



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2022; 11(12): 5679-5680
© 2022 TPI
www.thepharmajournal.com
Received: 15-09-2022
Accepted: 18-10-2022

Nikita Kadaskar
Department of Extension
Education, College of
Agriculture, Dapoli, Ratnagiri,
Maharashtra, India

Dr. HV Borate
Associate Professor (CAS),
Department of Extension
Education, College of
Agriculture, Dapoli, Ratnagiri,
Maharashtra, India

Priyanka B Kharde
Ph.D. (Scholar), Department of
Agril. Extension and
Communication, PGI, MPKV,
Rahuri, Maharashtra, India

Adoption of recommended dose of fertilizers by the mango growers from South Konkan region

Nikita Kadaskar, Dr. HV Borate and Priyanka B Kharde

Abstract

The present study was conducted in the south Konkan region of Maharashtra state using ex-post facto research design (Kerlinger 1969). Four talukas were selected on the basis of maximum area under mango cultivation and from each selected taluka, 5 villages were selected on the basis of maximum area under mango cultivation. Thus, 20 villages were selected. Total 120 respondents, respondents selected on the basis of proportionate sampling. The respondents were interviewed with the help of specially designed schedule. Collected data was classified, tabulated and analysed by using various statistical methods. The study showed that less than one-third (29.17 percent) of the respondents had medium adoption regarding recommended dose of fertilizers, followed by very low (25.83 percent), very high (21.67 percent), low (17.50 percent), and high (5.83 percent) adoption of recommended dose of fertilizers by the mango growers.

Keywords: Adoption, Konkan region, recommended dose of fertilizers

Introduction

Mango (*Mangifera indica* L.) belonging to family Anacardiaceae is the most important commercially grown fruit crop in India. It is being consumed in each part of the world due to its good medicinal and nutritional values. Alphonso variety is honoured as the king of all varieties of mangoes. Alphonso mango has geographical indications (GI) in Ratnagiri and Sindhudurg which enables it to claim exclusive rights to the product.

In India, the area under mango is 2258.13 thousand hectares, production is 21822.32 MT and productivity is 9.7 MT per hectare. The Maharashtra state alone has 166.76 thousand hectares area and 791.36 MT production with an average productivity of nearly 4.75 MT per hectare of mango crop (Source: Horticultural Statistics at a Glance 2018. Horticulture Statistics Division, Department of Agriculture, Cooperation and farmer's welfare).

Ratnagiri, Sindhudurg and Raigad are the major mango growing districts of Konkan in terms of area and production. All three districts are under the jurisdiction of Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth. Ratnagiri district has 60.05 hectares area and 190.00 MT production and Sindhudurg district has 23.50 hectares area and 70.38 MT production while Raigad has 12.33 hectares area with 36.97 MT production. (Source: Horticultural Statistics at a Glance 2018. Horticulture Statistics Division, Department of Agriculture, Cooperation and farmer's welfare).

Fertilizers have played an essential role in agricultural production, providing vital nutrients for crops and increasing demand over the years. As an agrarian country, India is home to numerous small and marginal farmers and is often plagued by low productivity and low quality. Crops are mainly rain-fed and cultivated on a single piece of land over time, decreasing soil fertility in many regions. Therefore, increased quantity of nitrogen fertilizers are being used in the country. Because of this, the Indian government has brought about economic reforms and has ensured that fertilizers are available at affordable prices to increase productivity. Due to subsidy eligibility on notified fertilizers, the Indian fertilizer industry has been able to provide enhanced food security for the country. While agriculture is heavily dependent on the use of fertilizers, the government has met almost all demand for chemical fertilizers.

Objectives

To study the adoption of recommended dose of fertilizers by the mango growers.

Corresponding Author:
Nikita Kadaskar
Department of Extension
Education, College of
Agriculture, Dapoli, Ratnagiri,
Maharashtra, India

Methodology

The research work was conducted in Ratnagiri and Sindhudurg district of south Konkan region of Maharashtra state. From each selected district, two tehsils having maximum area under mango cultivation were selected for the present study. Thus, Ratnagiri and Rajapur tehsils from Ratnagiri district and Devgad and Malvan tehsils from Sindhudurg district were selected for the study. Five villages from each tehsil were selected on the basis of maximum area under mango cultivation. A total 120 mango growers were selected for the present study. The data regarding adoption of recommended dose of fertilizers was collected with the help of a specially designed interview schedule by keeping in view the objectives of the study. Collected data was classified, tabulated and analyzed by using various statistical methods. 'Ex-post facto' research design was used to conduct the present study.

