RESEARCH ARTICLE

A study on knowledge level and adoption behaviour of improved cultivation practices of bajra growers in Bijapur district of Karnataka

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ABSTRACT

The study revealed that majority of the respondents belonged to the medium level of knowledge as this crop grown with the long experience of farmers and cultivation practices are simple and easy to adopt. Majority of respondent belonged to the medium level of adoption category followed by high and low adoption category. The practices like harrowing, varieties/hybrids, seed rate, optimum time of sowing and right time of harvesting were fully adopted by majority of farmers. Cent per cent of respondents not adopted spraying to control ergot disease.

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INTRODUCTION

Bajra is the most drought and heat tolerant crop among the cereal crops. It is predominantly cultivated as rainfed crop in diverse soils, climates and is an indispensable of semi-arid and arid regions in the country. The features associated with cultivation of this crop are low value status, adoption to poor resource base, production and consumption by poorer sections of society, stagnant demand and price structure.

Karnataka is the 6th major pearlmillet growing states in the country both are area and production. Pearlmillet is the important and indispensable *Kharif* cereal crop of shallow to medium black and red soils of the state and is largely cultivated in northern districts. In Northern Karnataka, among the *Kharif* cereals, pearlmillet is the most important and most assured crop among many other crops. In Karnataka bajra growing districts are Bijapur, Bagalkot, Koppal and parts of Belgaum, Dharwad, Gadag and Raichur districts. Among the pearlmillet growing districts, Bijapur had the largest area (97620ha). In Bijapur district,

Bijapur, Indi, B.Bagewadi stands first, second and third plance in area and production, respectively. The present study was undertaken with the specific objectives to know the level of knowledge and adoption of improved cultivation practices of bajra by the farmers of Bijapur district.

METHODOLOGY

The present study was conducted in Bijapur district during the year 2009. From Bijapur district, Bijapur and Indi Talukas were purposively selected as they stand first and second in area and production, respectively. In each Taluka, six villages were seleclted by random sampling method. A lit of bajra growing farmers of selected villages was obtained from Department of Agriculture. Ten farmers from each village were randomly selected as respondents for the study. Thus, the sample size constituted of 120 respondents. The information was collected by personal interview method with the help of structured schedule. The data were analysed with the help of frequency and percentage.

RESULTS AND DISCUSSION

The results obtained from the present investigation are presented below:

Categorisation of respondents according to their knowledge level:

It was observed from the Table 1 that 61 per cent of the respondents had medium level of knowledge followed by 25 per cent of the respondents possessing high level of knowledge and 13.33 per cent of the respondents belonged fs to low level of knowledge category. This might be due to their long experience in growing bajra and many of the cultivation practices were simple and easy to adopt. Similar results were also observed by Reddy and Swaroop (1995) in sunflower crop.

Categorization of respondents according to their adoption level:

The data presented in Table 2 reveal that 59.17 per cent of respondents belonged to medium level of adoption category followed by high level of adoption category (24.17%) and only 16.66 per cent of respondents fell under low level of adoption category. The reasons might be even though the practices were easy to adopt but now a days growing bajra is not remunerative as the market are very low, hence majority of bajra growers belonged to medium level of adoption category. The findings are in conformity with those of Halakatti *et al.* (2010) in sunflower crop.

Table 1: Categorization of respondents according to their knowledge level (n=120)

Category	No.of respondents	Percentage
Low knowledge category	16	13.33
Medium knowledge category	74	61.67
High knowledge category	30	25.00
Total	120	100.00

Table 2: Categorization of respondents according to their adoption level (n=120)

Category	No.of respondents	Percentage
Low knowledge category	20	16.66
Medium knowledge category	71	59.17
High knowledge category	29	24.17
Total	120	100.00

Extent of adoption of improved cultivation practices of bajra:

The data in Table 3 reveal that the improved practices like harrowing (80.00%), use of varieties/hybrids (81.67%), seed rate (92.50%), optimum time of sowing (90.83%) and right time of harvesting (85.83%) were fully adopted by the respondents. This might be due to the awareness of the farmers about importance of these practices for getting higher yield. About 70 per cent of the respondents have partially adopted the fertilizer application. The probable reason may be costly input, non-

Table 3: Extent of adoption of improved cultivation practices of bajra (n=120)

Improved cultivation practice	Full adoption		Partial adoption		Non-adoption	
	Frequency	%age	Frequency	%age	Frequency	%age
Land preparation						
Ploughing	53	44.17	00	00.00	67	55.83
Harrowing (3-4 times)	96	80.00	24	20.00	00	00.00
FYM application	36	30.00	67	55.83	17	14.17
Seed						
Varieties/ hybrids	98	81.67	00	00.00	22	18.33
Seed rate	99	92.50	21	17.50	00	00.00
Seed treatment	92	76.67	20	16.66	08	06.67
Time of sowing	109	90.83	11	9.17	00	00.00
Spacing	83	69.17	-	-	37	30.83
Thinning	-	-	-	-	120	100.00
Fertilizer application (NPK)	25	20.84	85	70.83	10	8.33
Interculturing	90	75.00	21	17.50	09	7.50
Hand weeding	25	20.83	12	10.00	83	69.17

availability during the season and majority of farmers growing bajra under dryland condition as the *Kharif* rains are uncertain in Bijapur district. Thinning and spraying for the control of ergot disease were not adopted by cent per cent farmers. The reasons for this might be due to that cost benefit ratio is very less for these practices and as the incidence of occurring of ergot disease is very less.

Conclusion:

The results of the study revealed that improved cultivatioin practices of bajra namely, ploughing, harrowing, seed rate, use of improved varieties/hybrids, sowing time, intercultivation and weeding were popular practices among bajra growers. The practices like spraying of chemical to control ergot disease and thinning practice were not adopted by cent per cent bajra growers. It could, therefore be suggested from the above findings that organized trainings should be conducted on the foregoing aspects coupled with method demonstration, in combination with other extension activities to increase the adoption of improved cultivation practices there by increasing the productivity.

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