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Chilli Growers' Brand Preference And Loyalty Towards Insecticide Companiesin Rajkot District Of Gujarat

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ABSTRACT

The study was mainly based on primary data, which were collected through personal interviews with the help of a structured survey schedule. Total of 20 dealers and 120 growers were selected for the study. The factors influencing chilli grower's brand preference towards insecticides were found to be highest with the price and quality of insecticides. Among the most popular insecticide brands, the first preference was given to Profex super of Nagarjuna Agrichem Limited. The majority of chilli growers were loyal towards dealers (80.83%) and brands (85.00%) of insecticides. Credit availability and efficiency were found the most important factors affecting the dealer loyalty and brand loyalty of chilli growers respectively. The majority of chilli growers faced major constraints in purchasing of insecticides *i.e.,* the high price of insecticide followed by the low effectiveness of insecticides. Dealers faced major constraints of competition among dealers followed by low margins. From the study it can be suggested that the insecticide companies should supply good quality insecticide at affordable price with effective field demonstrations which may attract both dealers and growers to become brand loyal and can identify the adulterations in insecticides. Companies should also keep growers updated with the latest schemes and benefits launched.

Key words: Insecticide, Brand Preference, Brand Loyalty, Dealer's Loyalty, Constraints, Garrett's ranking and Chilli, and Growers

INTRODUCTION

Pesticides are extensively used in modern agriculture and are an effective and economical way to enhance yield quality and quantity, thus ensuring food security for the ever-growing population around the globe. Approximately, 2 million tonnes of pesticides are used per annum globally, whereas China is the foremost contributing country, followed by the USA and Brazil. However, by the year 2020, global pesticide usage has been estimated to increase up to 3.5 million tonnes (Sharma *et.al.* 2019). India is the predominant exporter of pesticides to Brazil, USA and Bangladesh with quantities 1,29,942 MT, 85,577 MT and 36,618 MT respectively. Apart from fertilizers, pesticides played an important role in the green revolution during the last five decades. Indian exports of agrochemicals have shown impressive growth over the last five years (DPPQs).

The term vegetable usually refers to the

edible portions of certain herbaceous plants. These plant parts are either eaten fresh or prepared in several ways. Regular and adequate intake of different kinds of vegetables such as edible roots, stems, leaves, fruits, or seeds helps us maintain good health. On the other hand, reduced consumption of quality vegetables often causes communicable diseases including cardiovascular diseases and certain types of cancer. Vegetables are important sources of vitamins, minerals, and antioxidants providing human health benefits. Regular intake of the recommended amount of vegetables leads to sound health (Asaduzzaman and Asao, 2018). China was the leading producer with a production volume of over 600 million metric tonnes, followed by India. West Bengal is the largest state in area and production of vegetables respectively 1511.78 hectare and 30330.77 MT followed by the Uttar Pradesh, Madhya Pradesh, Bihar and Gujarat.

Chilli fruits are rich in vitamins A, C and E. In recent days, apart from its medicinal value, it has gained popularity as a vegetable and spice crop as it prevents heart attack by dilating blood vessels (Madala and Nutakki, 2020). India is the largest producer with 20.49 lakh tonnes and contributes 43.00 per cent of world chilli production, followed by Bangladesh, Thailand, China and Ethiopia during the year 2021. Andhra Pradesh was the largest chilli producer with 177.46 ha area and 796.65 MT production in year 2021 among other states across India, followed by Telangana, Madhya Pradesh, Karnataka and Orissa. Whereas Gujarat has the eighth rank in the production of chilli. Rajkot is one of the famous chilli growing district of Gujarat. Rajkot district occupies first position in terms of area and production of chilli crop. The present study aimed to analyse the insecticide brand and dealer loyalty andstudy the brand preference of chilli growers towards insecticides and constraints faced by chilli growers and dealers.

MATERIALS AND METHODS

The study was mainly based on primary data, which were collected through personal interviews with the help of a structured survey schedule. A multi-stage sampling method was adopted as an appropriate sampling procedure for the study. In the first stage, Rajkot district was purposively selected for the study. Rajkot district had 1st rank in area and production of chilli crop in overall Gujarat state. At the second stage, four talukas from Rajkot district were selected purposively *i.e.,*Gondal, Jamkandorna, Upleta and Dhoraji as these four talukas have higher areas under chilli crop cultivation. In the third stage, from each taluka, five villages were selected on the basis of a pilot survey. From each village, six chilli growers were randomly selected. The dealers were selected based on the extent of purchase of insecticides for chilli crops by the growers. Hence, a total of 20 dealers were selected to obtain the information required for the study. The percentage method was used for the analysis of brand preference and a similar method was used by Moksha *et. al*, (2017). Garrett's ranking method was used for performing an analysis of constraints faced by growers and dealers and similar method was adopted by Kumar *et al.,* (2019), Sharma *et al.,* (2020) and Zalkuwi *et al.,* (2015). As per this method, respondents

were asked to assign the rank for all the factors and the outcome of such ranking was converted into score value with the help of the following formula:

$$\text{Percent position} = \frac{100(R_{ij} - 0.5)}{N_j}$$

Where,

Rij= Rank given for ith factor by jthindividual

Nj = No. of factors ranked by the jth individual

RESULTS AND DISCUSSION

1) Brand preference of chilli growers towards insecticides

The chilli grower's brand preference towards insecticides found to be highest with price (74.17%) followed by quality (66.67%), readily available (65.00%), effective and easy to use (61.67%), brand image (60.83%), retailer's influence (55.00%), packaging (29.17%) and advertisements (19.17%).

