

PERCEPTION OF FARMERS ABOUT GIR SAWAJ BRAND BIOFERTILIZERS AND BIOPESTICIDES

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ABSTRACT

There is great need to increase farm production to overcome the requirement of food for increasing population without damaging the environment. The more use of chemical fertilizers are harmful to living soil and therefore the use of biofertilizers and biopesticide are required to improve the soil fertility without any harmful effect to the soil also biopesticides are required to control of pest without harmful effect to environment. Keeping these points in view an attempt has been made to study the evaluative perception of farmers about biofertilizer and biopesticides in Rajkot district of Saurashtra region with 120 “Gir sawaj” brand biofertilizer and biopesticides users. The study revealed that more than half (61.67 per cent) farmers belonged to medium evaluative perception about biofertilizer followed by 20.00 belonged to low level evaluative perception. Distribution of respondents according to their various dimensions of evaluative perception about ‘Gir sawaj’ biofertilizers in which, the overall evaluative perception about ‘Gir sawaj’ biofertilizers of respondents was significant. But sustainability and flexibility dimension of evaluative perception of ‘Gir sawaj’ biofertilizers was non-significant. Majority (68.33 per cent) of farmers were from medium level of evaluation perception about Gir sawaj brand biopesticides followed by high level of evaluation perception. In case of distribution of respondents in different dimension of evaluative perception, overall perception found to be significant but flexibility dimension of evaluative perception of ‘Gir sawaj’ biopesticides was non-significant.

Keywords : evaluative perception, biofertilizer, biopesticides,

INTRODUCTION

Economic status of the people in country like India mostly depends upon the agricultural production. Need for more intensive and economic agricultural production led to indiscriminate use of high doses of chemical fertilizers, pesticides etc., Relentless use of these chemicals not only alter the eco-system but also claim death to many lives every year due to their hazardous nature. Biofertilizers are used to improve the fertility of the land by using biological wastes and biological wastes do not contain any chemicals which are harmful to the living soil. Biofertilizers generate plant nutrients like nitrogen and phosphorus through their activities in the soil and make available to plants in gradual manner. They are beneficial in enriching the soil with microorganisms which increases quality of nutrient in soil and also impart strength to combat with diseases (Savci 2012). Biopesticides are certain types of pesticides derived from such natural materials as animals, plants, bacteria, and certain minerals. Microbial pesticides consist of a microorganism like bacterium, fungus, virus or protozoan as the active ingredient. Microbial pesticides can control many different kinds of pests, although

each separate active ingredient is relatively specific for its target pests and disease. (Abhilash and Singh, 2009)

Junagadh Agricultural University developed Rhizobium, Azotobacter and Phosphate Solubilizing Bacteria and released two type of biopesticide Trichoderma harzianum and Beauveria bassiana as trade name ‘Gir sawaj’. Junagadh Agricultural University provide facility to buy ‘Gir sawaj’ biofertilizers at university campus, KVKs (Krishi Vigyan Kendra) and various NGOs (Non-Government Organizations) to the farmers. Looking to the above points it is necessary to know the farmers perception in terms of simplicity, profitability, efficiency, flexibility, complexity, observability, cost effectiveness, sustainability about “Gir sawaj” brand biofertilizer and biopesticides.

OBJECTIVES

- (1) To study the evaluative perception of farmers about “Gir sawaj” brand biofertilizer and biopesticides
- (2) To know the distribution of respondents as per various

dimensions of evaluative perception about “Gir sawaj” brand biofertilizer and biopesticides

METHODOLOGY

A village-wise list of “Gir sawaj” brand biofertilizer and biopesticides users obtained from department of plant pathology and department of agricultural entomology of Junagadh Agricultural University. From the list 120 farmers were selected by using proportionate random sampling method from twelve villages of three taluka of Junagadh districts. Junagadh Agricultural University developed biopesticides for benefit of farmer and environment. Also location of agricultural university in Junagadh itself, so selling and using of products occurs more in the district. The present study carried out in Junagadh district of Gujarat. For the measurement of evaluative perception a scale developed by Patel (2005) was used with due modification. The

respondents were asked to give their response for each dimension towards ‘Gir sawaj’ biofertilizers and biopesticides in continuum. The evaluative perception on each of these dimensions was obtained by adding scores. Thus weightage score obtained and ranked each dimension on highest score.

RESULTS AND DISCUSSION

Evaluative perception of respondents about ‘Gir sawaj’ biofertilizers and biopesticides

Evaluative perception is defined as the meaningful sensation of the respondent about worth, efficiency or value of ‘Gir sawaj’ biofertilizers in terms of the dimensions, simplicity, profitability, efficiency, flexibility, complexity, observability, cost effectiveness and sustainability, based on their experience with the practice.

