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PERCEIVED EFFECTIVENESS OF BIOMIX AMONG BENEFICIARY OF TURMERIC GROWERS

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ABSTRACT

The present study was undertaken in the Hingoli, Aundha (Nagnath) and Basmat tehsils of Hingoli district in Marathwada region of Maharashtra state, with the goal of determining perceived effectiveness of biomix among beneficiary of turmeric growers. From each selected tehsil four villages were selected purposively, thus total 120 beneficiaries were selected purposively from 12 villages, ten beneficiaries from each village. The Ex-post-facto research design was used for the study. A well-structured questionnaire designed for study was used for collecting the data from biomix beneficiary through personal interview method. The data collection from beneficiary were edited tabulated and analyzed using suitable statistical tools like Frequency, Percentage, Mean, Standard deviation, coefficient of correlation and Multiple regression analysis. There were dependent variable namely "Perceived Effectiveness''. There were 14 independent variables viz., Farming experience, Education, Occupation, Land holding, Annual income, Socio economic status, Social participation, Sources of information, Extension contact, Risk orientation, scientific orientation, Innovativeness, Knowledge and Adoption. The study was noticed that, 44.17 per cent of beneficiary belonged to high perceived effectiveness category while, 35.00 per cent from medium perceived effectiveness category and only 20.83 per cent beneficiary belonged to low perceived effectiveness category.

Keywords **:** Perceived Effectiveness, Biomix, Beneficiary, Turmeric Growers, Biopesticide.

Introduction

Biomix consortium is a product developed by Vasantrao Naik Marathwada Krishi Vidyapeeth (VNMKV) Parbhani, Maharashtra, India. The consortium is a blend of beneficial microorganisms that can be used as a soil amendment to improve soil fertility, plant growth, and yield. Pest problem is one of the major constraints for achieving higher production in agricultural crops, India losses about 30 per cent of its crops due to pests and diseases each year. The damage due to these is estimated to be Rs.60, 000 crores annually. Agriculture production depends on availability and use of quality and quantity of farm inputs. Taking into consideration the area, production and productivity of crops in Marathwada, 'Biomix' developed by Vasantrao Naik Marathwada Agricultural University, Parbhani working department of Plant Pathology, 'Biomix' is a mixture of various useful biological consortium. Bio consortium, improves the soil properties, maintain the soil fertility and harmless. Bio consortium can play a vital role as a low cost input for sustainable agriculture for small and marginal farmers who cannot afford the expense of chemical fertilizers. The biomix is also used in different crops like turmeric, ginger, tomato, mango, groundnut, citrus, pomegranate, watermelon, papaya, different vegetable and legume crops like tur and soybean. The results of the use of biomix are very promising and it is found effective against different diseases, pests and promoted the growth of crops. This product has crossed the borders of Maharashtra and it is also used in Gujarat and Karnataka. Use of biomix have a supplementary nutritive, plant protection role in productivity, are eco-friendly, cost effective and

enhance the crop productivity status. On the basis of demand on farmers the department has established the separate unit for production. The production was started with 2 MT during 2010-11. In 2017-21 production reached up to 675 Tonnes. And income generated was 9.82 crore to VNMKV Parbhani. Overall, the biomix consortium produced by VNMKV Parbhani is an innovative and eco-friendly approach to enhance agriculture productivity and sustainability.

Materials and Methods

The present study was conducted purposively in Hingoli district of Marathwada region of Maharashtra state on the basis of maximum number of Biomix beneficiary of turmeric growers. From Hingoli district, three talukas were selected purposively for the present study on the basis of biomix beneficiary. Hingoli, Aundha (Nagnath)**,** Basmat were selected purposively on the basis of biomix beneficiary. From each of the selected talukas 4 villages was selected purposively. A total 12 villages were selected for the present study. From each village, selected 10 beneficiary was selected purposively, who are the biomix beneficiaries so, from each taluka total 40 beneficiary was selected. Hence, a total of 120 beneficiary was selected for the present study. An interview schedule was prepared in view of the objectives of the study and data were collected by personal interview of the selected respondents.

Results and Discussion

Table 1: Distribution of biomix beneficiary according to their overall perceived effectiveness. **(N=120)**

SL. No.	Category	Frequency	Percentage
1.	Low (up to 38)	25	20.83
2.	Medium (between 39 to 44)	42	35.00
3.	High (45 and above)	53	44.17
	Total	**120**	**100.00**

Table 1 revealed that nearly (44.17%) belonged to high level of perceived effectiveness category, while 35.00 per cent from medium level of perceived effectiveness category and only 20.83 per cent beneficiary belonged to low level of perceived effectiveness category. Similar findings were noticed by Lawankar (2019) and Gore (2022).

