

KNOWLEDGE LEVEL OF THE BRINJAL GROWERS ABOUT THE PRODUCTION TECHNOLOGY OF BRINJAL OF BANASKATHA DISTRICT OF GUJARAT

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ABSTRACT

The study revealed that majority 65.00 per cent of the brinjal growers had medium level of knowledge index regarding recommended practices of brinjal, while 18.33 per cent and 16.67 per cent of brinjal growers had low and high level of knowledge index, respectively. The level of knowledge was observed higher in most of the practices (except top dressing of fertilizers and recommended varieties) of recommended production technology of brinjal among the respondents. The independent variables like- age, education and extension contact had positive and highly significant correlation association and social participation, land holding, annual income, sources of information utilization and scientific orientation of the brinjal growers had positive and significant correlation association with their level of knowledge of recommended production technology of brinjal. Whereas size of family was found to have non-significant correlation association with level of knowledge of recommended production technology of brinjal.

Key word: knowledge level; brinjal growers & production technology

INTRODUCTION

Agriculture is the largest private enterprise in India and will continue to be the life line of the Indian economy even in foreseeable future. It contributes nearly 22.00 per cent to national gross domestic product (G.D.P). In food sector, alone agriculture contribute about 250 thousand crores rupees annually and also provide direct employment to about 234 million people.

Horticulture sector cover only 8.00 per cent of total crop area in the country and it contribute 24.50 per cent to G.D.P. and 54.55 per cent to export earning in agricultural sector (Chadha, 2002).

Looking to the production of brinjal scenario in the world, China is dominated as it produces 44.17 per cent of the world brinjal production followed by India 25.57 per cent. Ethiopia produce 6.31 per cent and Mexico produce 5.40 per cent of the total world production of brinjal with rank of third and fourth, respectively. The other important producer countries are Turkey, 3.76 per cent, Indonesia 3.68 per cent, Pakistan 3.57 per cent, Thailand 2.51 per cent and Egypt 2.36 per cent. (FAO, UNESD, 2006), and Patel et al. (2017).

The scope to increase the productivity of brinjal to its potential would substantiate the need for promotion of brinjal cultivation technology in the farmer's field. One way by which extension scientists can contribute to this task

is to find out better ways and means of promoting brinjal cultivation technology among the group of clientele.

The current advances in brinjal production technology have demonstrated that to improve the practices have great potential for increasing the brinjal production. Therefore, raising the efficiency of the growers is essential for getting desire profit from the brinjal cultivation. Understanding that, no detail study has yet carried out in this regards so, to know the adoption pattern of recommended practices of brinjal crop a study on "Knowledge level of the Brinjal growers about the production technology of Brinjal." was under taken with following specific objectives.

OBJECTIVES

- (1) To study the knowledge level of the brinjal growers about the production technology of brinjal
- (2) The association between the selected characteristics of brinjal growers and their level of knowledge of recommended production technology of brinjal

METHODOLOGY

Banaskantha district, where the researcher study was chosen for the study. Palanpur and Deesa talukas of Banaskantha district were purposively selected, because these talukas have more brinjal growing area as compared to

other talukas. Twelve brinjal growing villages were randomly selected from these two talukas. For this study 120 brinjal growers who had minimum 3 years of experience in brinjal cultivation were selected randomly. To know the various characteristics of brinjal growers a scale developed by Pareek and Trivedi (1963) was used with some modifications.

Measurements of level of knowledge about recommended production technology of brinjal crop was measured by using teacher made test. The data were collected with the help of well-structured, pre-tested, English version interview scheduled through personal contact and data were compiled, tabulated and analyzed to get draw the conclusion. A simple ranking technique was applied to measure the constraints faced by brinjal growers. The statistical tools used were percentage, mean score, standard deviation and coefficient of correlation value.

RESULTS AND DISCUSSION

Level of knowledge of the brinjal growers about the recommended production technology of brinjal

In the present study knowledge refers to know-how about different brinjal cultivation technology possessed by the brinjal growers. Adequate knowledge is essential to brinjal growers for the success and profitable cultivation. It was therefore thought necessary to obtain information from the brinjal growers about the knowledge they possessed about brinjal cultivation practices. The data regarding level of knowledge are given in Table 1.

Table 2 : Practice wise mean score knowledge index of improved brinjal production technology among the respondents and their rank order (n = 120)

Sr. No.	Recommended practices	Total maximum score	Total obtained score	Obtained mean score index	Rank
1	Type of Soil	240	194	80.83	IV
2	Nursery management and Transplanting	1320	1047	79.32	V
3	Time of sowing	120	120	100	I
4	Preparation of land	240	235	97.91	II
5	Recommended varieties	840	318	37.86	XII
6	Spacing	240	207	86.25	III
7	Fertilizers				
	Basal fertilizer	600	383	63.83	VIII
	Top drasing	1200	498	41.5	XI
8	Irrigation	120	120	100	I
9	Inter-culturing	120	120	100	I
10	Weeding	840	533	63.45	IX
11	Insect pest control	1800	1225	68.05	VII
12	Disease control	1200	720	60.00	X
13	Harvesting	600	455	75.83	VI

Table 1. Distribution of the respondents according to their level of knowledge index n = 120

Sr. No.	Level of knowledge index	Number	Percent
1	Low (below 56.27score)	22	18.33
2	Medium (between 56.28 to 75.75 score)	78	65.00
3	High (above 75.75 score)	20	16.67

Mean= 66.01

S.D. = 9.74

It is observed from the Table 1 that majority 65.00 per cent of the brinjal growers had medium level of knowledge index regarding recommended practices of brinjal, while 18.33 per cent and 16.67 per cent of brinjal growers had low and high level of knowledge index, respectively. Thus it can be concluded that 65.00 per cent of the respondents had medium level of knowledge regarding recommended production technology of brinjal. This finding is in the line with finding of Mate (2005), Parmar (2006), Mewara *et al.* (2007), Kadu (2009) and Kadam *et al.* (2010).

