,001 To ₹60,000/- followed by 32.00 per cent urdbean grower with ₹ 60,001 to ₹ 90,000 annual income. This finding is in support with that of Choudhary K. M. (2014), Kumbhani *et al.* (2017) and Bhabhor *et al.* (2017).

1. Adoption level of urdbean growers regarding recommended technology in Urdbean production

Table 1: Distribution of Urdbean growers according to their adoption of recommended technological of Urdbean

n=100

Sr. No.	Technology	As per recommendation (%)	Partial Adoption (%)		No Adoption (%)
1	Preparatory tillage	59	41		00
2	Seed Treatment	06	02		92
3	Time of Sowing	95	05		00
4	Selection of variety	11	11		78
5	Farm Yard manure	92	06		02
5	Weed management	59	41		00
6	Insect-Pest management				
	Sucking Pest	13	27		60
	Helicoverpa armigera	27	13		60
7	Disease management				
	Yellow Mosaic Virus	07	24		69
	Powdery Mildew	08	10		82
8	Seed rate	36	61**	03***	-
9	Spacing	36	41**	23***	00
10	Chemical Fertilizer	09	07**	84***	00

*57% of respondents done faulty adoption in Chemical fertilizer adoption by use of Urea as top dressing

** Above recommendation

*** Below recommendation

The data presented in Table-1, represent that great majority 95.00 per cent of urdbean growers were done sowing as per recommendation time of sowing of urdbean while 92.00 per cent of urdbean grower use FYM as per recommendation dose. Vast majority (92.00 per cent) of urdbean grower not adopted recommendation of seed treatment where 41.00 per cent of urdbean grower had partially adopted recommended weed management. As per data revealed in table-2 36.00

per cent of urdbean grower adopted spacing and seed rate of urdbean as per recommendation while 61.00 per cent and 41.00 per cent of respondents had adopted seed rate and spacing above recommendation, respectively. Further vast majority (84.00 per cent) of urdbean grower had below adopted recommendation followed by only 9.00 per cent of respondents had adopted chemical fertilizer as per recommendation.

Practice wise technology gap of urdbean growers in adoption of urdbean production technology

Table 2: Technological gap of Urdbean growers according to their different package of practices

n=100

Sr. No.	Package of practices	TGI (%)
1	Field preparation	20.5
2	Time of sowing	2.5
3	Selection of improved variety	83.5
4	Seed rate	51.5
5	Seed treatment	93.0
6	Spacing	32.0
7	Farm Yard Manure	5.0
8	Chemical fertilizer	55.0
9	Weed management	20.5
10	Sucking pest management	73.5
11	Helicoverpa armigera management	66.5
12	Yellow Mosaic Virus management	81.0
13	Powdery Mildew management	87.0

*TGI= Technological Gap Index

The data presented in Table 2, revealed that 93.00 per cent technological gap in adoption of recommended seed treatment in urdbean crop followed by 87.00 and 83.50 per cent technological gap in recommended management of powdery mildew and selection of improved variety of urdbean, respectively. While only 2.50 per cent and 5.00 per cent technological gap in adoption of recommended time of sowing and dose of farm yard manure in urdbean crop.

CONCLUSION

It could be concluded that majority of urdbean grower belonged to middle age group joint type of family with medium size of family. Majority of urdbean grower were illiterate, had membership in one organization. Further concluded that majority of urdbean grower having small size land holding and having agriculture with animal husbandry as a occupation with annual income ₹30,001 to ₹60,000 Rs and had mix type house with up to 15 year of farming experience. Great majority 95.00 per cent of urdbean growers were done sowing as per recommendation time of sowing of urdbean. While vast majority of urdbean grower not adopted recommendation of seed treatment. Whereas 93.00 per cent technological gap in adoption of recommended seed treatment in urdbean crop. Further majority of urdbean grower had a medium technological gap in adoption of recommended technology of urdbean crop.

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