Result and Discussion

In the present study, an attempt was made to understand the extent to which farmers adopted the recommended dose of fertilizers. From the perusal of the data in Table 1 clear that less than one-third (29.17 percent) of the respondents had medium adoption regarding recommended dose of fertilizers, followed by very low (25.83 percent), very high (21.67 percent), low (17.50 percent), and high (5.83 percent) adoption of recommended dose of fertilizers by the mango growers.

Table 1: Distribution of the mango growers according to their overall adoption level

Categories	Number	Percent
Very low (Up to 0.26)	31	25.83
Low (Between 0.27 to 2.37)	21	17.50
Medium (Between 2.38 to 6.60)	35	29.17
High (Between 6.61 to 8.72)	07	5.83
Very high (8.73 and above)	26	21.67

Mean = 4.49 S.D. = 4.23

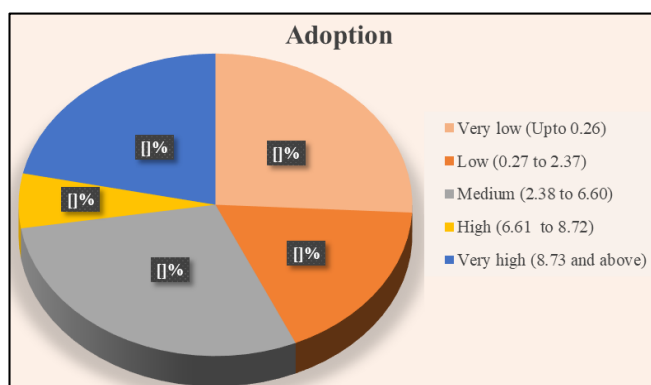


Fig 1: Distribution of the mango growers according to their overall adoption level

Conclusions

From the perusal of the data in Table 2 clear that Less than one-third (29.17 percent) of the respondents had medium adoption regarding recommended dose of fertilizers, followed by very low (25.83 percent), very high (21.67 percent), low (17.50 percent), and high (5.83 percent) adoption of recommended dose of fertilizers by the mango growers.

Thus, it becomes clear that rate of adoption of recommended

dose of fertilizers by the mango growers was considerably lower than level of knowledge about recommended dose of fertilizers. That means, mango growers scientific knowledge about recommended dose of fertilizers in mango and scientific adoption of recommended dose of fertilizers in mango was not up to the mark in certain proportion. Generally, this might have happened because of the barriers faced by the mango growers while actual implementation of technology.

The study revealed that the mango growers had low to medium level of adoption towards recommended dose of fertilizers. This implies that the concerned agencies and personnel may focus their efforts on every components of adoption of recommended dose of fertilizers, that would help to mango growers for better management and application of recommended dose of fertilizers for their mango orchards.

References

1. Badgujar CD. Knowledge and adoption of the recommended package of practices for banana crop, *Journal of Krishi Vigyan*. 2014;2(2):85-87.
2. Chanu TM, Baite DJ, Singh MK, Rao DUM. Adoption of pineapple cultivation practices by the farmers in Manipur state. *Indian Research Journal of Extension Education*. 2014;14(1):17-20.
3. Divya G, Arunachalam R. A study of adoption level of mango growers on the recommended technologies in Krishnagiri district of Tamil Nadu. *Madras Agricultural Journal*. 2020;107(1-3):97-102.
4. Farakte A. Study on influence of social values on adoption of the commercial mango production technology. M.Sc. (Agri.) Thesis, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri, Maharashtra; c2017.
5. Kerlinger FN. *Foundation of Behavioural Research*. Surjeet Pub., New Delhi; c1969. p. 198-224.
6. Patra NK, Kense P. Study on knowledge and adoption of improved cultivation practices of mandarin (*Citrus Reticulata Blanco*) growers in Nagaland, India. *Indian Journal of Extension Education*. 2020;56(4):126-133.
7. Sharma M, Ladher DS. Adoption of improved tomato cultivation practices. *Indian Journal of Extension Education*. 2013;49(1 & 2):62-66.
8. Singh G, Bhalla JS, Rampal VK. Extent of adoption of recommended citrus production practices by the beneficiaries of citrus estates in Punjab. *Indian Journal of Extension Education*. 2018;55(2):1-8.
9. Singh KV, Singh GP, Priyadarshi A. Extent of improved practices of mango production by mango growers in Muzaffarnagar district of Uttar Pradesh. *Indian Research Journal of Extension Education*. 2010;10(3):107-113.
10. Suramwad SR, Kolgane BT. A study of adoption of improved grape production technology followed by grape grower in Sangli district of Maharashtra. *Indian Research Journal of Extension Education*. 2017;17 (3):97-104.
11. *Horticultural Statistics at a Glance*. Horticulture Statistics Division, Department of Agriculture, Cooperation and farmer's welfare; c2018.