



## RESEARCH PAPER

# Knowledge and adoption of recommended practices of brinjal

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**Abstract :** The present study on knowledge and adoption of recommended practices of brinjal was conducted in the year 2015–16 in Amravati district. For this study 80 brinjal growers were purposively selected from one tehsil of district with the help of random sampling method. The data were collected with the help of structured interview schedule. Collected data was carefully examined, classified quantified and tabulated. Frequencies, mean, standard deviation, correlation of co-efficient analysis were employed for interpreting the results. Results obtained after analysis have been summarized as below. Findings revealed that majority of the respondents 43.75 per cent were found in the middle age group 31 to 50 years. Majority of the respondents 47.50 per cent were educated upto college level. Nearly 31.25 per cent respondents belonged to semi medium land holding between 2.01 to 4 ha. Maximum percentages of the respondents had their annual income in between Rs. 50,001 to 1,00,000/- and above. Majority of the respondents 70.00 per cent were having upto 3.00 ha area under irrigation. Majority of the respondents 50.00 per cent possessed 0.20 to 0.40 ha area under brinjal crop. Majority of the respondents 58.75 per cent had low level of social participation. Nearly 40.00 per cent of respondents in medium category of extension contact. Majority of the respondents 42.50 per cent found to be in the medium level of market orientation. Majority of the respondents 60.00 and 61.25 per cent belonged to medium category of knowledge and adoption level, respectively. Findings of relational analysis revealed that the characteristics such age, education, land holding, annual income, area under irrigation, area under brinjal crop, extension contact, market orientation were positively and significantly correlated with knowledge about recommended practices of brinjal. Whereas, social participation was not associated with knowledge about recommended practices of brinjal. Among the characteristics of respondents *viz.*, education, land holding, annual income, extension contact, market orientation were positively and significantly correlated with adoption at 0.01 level of probability while age, area under irrigation, area under brinjal crop were positively and significantly correlated with adoption at 0.05 level of probability had positive and significant relationship with adoption of recommended practices of brinjal. However, social participation, did not show significant relationship with adoption of recommended practices of brinjal. Lower down of water table of irrigation sources, high cost of insecticides and pesticides, high cost of fertilizer, sale of brinjal crop does not fetch remunerative price in the market, irregular power supply, high wages of labour, transporting of brinjal produce by jeep or tractor is expensive, non-availability of Agril. loans at proper time were the important constraints.

**Key Words :** Knowledge, Adoption, Brinjal growers, Practices, Constraints

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## INTRODUCTION

Among vegetable grown in our country, *Solanaceae* family secure a prominent place of vegetables its member such as brinjal, tomato, chilli and potato are commonly grown throughout the country. Amongst these, Brinjal (*Solanum melongena* L.) is most common and popular vegetable with rural people of our country. Brinjal is adapted in wide range of climatic condition from north to south and east to west. Brinjal is cultivated in almost all the states in country. But major production states are Orissa, West Bengal and Bihar, area under brinjal is higher in Orissa than that of West Bengal. In hilly region, it is grown only in the summer. It is used in variety of culinary preparations and industrially processed foods. India is world's 2<sup>nd</sup> largest producer of brinjal after China. Brinjal has been staple vegetable in our diet, since ancient time. Contrary to common belief, it is quite in nutritive value and can be compared to other vegetables. The food value of brinjal 97.7 per cent moisture, 1.4 per cent protein, 0.3 per cent fat, 0.3 per cent minerals. The unripe fruit is primarily used as cooked vegetables for preparation of various dishes in different region of the world. It has got much potential as raw material in pickle and dehydration industries. It is supposed to possess certain medical properties and white brinjal is said to be good for diabetic patients. It is highly productive and usually finds its place as poor man's crop.

The brinjal is most hardy and low cost crop. Brinjal is grown in all three seasons and has an added advantage that pickings of this fruit vegetables are available for longer duration. Both these characteristics make fruit available throughout the year. This makes steady source of income. The demand for brinjal crop is increasing, which fetches good price in a comparatively shorter period of time.

The specific objectives have been undertaken as follows:

- To study profile of the brinjal growers.
- To study knowledge possessed by brinjal growers in respect of brinjal cultivation practices.
- To study the adoption of recommended cultivation practices by brinjal growers.
- To study relationship between selected characteristics of brinjal growers with knowledge and adoption about recommended practices of brinjal cultivation.
- To study the constraints faced by brinjal growers in adoption of recommended practices of brinjal cultivation.

