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A Study of the Knowledge of Pigeonpea Growers and it's Association with their Selected Characterstics

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Abstract: *The study was conducted to know the extent of knowledge about recommended pigeonpea package of practices by the growers and to delineate relationship between profile of respondents with the knowledge of pigeonpea production technology by farmers of Parbhani district in Maharashtra. The study was conducted in Parbhani district comprising 120 respondents from twelve villages. The result showed that majority (58.83 per cent) of the respondents had medium level of knowledge. Education, annual income, economic motivation, risk orientation, extension contact and sources of information had positive and significant relationship with knowledge of recommended package of practices of pigeonpea. . The present study revealed that Education, Economic motivation, Extension contact and sources of information had significant effect on knowledge of recommended package of practices of pigeonpea. Therefore, these variables need to be considered while disseminating the pigeonpea production technology of improved agricultural practices concerned.*

Keywords*: Adoption, Knowledge, Package of practices*

INTRODUCTION

Indian agriculture is currently the biggest industry in India. On the whole it has key role in the socio-economic growth of the country. The main food grains which play an important role in Indian economy are cereals, oilseeds and pulses. After cereals and oilseeds, pulses find third important place in agriculture. Grain legumes, also known as pulses, are plants belonging to the family Leguminasae, which are grown primarily for their edible grains or seeds. Pigeonpea is an important pulse crop in India. It is also known as Red gram, Arhar and Tur. But, there is always appears the problem of non-adoption or low adoption regarding recommended package of practices. Therefore, to achieve maximum per cent adoption of recommended package of practices, extension agencies play a significant role. This crop widely grown in India; but the yield and productivity of pigeonpea is not satisfactory as compare to area under cultivation. The low production of pigeonpea may be due to non adoption or poor adoption of recommended which may be due to low knowledge about recommended production technology. Extension activities conducted in the area helps farmers for gaining the knowledge about recommended package of practices. Knowledge was defined as comprehensive understanding of agricultural innovations i.e. recommended Pigeaonpea cultivation practices.

It was therefore, felt necessary to probe into the various dimensions particularly on knowledge of recommended package of practices of pigeonpea cultivation and to come with certain concrete findings.

The present study was proposed to be undertaken with the following specific objectives.

1. To study the extent of knowledge about recommended pigeonpea package of practices by the growers.
2. To delineate relationship between profile of respondents with the knowledge.

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METHODOLOGY

The present study was undertaken in Parbhani district of Maharashtra. Three talukas namely Manwat, Selu and Pathri from Parbhani district were randomly selected. and from each talukas four villages were selected randomly. Ten farmers from each village who were cultivating this crop were selected randomly. Thus, the total numbers of respondents were one hundred and twenty. The data pertaining to the objectives of the study were collected with the help of structured interview schedule by personal interview method.

The data thus collected were subjected to the statistical analysis by using, frequency, percentage and statistical test such as Karl's Pearson co-efficient of correlation and multiple regression analysis for assessing the relationship of the independent variables with the dependent variable.

Knowledge of respondents about recommended practices was measured by directly asking them questions about the advocated practices. In this, 31multiple choice questions were prepared in consultation with the scientists of MKV and literature available. The answers given by the respondents were marked in the questionnaire. The correct answer of the respondents was given one score and incorrect answer was given zero score. The respondents were categorized under three groups on the basis of mean $\pm$ SD as follows.

RESULTS AND DISCUSSION

The results of the present research work are presented below.

Overall knowledge level

It was observed from table 1 that majority (50.83 per cent) of the respondents had medium level of knowledge. Whereas, 25.00 per cent and 24.14 per cent of respondents had high and low level of knowledge about recommended package of practices of pigeonpea.

Table 1
Distribution of respondents according to their overall knowledge level

Sr. No.	*Knowledge level*	*Frequency*	*Per cent*
1.	Low (upto 15)	28	24.14
2.	Medium (16 to 18)	61	50.83
3.	High (19 and above)	31	25.83
	Total	**120**	**100.00**

Results is in line with findings of Deshpande (1994), Sing (2010) respectively.

Relationship between profile of respondents with the knowledge and adoption of recommended package of practices of pigeonpea

It was observed from Table 2 that out of eight independent variables viz., education, annual income, Economic Motivation risk orientation and extension contact and sources of information had positive and significant relationship with knowledge of recommended package of practices of pigeonpea.

Table 2
Relationship between profile of respondents with knowledge of recommended package of practices of pigeonpea

Sr. No.	*Independent variables*	*Correlation coefficient 'r'*
1.	Farm experience	-0.139
2.	Education	0.273**
3.	Land holding	0.286*
4.	Annual income	0.475**
5.	Economic motivation	0.284**
6.	Risk orientation	0.688**
7.	Extension contact	0.415**
8.	Sources of information	0.413**

Note : ** Significant at 1 per cent level of probability.
* Significant at 5 per cent level of probability.

Whereas, farm experience, land holding, did not show any relationship with knowledge of recommended package of practices of pigeonpea.

This finding is in consonance with the findings of Dhage (1992), Ramteke (2001).

Multiple regression analysis of knowledge

The regression analysis was done to appraise the contribution of selected independent variables to the dependent variables i.e. knowledge of respondents.

An analysis presented in table 3 indicated that 55.2 per cent variation in knowledge of the pigeaonpea production technology of farmers was explained by eight independent variables.

Table 3
Multiple regression analysis of knowledge of recommended package of practices with independent variables.

Sr. No.	*Independent variables*	*Correlation*		
		B(I)	*SE*	*'t' value*
1.	Farm experience	-0.0891	0.0284	-3.134
2.	Education	0.1660	0.1427	1.963*
3.	Land holding	-0.1583	0.1376	-1.1501
4.	Annual income	0.0246	0.0071	1.7509
5.	Economic motivation	0.4529	0.1051	4.306**
6.	Risk orientation	0.3149	0.1009	1.429
7.	Extension contact	0.0963	0.7118	2.758**
8.	Sources of information	0.2311	0.1080	2.535**
	R2 = 0.552		F = 17.09	

Note : ** Significant at 1 per cent level of probability.
* Significant at 5 per cent level of probability.

From the regression analysis it was seen that out of eight independent variable, only four variables i.e. Education, Economic motivation, Extension contact and sources of information had significant effect on knowledge of recommended package of practices of pigeonpea. The regression coefficient of the variable was 0.1660, 0.4529, 0.0963 and 0.2311.

It could concluded that Education, Economic motivation, Extension contact and sources of information is more important variable effecting the knowledge of recommended package of practices of pigeonpea.

The similar findings were noticed by Dhage (1992), Deshpande (1994).

CONCLUSION

The result showed that majority (50.83 per cent) of the respondents had medium level of knowledge. To increase the knowledge about pigeonpea production technology field trips, results demonstration, various training programmes,etc. should be emphasized.

It was revealed that the variables like education, annual income, Economic Motivation risk orientation and extension contact and sources of information had positive and significant relationship with knowledge of recommended package of practices of pigeonpea.

The present study revealed that 55.2 per cent variation in knowledge of the technology of farmers was explained by eight independent variables. But Education, Economic motivation, Extension contact and sources of information had significant effect on knowledge of recommended package of practices of pigeonpea.

It is hoped that findings would help either directly and indirectly to extension agencies while disseminating pigeonpea production technology among farmers.

Referances

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