

## Technological knowledge of farmers about the use of biofertilizer

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### ABSTRACT

The study was conducted in Morshi Pachayat Samiti in Amravati District of Maharashtra State. Finding of study revealed that 50 per cent of the respondents showed satisfactory knowledge level about the use of biofertilizer. It was further seen that about 30 per cent of them showed poor knowledge and less than this number of respondents were showing a good knowledge of biofertilizer use. Education, annual income, socio-economic status and scientific orientation were found negatively and significantly related at 0.05%. On the other hand, cosmopolitanism was found to be non-significant.

### INTRODUCTION

The bio-fertilizer is alternative to chemical fertilizer in improvement of soil for sustainable crop production. Bio-fertilizers are assuming greater significance as complement or supplement to chemical fertilizers because of significance change in crop production system, reasonable cost and environmental soundness. With the view to popularizing bio-fertilizer. Govt. of India has established a National Bio-fertilizer Development Centre at Ghaziabad in Uttar Pradesh, Regional Bio-fertilizer Development Centre (R.B.D.C.) at Bangalore. Bhaubaneswar, Imphal, Hisar, Jodhpur and Nagpur. The main aim of this study was to find out the level of technological knowledge of bio-fertilizer, which is essential for increasing the crop production.

### METHODOLOGY

The study was carried out in Morshi Panchayat Samiti in Amravati District (M.S.). 125 farmers were selected from 10 selected villages by random sampling method. To measure that technological knowledge of farmers about the use of bio-fertilizer, a suitable questionnaire was developed and the data were collected by personally interviewing the selected respondents.

Two sets of variables namely, independent variables and dependent variables were selected. The independent variables included personal and socio-economic

characteristics. The dependent variable included was technological knowledge possessed by the farmers regarding the bio-fertilizers.

### RESULTS AND DISCUSSION

The finding pertaining to extent of knowledge of the respondents on use of bio-fertilizers are presented in Table 1. It is revealed that 50 per cent of the respondents showed satisfactory knowledge level about the use of bio-fertilizers. It is further seen that about 30 per cent of them showed poor knowledge and a small respondents were showing a good knowledge of bio-fertilizer use.

Use of bio-fertilizer was known to most farmers but the technological knowledge was not of good level but was satisfactory only. It also indicated that poor knowledge was the outstanding factor in a considerable number of farmers. Based on these observations, it can be said that satisfactory knowledge and the poor knowledge of majority of the farmers may be the reason for not adopting the bio-fertilizer in their farming. Moderate level of knowledge about bio-fertilizer was stated by Bhople and Borkar (2002) and Bodke (2003).

The result presented in Table 2 revealed that the variables viz. age and land holding were positively and significantly related at 0.01% level of probability about the use of bio-fertilizer, education, annual income, socio-economic status and scientific orientation were found negatively and significantly related at 0.05%

### Key words :

Biofertilizer,  
Technological  
knowledge, Soil  
fertility.

Accepted :  
March, 2010

**Table 1: Distribution of respondents according to their technological knowledge level (N=125)**

Sr. No.	Technological knowledge level	Respondents	Percentage
1.	<b>Low</b> Poor knowledge level	37	29.60
2.	<b>Medium</b> Satisfactory knowledge level	62	49.60
3.	<b>High</b> Good knowledge level	26	20.80
	Total	125	100.00

**Table 2 : Relationship of selected characteristics of respondents with technological knowledge**

Sr. No.	Characteristics	Coefficient of co-relation ('n') value
1.	Age	0.191*
2.	Education	-0.472**
3.	Land holding	0.391*
4.	Annual income	-0.377**
5.	Socio-economic status	0.444**
6.	Scientific orientation	-0.274**
7.	Cosmopoliteness	-0.205 NS

\* and \*\* indicate significance of values at P=0.01 and 0.05, respectively  
NS – Non significant

level of probability with technological knowledge about the use of bio-fertilizers. On the other hand, the correlation of coefficient of cosmopoliteness with technological knowledge was found to be non-significant. Similar findings were reported by Borkar (2000) and Bodake (2003).

### Conclusion:

From the findings of the present study, it can be concluded that the farmers in the selected area belonged to medium land holdings, medium socio-economic status

and medium income. However, they were also observed to be educated and more number of them were in young and middle age groups. It can also be concluded that their technological knowledge about the use of bio-fertilizer was satisfactory but this number can be increased to higher level of knowledge.

It can be suggested that the knowledge of bio-fertilizer should be given more clearly and precisely by practical demonstrations in their villages. For those farmers who are progressive, printed literature in simple local language can be distributed by the Dept. of Agriculture and the University or the NGOs like Krishi Vigyan Kendra, Kisan Call Centre and Market Information Centers, in the areas.

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