# Extent of knowledge of farmers on cauliflower production technology

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**Abstract :** The present study was conducted in ten villages of two taluka of Parbhani and Nanded district of Marathwada region of Maharashtra State on 80 cauliflower growers with an object to study the extent of knowledge about recommended production technology of the cauliflower growers. The research design adopted was ex-post-facto, since the data were collected by personally interviewing the cauliflower growers and analyzed stalistically. It revealed that regarding the overall knowledge level 65 per cent of respondents had moderate knowledge about recommended production technology of cauliflower crop followed 17.50 per cent of respondents had high and low level of knowledge, respectively. It was also concluded that 95.00 per cent of respondents were having knowledge about recommended quantity of FYM, land requirements (88.75 %), climate conditions required for cauliflower (87.50%), seed rate (87.50%), number of harrowing (86.25 %) , method of irrigation (86.25 %) , varieties of cauliflower, (83.75 %), method of sowing (82.50 %), number of hoeing required for cauliflower crop (78.75 %), size of seed bed for transplanting (37.50 %) , best cultivation season of cauliflower (77.50 %), diseases on cauliflower crop (68.75 %), recommended number of ploughing (62.50 %), spacing for cauliflower crop (63.75 %), disease control (63.75 %), basal doses of the fertilizers (56.25 %), pest of cauliflower (55.00 %) , pest control (50.00 %), irrigation methods for cauliflower crop (86.25%), irrigation interval for cauliflower crop(38.75 %).

Key Words : Knowledge level, Cauliflower production technology

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#### INTRODUCTION

The transfer agricultural technology is in operation throughout the country, but the technology had not yet reached to the grass root level. Knowledge about any practices plays an important role on its adoption. Therefore, for adoption of technology, knowledge is the pre-requisite. The adoption of recommended cultivation practices by farmers is conditioned by many factors that interact with each others. In such situation, it was thought essential to know which of these factors influenced the adoption behaviour of cauliflower grower. Similarly extension workers have to play a more vital role to educate the farmers to take up cauliflower production on their farms. The present study was designed with the specific objective that to study the extent of knowledge about cauliflower production technology of the cauliflower growers.

#### **MATERIALS AND METHODS**

The present study was conducted in ten villages of two taluka of Parbhani and Nanded district of Marathwada region of Maharashtra State on 80 cauliflower growers with an object to study the extent of knowledge about recommended production technology of the cauliflower growers. The research design adopted was ex-post-facto. Knowledge is comprehensive understanding of agriculture innovation *i.e.* selected improved package of practices used in cauliflower cultivation. There were twenty two knowledge questions included in teacher made knowledge test. If respondents answer the questions correctly, one score was given to each question and if answer wrong, zero score was given. Thus the score consisted of 0 - 22. The data pertaining to the objectives were collected with the help of specially

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structured interview schedule. In order to facilitate the analysis and interpretation statistical tools like frequency, percentage, correlation co-efficient and multiple regressions were used.

## **RESULTS AND DISCUSSION**

The experimental findings obtained from the present study have been discussed in following heads:

# Extent of knowledge about recommended production technology by the cauliflower growers :

From Table 1 It is revealed that 65 per cent of respondents had moderate knowledge about recommended production technology of cauliflower crop followed 17.50 per cent of respondents had high and low level of knowledge, respectively. It is inferred that most of the respondents had moderate knowledge about recommended production technology of cauliflower crop. The findings are in concurrence with the finding reported by Waman *et al.* (1996).

It was found from Table 2 that 95.00 per cent of respondents were having knowledge about recommended quantity of FYM, 88.75 per cent of respondents were having knowledge of land requirements and 87.50 per cent of the respondents were having correct knowledge of climatic conditions required for cauliflower.