Table 1 : Distribution of respondents according to their evaluative perception about ‘Gir sawaj’ biofertilizers and biopesticides

Sr. No.	Category	Biofertilizer users (n=60)		Biopesticides users (n=60)	
		Frequency	Percent	Frequency	Percent
1	Low level of Evaluative perception	12 (up to 11.23 score)	20.00	9 (up to 13.20 score)	15.00
2	Medium level of Evaluative perception	37 (11.24 to 20.27 score)	61.67	41 (13.21 to 22.02 score)	68.33
3	High level of Evaluative perception	11 (Above 20.27 score)	18.33	10 (Above 22.02 score)	16.67
		Mean = 15.75	S.D. = 4.52	Mean = 17.61	S.D. = 4.41

It is observed from the Table 1 that nearly two fifth (61.67per cent) of the farmers had medium level of evaluative perception towards ‘Gir sawaj’ biofertilizers followed by 20.00 per cent of farmers had low level of evaluative perception. While 18.33 per cent of farmers had high level of evaluative perception. Thus, it can be concluded that all most all farmers had medium to low level of evaluative perception towards ‘Gir sawaj’ biofertilizers.

In case of biopesticides, it is also revealed that nearly two fifth (68.33 per cent) of the farmers had medium level of evaluative perception towards ‘Gir sawaj’ biopesticides followed by 16.67 per cent of farmers had high level of evaluative perception. While 15.00 per cent of farmers had low level of evaluative perception. Thus, it can be concluded

that all most all farmers had medium to high level of Evaluative perception towards ‘Gir sawaj’ biopesticides.

This finding is in line with the findings of Patel (2005).

Distribution of respondents as per various dimensions of evaluative perception about Gir sawaj brand biofertilizer and biopesticides

For the distribution of respondents as per various dimensions of evaluative perception, the responded were classified according to strongly agree, agree, undecided, disagree and strongly disagree as per categories of evaluative perception’s dimensions like simplicity, profitability, efficiency, sustainability, input availability and flexibility.

Table 2 : Distribution of respondents according to their evaluative perception about 'Gir sawaj' biofertilizers and biopesticides as per various dimensions

Sr. No.	Dimension	Biofertilizer users (n=60)		Biopesticide users (n=60)	
		WMS	Rank	WMS	Rank
1	Simplicity	4.02	I	4.07	I
2	Profitability	3.40	III	3.63	III
3	Efficiency	3.17	IV	3.17	IV
4	Sustainability	2.57	V	3.15	V
5	Input availability	3.43	II	3.85	II
6	Flexibility	2.53	VI	2.85	VI
Agreed mean>3.00		Pooled mean= 3.19*		Pooled mean = 3.45*	

It is clearly indicated from Table 2 that among the six dimension of evaluative perception of biofertilizer users, simplicity (mean = 4.02) got rank first, at second rank possessed by input availability (mean = 3.43), at third rank profitability (mean = 3.40), efficiency (mean = 3.17) got fourth rank, sustainability (mean = 2.57) was on fifth rank and flexibility (mean=2.53) was on sixth rank. From that simplicity (mean = 4.07) got rank first, at second rank possessed by input availability (mean = 3.85), at third rank profitability (mean = 3.63), efficiency (mean = 3.17) got fourth rank, sustainability (mean = 3.15) was on fifth rank and flexibility (mean=2.85) was on sixth rank respectively.

The overall weightage mean score of biofertilizer users was 3.19 and agreed mean score was 3.00, so evaluative perception about 'Gir sawaj' biofertilizers of respondents is significant. Sustainability and flexibility of evaluative perception of 'Gir sawaj' biofertilizers is non-significant. While in case of biopesticides weighted mean score is 3.45 and agreed mean score is 3.00 so evaluative perception about 'Gir sawaj' biopesticides of respondents was significant. Flexibility dimension of evaluative perception of 'Gir sawaj' biopesticides was non-significant.

CONCLUSION

Farmers are aware about harmful effect of use of chemical fertilizer and conventional pesticides and now a day they are starting to use of biofertilizer and biopesticides. The study revealed that more than half (61.67 per cent) farmers

belonged to medium evaluative perception about "Gir sawaj" brand biofertilizer. Distribution of respondents according to their evaluative perception about 'Gir sawaj' biofertilizers as per various dimensions in which, the overall evaluative perception about 'Gir sawaj' biofertilizers of respondents was significant. But sustainability and flexibility dimension of evaluative perception of 'Gir sawaj' biofertilizers is non-significant. Majority (68.33 per cent) of farmers were from medium level of evaluation perception about Gir sawaj brand biopesticides followed by high level of evaluation perception. In case of distribution of respondents in different dimension of evaluative perception, overall perception found to be significant but flexibility dimension of evaluative perception of 'Gir sawaj' biopesticides is non-significant.

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Received : April 2020 : Accepted : July 2020