Short Communication

Study on the knowledge level of organic farmers in production of vermicompost in Palghar district of Maharashtra

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ABSTRACT

Organic farming works in harmony with nature rather than against it. This involves using techniques to achieve good crop yields without harming the natural environment or the people who live and work in it. Vermicompost is a safe, non-polluting and one of the most economical and convenient ways of recycling of organic waste. Keeping this in view the present study was undertaken to find out the knowledge of the organic farmers in production of vermicompost. The findings showed that majority of respondents had knowledge about use of raised bed for vermicompost preparation, period for preparation of vermicompost and information about earthworm species for vermicompost preparation. The knowledge was found less in respect of application of earthworms per square meter, ratio of organic material and cow dung, NPK content in vermicompost and pH of vermicompost bed.

Keywords: Vermicompost; respondents; organic sources; earthworms

INTRODUCTION

On an organic farm, each technique would not be normally used on its own. The principles of organic farming lie in the maintenance of soil fertility through careful husbandry, the recycling of agricultural wastes and avoidance or reduction of external inputs (Goldsmith and Hildeyard 1996). Organic farming does not mean going back to traditional methods. Many of the farming methods used in the past are still useful today. Organic farming takes the best of these and combines them with modern scientific knowledge. The quality of natural resources should be maintained and the vitality of the entire agro-ecosystem- humans, animals and crops to microorganisms should be enhanced in a sustainable agricultural system. The emphasis is on the use of renewable resources where there is minimal loss of nutrients, biomass and energy. Waste is nil or minimal (Reijntjes et al 1992). According to Saxena and Singh (2000) non-availability of bio-fertilizers and non-availability of vermicompost in adequate quantity were the problems noticed with organic growing farmers. Among the various sources of organic farming first and foremost way is vermiculture technology. Vermicomposting is the process by which worms are used to convert organic materials (usually wastes) into a humus-like material known as vermicompost. According to Kale et al (2011) more emphasize should be given on production of vermicompost and awareness amongst throughout the society should increase the rate of adoption of vermicompost as well as organic farming. The challenge of using natural resources sustainably is fundamentally a social one and decisions made on the farm have effects on the local community. Vermicompost is a safe, non-polluting and one of the most economical and convenient ways of recycling of organic waste. Keeping this in view the present study was undertaken to find out the knowledge of the organic farmers in production of vermicompost.

METHODOLOGY

The study was conducted in Palghar district of Maharashtra state. Two Tehsils in Palghar district namely Palghar and Wada were selected randomly. The list of villages with well-established organic farming groups was obtained from the central government scheme Paramparagat Krishi Vikas Yojana. Accordingly one village from selected Tehsils was selected randomly. Thus two villages from two Tehsils of Palghar district were selected. From each village 30 organic farmers were selected

randomly and thus the total sample size was 60. The data were collected through structured interview schedule.

RESULTS and DISCUSSION

The knowledge level of farmers in production of vermicompost was found out (Table 1).

The data indicate that majority of the respondents had knowledge about use of raised bed for vermicompost preparation (93.33%), period for preparation of vermicompost (91.66%) and preparation of vermicompost bed (90.00%). Total 86.66 per cent of them had knowledge about use of organic matter as raw material, information of earth worm species for vermicompost preparation (85.00%) and application of water in summer (81.66%). Less than half (48.33%) of the respondents had knowledge regarding application of earthworms per square meter, ratio of organic material and cow dung (26.67%) and information about NPK content in vermicompost (23.33%). It was also noticed that only 6.66 per cent respondents had knowledge about pH of vermicompost bed.

CONCLUSION

The findings showed that majority of the respondents had knowledge about use of raised bed for vermicompost preparation, period for preparation of vermicompost, preparation of vermicompost bed and use of organic matter as raw material. The knowledge was found less in respect of application of earthworms per square meter, ratio of organic material and cow dung, information about NPK content in vermicompost and pH of vermicompost bed. The extension agencies should make sufficient efforts for increasing awareness among organic farmers by different extension educational activities like demonstrations, group discussions and field visits.

Table 1. Distribution of farmers according to practice-wise knowledge of vermicompost

Practice	Respondents (n= 60)		Rank
	Frequency	Percentage	
Use of organic matter as raw material	52	86.66	IV
Use of raised bed for vermicompost preparation	56	93.33	I
Information of earthworm species for vermicompost preparation	51	85.00	V
Information about NPK content in vermicompost	14	23.33	IX
Preparation of vermicompost bed	54	90.00	III
Ratio of organic material and cow dung	16	26.67	VIII
Application of earthworms per sqm	29	48.33	VII
pH of vermicompost bed	04	06.66	X
Application of water in summer	49	81.66	VI
Period for preparation of vermicompost	55	91.66	II

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