## MATERIAL AND METHODS

Amravati district was purposively selected for the study. The study was conducted in Achalpur tehsil of Amravati district. The farmers were interviewed with the help of structured interview schedule personally. From one tehsil 80 respondents were selected. The interview schedule was constructed by formulating relevant questions in accordance with objectives of the study. The schedule included questions pertaining to age, education, land holding, annual income, area under irrigation, area under brinjal crop, social participation, extension contact, market orientation as well as knowledge and adoption.

The information from the respondent was collected by personal interview methods and their responses were considered for the purpose of present study. Data were collected. Mean, S.D. and co-efficient correlation methods were used for analysis of the data.

## RESULTS AND DISCUSSION

The findings of the study as well as relevant discussion have been summarized under the following heads :

### Relation analysis :

In order to find out the relationship of the selected characteristics of respondents with their knowledge and adoption, co-efficient of correlation were worked out. The findings are presented in this part.

### Relationship of selected characteristics of respondents with their knowledge :

The co-efficient of correlation of knowledge with personal, situational, socio-economic and communication characteristics of the respondents have been furnished in Table 1.

On critical examination in Table 1, it reveals that among the 9 independent variables age, education, land holding, annual income, area under irrigation, area under brinjal crop, extension contact, market orientation were positively and significantly correlated with knowledge at 0.01 level of probability. Therefore, the Null hypotheses was rejected for these characteristics stating that there exists significant relation between these characteristics and knowledge possessed by respondents about recommended practices of brinjal.

The variables social participation did not show any significant association with knowledge possessed by

respondents. The Null hypotheses for these variables was, therefore, accepted. The finding of present study is in accordance with the findings reported by Desai (2005).

**Relationship of selected characteristics of respondents with their adoption :**

The co-efficient of correlation of adoption with personal, situational, socio-economic and communication characteristics of the respondents have been furnished in Table 2.

It is evident from Table 2 that education, land holding, annual income, extension contact, market orientation were positively and significantly correlated with adoption at 0.01 level of probability. Age, area under irrigation, area under brinjal crop were positively and significantly correlated with adoption at 0.05 level of probability. Thus, the Null hypotheses was rejected for these variables showed that there exists significant relation between these characteristics and adoption of recommended practices of brinjal. The variables social participation did not show any significant association with

adoption possessed by respondents. The Null hypotheses for these variables was, therefore, accepted. The finding of present study is in accordance with the findings reported by Desai (2005); Kumari *et al.* (2012) and Dhaka and Soni (2012).

**Conclusion :**

Study indicates that the majority of respondents belonged to middle age group, majority of them completed college education, majority of the respondents had semi medium land holding, annual income in between Rs. 50,001 to 1,00,000/-, majority of the respondents had upto 3 ha area under irrigation, 0.20 to 0.40 ha area under brinjal crop, low level of social participation, medium extension contact, medium level of market orientation, medium knowledge and adoption, respectively. Among the characteristics of respondents as age, education, land holding, annual income, area under irrigation, area under brinjal crop, extension contact, market orientation were positively and significantly correlated with knowledge at 0.01 level of probability.

**Table 1 : Co-efficient of correlation of characteristics of the respondents with their knowledge**

Sr. No.	Variable	'r' value
1.	Age	0.3709**
2.	Education	0.4906**
3.	Land holding	0.4474**
4.	Annual income	0.4138**
5.	Area under irrigation	0.3651**
6.	Area under brinjal crop	0.4450**
7.	Social participation	0.1361 <sup>NS</sup>
8.	Extension contact	0.5194**
9.	Market orientation	0.4217**

\* and \*\* indicate significance of values at P=0.05 and 0.01, respectively

NS = Non- significant

**Table 2: Co-efficient of correlation of characteristics of the respondents with their adoption**

Sr. No.	Variable	'r' value
1.	Age	0.2497*
2.	Education	0.4552**
3.	Land holding	0.3229**
4.	Annual income	0.3115**
5.	Area under irrigation	0.2518*
6.	Area under brinjal crop	0.2571*
7.	Social participation	-0.0408 <sup>NS</sup>
8.	Extension contact	0.3930**
9.	Market orientation	0.3868**

\* and \*\* indicate significance of values at P=0.05 and 0.01, respectively

NS = Non-significant

Among the characteristics of respondents education, land holding, annual income, extension contact, market orientation were positively and significantly correlated with adoption at 0.01 level of probability. While age, area under irrigation, area under brinjal crop were positively and significantly correlated with adoption at 0.05 level of probability.

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