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KNOWLEDGE OF RECOMMENDED BRINJAL PRODUCTION TECHNOLOGY AMONG THE FARMERS

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Abstract

This study was carried out in Durg district of Chhattisgarh (India) during 2011 – 12 in the randomly selected villages. The study aimed to assess the knowledge level of brinjal growers in brinjal production. Information was obtained with help of interview schedule by personal interview. Collected data were analyzed by using suitable statistical tools. The finding of the study revealed that the overall level of knowledge of brinjal production technology was medium. Maximum knowledge was noticed in the practice of seed rate and seed treatment.

Key words : Knowledge, brinjal production, awareness, statistical tools, Chhattisgarh.

Introduction

Brinjal or eggplant (*Solanum melongena* L.) is an important solanaceous crop of sub-tropics and tropics. The name brinjal is popular in Indian subcontinent and is derived from Arabic and Sanskrit whereas the name eggplant has been derived from the shape of the fruit of some varieties, which are white and resemble in shape to chicken eggs. It is also called aubergine (French word) in Europe. Several studies have been conducted on vegetable crops to know the knowledge and adoption of recommended cultivation practices but very few research studies have been conducted on brinjal crop in Chhattisgarh state. Hence, present study was designed to know the reaction, reason for adopting brinjal production with the specific objective.

To find out the level of knowledge of the Brinjal growers regarding recommended brinjal production technology.

Materials and Methods

The present investigation was carried out during the year of 2010-11 in 12 selected villages in Durg, Berla and Dhamdha blocks of Durg district of Chhattisgarh state. Ten farmers were selected from one village randomly, thus total 120 farmers were selected purposively for the present study. The data were collected through personal interview and analyzed by using appropriate statistical methods like mean, percentage, correlation and multiple regression analysis etc. for the interpretation of the data.

English and English (1961) defined knowledge, as a body of understandable information possessed by an individual or by culture.

The knowledge test consisted of items called questions covering all the package of practices of brinjal production technology. The set of questions developed were discussed with the subject matter specialists in different disciplines who were members of advisory committee. Total 18 questions were finalized.

A teacher made scale was developed to measure the knowledge level of farmers regarding selected technologies recommended for brinjal crop, and was used with due modifications. The responses of respondents regarding knowledge were obtained into three point continuum as under.

Categories	Score
Incomplete knowledge	1
Partial knowledge	2
Complete knowledge	3

The knowledge index was worked as follows:

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$$\text{Knowledge index} = \frac{\text{Sum of knowledge score actually obtained by the respondents}}{\text{Maximum possible knowledge score obtainable by the respondents}} \times 100$$

Further, the respondents were classified into three categories by using following formula:

K.I. = Mean $(\overline{X})$ ± S.D. (Standard Deviation)

Categories	
Low level (upto 40 score)	$(< \overline{X} - S.D.)$
Medium level (41-46 score)	$(\text{in between } \overline{X} \pm S.D.)$
High level (above 46 score)	$(> \overline{X} \pm S.D.)$

Results and Discussion

Scientific-orientation

Table 1 : Distribution of respondents according to their scientific orientation.

(n= 120)

S. no.	Scientific-orientation	Frequency	Per cent
1.	Low level (up to 16 score)	12	10.00
2.	Medium level (17– 22 score)	101	84.17
3.	High level (above 22 score)	07	05.83
	Total	**120**	**100.00**

$\overline{X}$ = 19.10833 S.D = 2.855

The results in table 1 showed that majority of the respondents (84.17%) had medium level of Scientific–orientation, followed by 10.00 per cent, who had low level of scientific–orientation while, 05.83 per cent of respondents had high level of scientific orientation regarding brinjal production technology.

It can be concluded that majority of the respondents came under the medium level of scientific–orientation category regarding brinjal production technology.

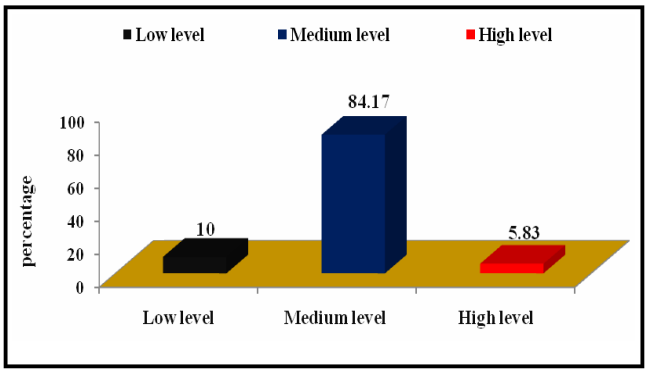

Fig. 1 : Scientific Orientation

The level of knowledge of the respondents regarding recommended brinjal production technology

The data presented in table 2 indicate that out of total respondents most (40.00%) of them had medium level of knowledge regarding recommended brinjal production technology. Whereas 30.84 per cent and 29.16 per cent of the respondents were having low and high level of knowledge, respectively.

Table 2 : Distribution of respondents according to overall level of knowledge regarding recommended brinjal production technology.

