A study on knowledge of cumin production technology

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ABSTRACT

The gap between know how already attained and their application in field is still large despite of considerable advancement in cumin production technology. Cumin is the important spices crop of the Junagadh district. The present research was conceived to know the actual level of knowledge of cumin production technology at farmers' level. The results of this study indicated that an average level of knowledge of improved cumin production technology was 24.36 per cent. An Education, social participation, extension contact, irrigation potentiality, cropping intensity, extension participation, innovativeness, economic motivation, exposure to information sources were highly significant with level of knowledge.

Key words : Cumin, Production, Technology, Dependent variables

INTRODUCTION

Cumin (*Cuminum cyminum* L.) has got an important place in seed spices. It is one of the most important spices crop grown all over the country. Cumin give an agreeable flavour and aroma to food and add greatly to the pleasure of eating (Alyaduraj, 1966). It occupies an area of 2,64,018 hectares producing 1,07,858 tones in India (Singhal, 2003). Study showed that there exits a huge untapped potential yield under real farming situation. Under the circumstance, with a view to know the actual level of knowledge of cumin production technology at farmers' level, it was planned to conduct a study with the specific objectives to study the level of knowledge of cumin growers' about cumin production technology, to study the relationship, if any, between dependent variables (knowledge) and independent variables (characteristics of the cumin growers).

MATERIALS AND METHODS

The age, education, size of family, social participation, extension contact, annual income, size of land holding, irrigation potentiality, cropping intensity, risk orientation, yype of family, extension participation, innovativeness, economic motivation and exposure to information sources were the independent variables selected for the study. The study was conducted in 4 villages of 2 taluka of south Saurashtra agro-climatic zone of Gujarat state. By proportionate random sampling method a total of 100 respondents were selected. Data were collected by personal interview method with the help of specially designed schedule.

For measurement of knowledge of respondents about cumin production technology, the teacher made test was used.

The respondents were asked whether they know particular cumin production technology or not, for each cumin production practices, total numbers of respondents were calculated accordingly those who know that practice.

A unit score was given to correct and zero to incorrect response. The total score obtained by individual respondent for all the statements was calculated.

RESULTS AND DISCUSSION

Level of knowledge:

From Table 1, it is clear that 60.00 per cent of the cumin growers' were medium level knowledge whereas equal numbers of cumin growers *i.e.* 20 per cent had high and low levels knowledge about recommended cumin

Table 1: Distribution of respondents based of their knowledge about cumin production technology					N=100
Category	Knowledge score	Frequency	Percentage	Mean	Standard deviation
Low	Below 21.93	20	20		
Medium	Between 21.93 to 26.79	60	60	24.36	
High	Above 26.79	20	20		2.43
Total		100			

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production technology. However, on an average the knowledge of recommended cumin production technology was 24.36 per cent.

Relationship with independent variables:

An attempt was also made to find out the relationship between the knowledge (dependent variable) and selected independent variables (Table 2)

Table 2: Correlation between knowledge about cumin production technology followed by the farmers and the independent variables   N = 100

Sr. No	Name of the independent variables	'r' value
1.	Age	-0.1567*
2.	Education	0.2691**
3.	Size of family	0.1303 NS
4.	Social participation	0.1799**
5.	Extension contact	0.1857**
6.	Annual income	0.0719NS
7.	Size of land holding	0.1435 NS
8.	Irrigation potentiality	0.2638**
9.	Cropping intensity	0.3047**
10.	Risk orientation	0.1641*
11.	Type of family	0.1001NS
12.	Extension participation	0.2483**
13.	Innovativeness	0.2793**
14.	Economic motivation	0.1973**
15.	Exposure to information sources	0.1940**

* and ** indicates significance of values at $P=0.05$ and 0.01 are $r = 0.1509$ and 0.1793, respectively.   NS = Non significant

There was no significant association of the knowledge of cumin growers about recommended cumin production technology with their size of family, annual income, size of land holding and type of family.

Remaining all the characteristics like education, social participation, extension contact, irrigation potentiality, cumin crop intensity, risk orientation, extension participation, innovativeness, economic motivation and exposure to information source were positively and highly significantly associated with the knowledge of the cumin growers while, age was negative and significantly associated with the knowledge of the cumin growers.

Conclusion and implications:

It is evident from the results of this study that on an average the knowledge of improved cumin production technology was 24.36 per cent. The characteristics like education, social participation, extension contact, irrigation potentiality, cumin crop intensity, risk orientation, extension participation, innovativeness, economic motivation and exposure to information sources were positively and highly significantly associated with the knowledge of the cumin growers.

To raise the cumin growers knowledge of recommended cumin production technology they should be facilitated with latest technical know - how and motivate them to participate in the extension activities. Besides, the extension agencies and input agencies working in the area should make concentrate efforts to organize extension activities such cumin crop demonstration, farmers' day, farmers' training and to persuade them to participate actively in these activities. They should also be advised to participate more actively in the social organization.

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