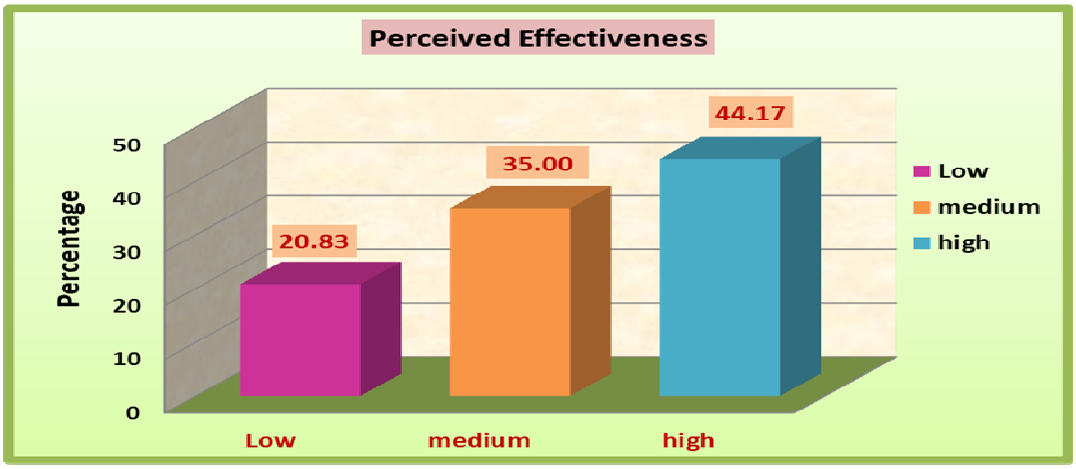

Table 2: Distribution of biomix beneficiary according to perceived effectiveness of biomix among beneficiary of turmeric growers (N = 120)

SL. No.	Effectiveness of biomix among turmeric growers	Very effective	Per cent	Effective	Per cent	Not effective	Per cent
1.	Use of biomix consortium in turmeric and other crops.	70	58.33	31	25.83	19	15.83
2.	Increase germination capacity after using biomix.	58	48.33	43	35.83	19	15.83
3.	Biomix improves the soil properties and maintain soil fertility.	53	44.17	58	48.33	09	7.50
4.	Controlling soil salinity problem.	66	55.00	39	32.50	15	12.50
5.	Use of biomix increases the availability of nutrient in the soil.	57	47.00	54	45.00	09	7.50

6.	Given knowledge regarding use/ handling of biomix is effective.	65	54.17	44	36.67	11	9.16
7.	Biomix can reduce other fertilizer's cost.	53	44.17	52	43.33	15	12.50
8.	Using biomix for seed treatment is effective.	57	47.50	54	45.00	09	7.50
9.	After using biomix, quality of roots and colour of leaves get improved.	52	43.33	52	43.33	16	13.34
10.	Use of biomix improves the tuber size, shape and number.	38	31.67	61	50.83	21	17.50
11.	Applying biomix controls diseases, pests and white grub.	57	47.50	49	40.83	14	11.67
12.	Applying biomix on turmeric increase the quality, production and profit.	39	32.50	66	55.00	15	12.50
13.	Biomix is cost effective.	37	30.83	57	47.50	26	21.67
14.	Growth of natural enemies of pests is not affected.	56	46.67	52	43.33	12	10.00
15.	Biomix is best alternative for chemical pesticides, fertilizers etc.	33	27.50	67	55.83	20	16.67
16.	Biomix is target specific and safe to beneficial micro –organisms.	51	42.50	60	50.00	09	7.50
17.	Spraying of biomix in early stage of turmeric reduces the attack of leaf spot.	36	30.00	68	56.67	16	13.33
18.	Effective of biomix on crop and obtaining good results are you suggest to other farmers to use biomix.	59	49.17	47	39.16	14	11.67

Conclusion

It is concluded that from the present study biomix beneficiary of turmeric growers, it was observed that majority 64.17 per cent of beneficiary had medium farming experience, secondary level of education 35.83 per cent, occupation (cultivation) 57.50 per cent, semi-medium land holding 36.67 per cent, medium annual income 65.00 per cent, medium socio economic status 61.67 per cent, medium social participation 54.17 per cent, medium source of information 60.00 per cent, medium level of extension contact 62.50 per cent, medium level of risk orientation 56.67 per cent, medium level of scientific orientation 58.33 per cent, medium level of innovativeness 60.83 per cent, medium level of knowledge 58.33 per cent and medium level of adoption 57.50 per cent. It can be concluded from the above table that majority of the biomix beneficiary had high level of perceived effectiveness of biomix among beneficiary of turmeric growers the rational analysis of selected characteristics showed that farming experience, education, occupation, land holding, annual income, socio economic status, social participation, sources of information, extension contact, risk orientation, scientific orientation, innovativeness, knowledge, adoption influenced the perceived effectiveness of biomix among beneficiary of turmeric growers.

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