(n= 120)

S. no.	Level of knowledge	Frequency	Per cent
1.	Low (upto 40 score)	37	30.84
2.	Medium (41-46 score)	48	40.00
3.	High (above 46 score)	35	29.16
	Total	**120**	**100.00**

$\overline{X}$ = 42.825 S.D = 2.979

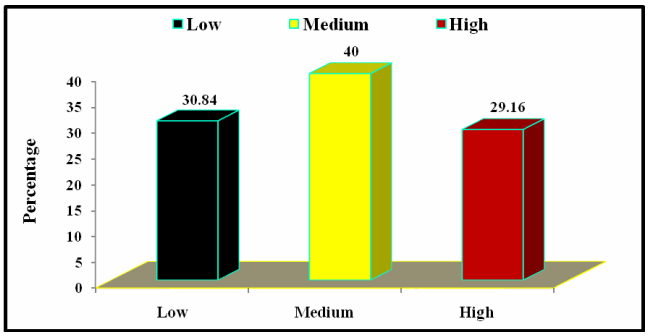

Fig. 2 : Overall level of knowledge.

It can be concluded that most of the respondents had medium to high level of knowledge and about twenty nine per cent of the respondents had low level of knowledge regarding recommended brinjal production technology.

Practice wise level of knowledge of the respondents regarding recommended brinjal production technology

The data presented in table 3 reveals that the respondents had low level of knowledge regarding recommended brinjal production technology i.e. sowing method and seedling preparation and intercropping (23.34%), hardening off and selection and preparation of land for transplanting (16.67%), preparation of nursery bed (16.66%), manures and fertilizers in nursery bed (15.83%), mulching and manures and fertilizers in main field (12.50%), insect, pest and disease identification and management in nursery bed (11.67%), seed rate and seed

treatment (8.33%), selection of varieties, transplanting time and method and weed identification and management (6.66%), stage of seedlings for transplanting, irrigation and ratooning (04.17%) and none of the respondents had low level of knowledge regarding harvesting of brinjal crop.

Table 3 : Distribution of respondents according to their practice wise level of knowledge regarding recommended brinjal production technology.

(n= 120)

S. no.	Recommended practices of brinjal production technology	Level of knowledge		
		Low f (%)	Medium f (%)	High f (%)
1.	Preparation of nursery bed	20 (16.66)	88 (73.34)	12 (10.00)
2.	Selection of varieties	08 (6.66)	93 (77.51)	19 (15.83)
3.	Seed rate and seed treatment	10 (8.33)	69 (57.50)	41 (34.17)
4.	Manures and fertilizers in nursery bed	19 (15.83)	82 (68.34)	19 (15.83)
5.	Sowing method and seedling preparation	28 (23.34)	77 (64.16)	15 (12.50)
6.	Mulching	15 (12.50)	99 (82.50)	06 (05.00)
7.	Insect, pest and disease identification and management in nursery bed	14 (11.67)	104 (86.67)	02 (01.67)
8.	Stage of seedlings for transplanting	05 (04.17)	85 (70.83)	30 (25.00)
9.	Hardening off	20 (16.67)	84 (70.00)	16 (13.34)
10.	Selection and preparation of land for transplanting	20 (16.67)	68 (56.66)	32 (26.67)
11.	Transplanting time and method	08 (06.67)	102 (85.00)	10 (08.33)
12.	Manures and fertilizers in main field	15 (12.50)	99 (82.50)	06 (05.00)
13.	Irrigation	05 (04.17)	85 (70.83)	30 (25.00)
14.	Intercropping	28 (23.34)	77 (64.16)	15 (12.50)
15.	Weed identification and management	08 (06.67)	89 (74.17)	23 (19.17)
16.	Insect, pest and disease identification and management	18 (15.00)	66 (55.00)	36 (30.00)
17.	Harvesting	00 (00.00)	105 (87.50)	15 (12.50)
18.	Ratooning	05 (04.17)	85 (70.83)	30 (25.00)

f = Frequency % = Per cent

While in case of medium level of knowledge regarding recommended brinjal production technology (87.50%) respondents had medium level of knowledge regarding harvesting followed by insect, pest and disease identification and management in nursery bed (86.67%), transplanting time and method (85.00%), mulching (82.50%), manures and fertilizers in main field (82.50%), selection of varieties (77.51%), weed identification and management (74.17%), preparation of nursery bed (73.34%), stage of seedlings for transplanting (70.83%), irrigation (70.83%), ratooning (70.83%), hardening off (70.00%), manures and fertilizers in nursery bed (68.34%), sowing method and seedling preparation (64.16%). intercropping (64.16%), seed rate and seed treatment (57.50%), selection and preparation of land for transplanting (56.66%) and insect, pest and disease identification and management (55.00%), respectively.

While in case of high level of knowledge regarding selected practices of recommended brinjal production technology the practices were seed rate and seed treatment (34.17%) followed by insect, pest and disease identification and management (30.00%), selection and preparation of land for transplanting (26.67%), stage of seedlings for transplanting, irrigation and ratooning (25.00%), weed identification and management (19.17%), manure and fertilizer in nursery bed and Selection of varieties (15.83%), hardening off (13.34%), sowing method and seedling preparation, intercropping and harvesting (12.50%), preparation of nursery bed (10.00%), transplanting time and method (08.33%), mulching and manure and fertilizer in main field (05.00%) and insect, pest and disease identification and management in nursery bed (01.67%).

Conclusion

The overall level of knowledge of brinjal production technology was medium. Maximum knowledge was noticed in the practice of seed rate and seed treatment. Knowledge level of farmers should be increased in various aspects of brinjal production technology *i.e.* use of proper dose of fungicide, insecticide, fertilizers and manures through systematic training programme, which could be more effective in future brinjal production.

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