Appraisal of data from Table 2 further indicated that 87.50 per cent of respondents were having knowledge about seed rate, 86.25 per cent of them were having knowledge of recommended number of harrowing and 86.25 per cent of respondents were having knowledge about method of

Table 1: Distribution of the respondents according to level of overall knowledge levels			( <b>n=80</b> )
Sr. No.	Level of knowledge	Respondents	
		Frequency	Percentage
1.	Low (Up to 14)	14	17.50
2.	Medium (15 to 21)	52	65.00
3.	High (22 and above)	14	17.50
	Total	80	100.00

Table 2:	Distribution of respondents according to their knowledge about cauliflower production t	84	(n=80)
Sr. No.	Characteristics -	Resp Frequency	Percentage
1.	Climate condition required for cauliflower	70	87.50
2.	Land requirement	70	88.75
3.	Main season cultivation ( <i>Rabi</i> )	62	77.50
4.	No. of ploughing operations (1-2 ploughing)	50	62.50
5.	No. of harrowing (2-3 harrowing)	69	86.25
6.	Quantity of FYM (40 to 50 cartload)	76	95.00
7.	Recommended varieties of cauliflower	67	83.75
8.	Seed rate (600 to 700 g/ha)	70	87.50
9.	Method of sowing	66	82.50
10.	Size of seed bed (3 x 1.0 x 0.15 m)	30	37.50
11.	Days for transplanting (3-4 weeks)	63	78.75
12.	Recommended spacing (45x45cm, 60x60cm)	51	63.75
13.	Recommended first dose of half nitrogen and full P2O5 and K2O at the time of sowing.	45	56.25
14.	Method of irrigation	69	86.25
15.	Irrigation interval	31	38.75
16.	No. of hoeing (2-3 hoeing)	63	78.75
17.	Major pest of cauliflower	44	55.00
18.	Pest control by spraying quinolphos	40	50.00
19.	Major disease of cauliflower	55	68.75
20.	Disease control by using copper oxychloride	51	63.75
21.	Average yield (250-300 q/ha.)	72	90.00
22.	Crop duration (90-130 days)	70	87.50

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irrigation., 83.75 per cent of respondents were having knowledge of recommended varieties of cauliflower. From Table 2 further it was observed that 82.50 per cent of them knew about method of sowing, 78.75 per cent of respondents were having knowledge about number of hoeing required for cauliflower crop. It is also seen that 37.50 per cent of respondents knew the size of seed bed for transplanting and 77.50 per cent of them had knowledge of best cultivation season of cauliflower, 68.75 per cent of them had knowledge about the diseases of cauliflower crop, 62.50 per cent of the respondents were having knowledge of recommended number of ploughing.

It is revealed from Table 2 that 63.75 per cent of them were having correct knowledge about recommended spacing for cauliflower crop, 63.75 per cent of the respondents were having knowledge of disease control, and 56.25 per cent respondents were having knowledge about basal doses of the fertilizers, 55.00 per cent of the respondents were having knowledge about the pest of cauliflower, 50.00 per cent respondents were having knowledge of pest control. As regards the knowledge level of respondents about the recommended irrigation for cauliflower crop, 38.75 per cent of respondents knew the irrigation interval for cauliflower crop. The majority of the cauliflower growers had medium knowledge and adoption level with respect to production technology of cauliflower growers. It goes without saying that a cauliflower grower fetches fabulous income if almost recommended production technology is followed by cauliflower growers. This implies that for enhancing adoption level, they should have also a high level of knowledge and skill to avoid the difficulty in actual use. Hence, it is suggested that an organized programme on cauliflower production, training, demonstrations and frequent field visits should be taken up by the concerned extension agency so that knowledge and adoption level of recommended production technology of cauliflower growers is enhanced. Some of the variables are positively related with the adoption of recommended production technology of cauliflower. Therefore, the respondent who possesses the high knowledge and quality of risk preference may be considered as resource person in enhancing the better management of cauliflower cultivation which ultimately helps the cauliflower growers to increase cauliflower production.

#### **Conclusion :**

The significant increase in the knowledge of the cauliflower growers may be due to the intensive education trainings efforts made by the trainers and also due to realization of importance of these practices by the participants in raising to their production and productivity. Hence, it is suggested that an organized programme on cauliflower production, training, demonstrations and frequent field visits should be taken up by the concerned extension agency so that knowledge level of cauliflower production technology of cauliflower growers is enhanced.

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