Practice wise knowledge level of brinjal growers about recommended brinjal production technology:

Table 2 reveal that the knowledge about time of sowing, irrigation and inter-culturing were equal cent per cent among the brinjal growers and ranked first. The obtained mean score of level of knowledge of preparation of land (97.91 per cent), spacing (86.25 per cent), type of soil (80.83 per cent), nursery management and transplanting (79.32 per cent), harvesting (75.83 per cent), insect-pest control (68.05 per cent), were good among the respondents and were ranked second, third, fourth, fifth, sixth and seventh, respectively.

The mean score of level of knowledge regarding package of practices viz., basal fertilizers (63.83 per cent), weeding (63.45 per cent), disease control (60.00 per cent), top dressing of fertilizers (41.50 per cent) and recommended varieties (37.86 per cent) were found low and ranked eight, nine, ten, eleven and twelve, respectively.

From the above discussion, it can be concluded that considering the self experience and extension contact the level of knowledge was observed higher in most of the practices among the brinjal growers. The findings are agreement with the finding of Sasane *et al.* (2011) and Biradar *et al.* (2013).

Association between characteristics of brinjal growers and their level of knowledge of recommended production technology of brinjal

The level of knowledge recommended agricultural technology is a unit act but a complex process involving sequence and thought of action. The action of individual farmers is governed by personal, socio-economical, situational, communicational and psychological variables with their level of knowledge of improved brinjal production technology were worked out by calculating coefficient correlation. The results in this regard are depicted as under.

Table 3: Relationship between the characteristics of brinjal growers and their level of knowledge of recommended production technology of brinjal. n = 120

Sr. No.	Independent Variables	Correlation-Coefficient ('r' value)
1	Age	0.3109**
2	Education	0.2596**
3	Size of family	0.0183 (NS)
4	Social participation	0.1857*
5	Land holding	0.1841*
6	Annual income	0.1828*
7	Extension contact	0.2413**
8	Sources of information utilization	0.1847*
9	Scientific orientation	0.1810*

NS = non significant
 *= significant at 0.05 level
 **= significant at 0.01 level

(1) Age

It is apparent from the data presented in the Table 3 that the age of the brinjal growers had positive and highly significant correlation with their level of knowledge of recommended production technology of brinjal.

(2) Education

The data presented in Table 3 reflect that the level of knowledge of the brinjal growers regarding recommended production technology had positive and highly significant correlation with their level of education, which indicate that education play an important role in influencing the level of knowledge of new technology among the brinjal growers.

(3) Size of family

As reveal from data presented in Table 3 there was non-significant association between size of family and level of knowledge of recommended production technology of brinjal.

(4) Social participation

The data presented in Table 3 clearly indicate that social participation by the brinjal growers had significant correlation with their level of knowledge of recommended production technology of brinjal.

(5) Size of land holding

The data presented in Table 3 clearly indicate that size of land holding of the brinjal grower's had positive and significant association with their level of knowledge of recommended production technology of brinjal. Thus, the null hypothesis $H_{1,5}$ was rejected.

(6) Annual income

It is apparent from the data presented in the Table: 3 that annual income of the brinjal growers had positive and significant correlation with their level of knowledge of recommended production technology of brinjal.

(7) Extension contact

The data presented in Table 3 clearly indicate that extension contact of the brinjal growers had positive and highly significant correlation with their level of knowledge of recommended production technology of brinjal.

(8) Sources of information

The data depicted in Table 3 show that the sources of information utilization of the brinjal growers had positive and significant correlation with their level of knowledge of recommended production technology of brinjal.

(9) Scientific orientation

It is apparent from the data presented in Table: 3 that scientific orientation of the brinjal growers had positive and significant correlation with their level of knowledge

of recommended production technology of brinjal which indicate that scientific orientation had positive influence on knowledge of brinjal production technology.

CONCLUSION

The study was conducted to Knowledge level of the Brinjal growers about the production technology of Brinjal of Banaskatha district of Gujarat state. Palanpur and Deesa talukas of Banaskantha district were purposively selected, because these talukas have more brinjal growing area as compared to other talukas. Twelve brinjal growing villages were randomly selected from these two talukas. For this study 120 brinjal growers who had minimum 3 years of experience in brinjal cultivation were selected random sampling method and data were collected from them using a well-structured and pre-tested interview schedule. The collected data were analysed and tabulated.

The study revealed that majority 65.00 per cent of the brinjal growers had medium level of knowledge index regarding recommended practices of brinjal, while 18.33 per cent and 16.67 per cent of brinjal growers had low and high level of knowledge index, respectively. The level of knowledge was observed higher in most of the practices (except top dressing of fertilizers and recommended varieties) of recommended production technology of brinjal among the respondents.

The independent variables like- age, education and extension contact had positive and highly significant correlation association with knowledge of recommended production technology of brinjal crop by brinjal growers. The five variables viz., Social participation, land holding, annual income, sources of information utilization and scientific orientation of the brinjal growers had positive and significant correlation association with their level of knowledge of recommended production technology of brinjal. Remaining variable viz., size of family was found to have non-significant correlation association with level of knowledge of recommended production technology of brinjal.

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