Table 1: Distribution of factors influencingon chilli growers' preference for the selected insecticide brands (n=120)

Sr. No.	Factors	Frequency	Percentage
1	Retailers influence	66	55.00
2	Quality	80	66.67
3	Price	89	74.17
4	Readily available	78	65.00
5	Brand image	73	60.83
6	Packaging	35	29.17
7	Effective and easy to use	74	61.67
8	Advertisements	23	19.17

Table 2: Distribution of insecticide brands preferred by chilli growers (n=120)

Sr. No.	Brands	Frequency	Percentage
1	Proking	19	15.83
2	Acephate	06	05.00
3	Profex super	31	25.83
4	Fosmite	08	06.67
5	Star gazette	12	10.00
6	Movento	26	21.67
7	Others	18	15.00
	Total:	120	100.00

The Table 2 indicats that among the most popular insecticide brands, the first preference was given to Profex super of Nagarjuna Agrichem Limited (25.83%) by the sample chilli growers followed by Movento brand of Bayer Crop Science company (21.67%) and Proking of United Insecticide Pvt. Ltd. company (15.83%) as their second and third preference respectively. The other brands like Omite and Fix of DhanukaAgritech Limited (15.00%), Star gazette brand of SWAL Corporation Limited (10.00%), Fosmite brand of PI Industry Ltd. (06.67%) and

Acephate brand of United Insecticide Pvt. Ltd. company (05.00%) were also popular among the chilli growers in the study area.

2) Insecticide brands and dealers loyalty of chilli growers

Table 3: Distribution of the chilli growers according to dealer loyalty (n=120)

Sr. No.	Dealer loyalty	Frequency	Percentage
1	Loyal	97	80.83
2	Disloyal	23	19.17
	Total:	120	100.00

Results showed that 80.83 per cent of farmers were loyal towards dealers whereas 19.17 per cent were disloyal. Thus, it is inferred that most of the chilli growers preferred buying insecticides from the same dealer rather than buying from different dealers.

Table 4: Distribution of factors affecting on loyalty of chilli growers towards dealers (n=97)

Sr. No.	Factor	Frequency	Percentage
1	Credit availability	84	86.60
2	Availability of brand	73	75.26
3	Goodwill of dealer	70	72.16
4	Discount	61	62.89
5	Price	50	51.55
6	Distance	21	21.65

Results depicted that credit availability was the most important factor affecting dealer loyalty with 86.60 per cent followed by availability of brand (75.26%), goodwill of the dealer (72.16%), discount (62.89%), price (51.55%) and distance (21.65%).

Table 5: Distribution of the chilli grower according to brand loyalty (n=120)

Sr.No.	Brand loyalty	Frequency	Percentage
1	Loyal	102	85.00
2	Disloyal	18	15.00
	Total:	120	100.00

Table 6: Distribution of factors affecting on loyalty of chilli growers towards brand (n=102)

Sr. No.	Factor	Frequency	Percentage
1	Price	77	75.49
2	Efficiency	90	88.24
3	Availability of brand	87	85.29
4	Packaging	41	40.20
5	Advertisement	41	40.20

Results revealed that most of the chilli growers (85.00%) were brand loyal, whereas 15.00 per cent were not loyal to the brand. This finding is in accordance with the finding of Rohini and Padmanaban (2000), they were also reported that most of the growers were loyal towards brands.

From Table 6, efficiency was found the most important factor affecting brand loyalty with 88.24 per cent followed by availability of brand (85.89%) and price (75.49%). It can be further seen from the table that the advertisements (40.20%) and packaging (40.20%) have a small role in brand loyalty and similar results were reported by Rohini and Padmanaban (2000).

3) Constraints faced by the chilli growers and dealers

Table 7: Constraints faced by chilli growers during the purchase of insecticides (n=120)

Sr. No.	Constraints faced by growers	Garrett's score	Rank
1	High price of insecticides	61.50	I
2	Low effectiveness of insecticides	57.33	II
3	Unavailable on time	55.58	III
4	Unavailability of particular brand	52.65	IV
5	Packaging	48.29	V
6	Wrong information	47.42	VI
7	More distance to point of purchased of insecticides	24.03	VII

The results of study showed that chilli growers faced the major constraint as high price of insecticides followed by low effectiveness of insecticides, unavailable on time, unavailability of particular brand, packaging, wrong information and more distance to point of purchased insecticides and similar results have been reported by Prajapati *et. al.* (2016).

Table 8: Constraints faced by dealers during selling of insecticides used for chilli crop (n= 20)

Sr. No.	Constraints faced by dealers	Garrett's score	Rank
1	Competition among dealers	67.75	I
2	Low margin	60.40	II
3	Lack of field staff	58.25	III
4	Growers unable to pay back on time	56.80	IV
5	Less number of brands available	45.25	V
6	Lack of promotional schemes	31.35	VI
7	High cost of advertisement	29.20	VII

The results of the study revealed that major constraints faced by dealers were competition among dealers followed by low margin, lack of field staff, growers unable to pay back on time, less number of brands available, lack of promotional schemes and high cost of advertisement.

CONCLUSION

The study found that price and quality factors play crucial role in influencing chilli growers' preference towards insecticide brands for chilli crops. Profex super of Nagarjuna Agrichem Limited company and

movento brands of Bayer Crop Science company insecticides majorly preferred by chilli growers. Most of the chilli growers were loyal towards dealers and brands of insecticides. Credit availability was the most important factor that affected the sampled chilli growers' loyalty towards dealers. Efficiency and availability of brands both the factors have a greater percentage and maximum role in the brand loyalty of chilli growers. The factors influencing chilli grower's brand preference towards insecticides were found to be highest with the price and quality of insecticides. The insecticide companies should supply good quality insecticide at affordable price which may attract both dealers and growers to become brand loyal. The majority of chilli growers faced major constraints in purchasing insecticides *i.e.,* high price of insecticide followed by low effectiveness of insecticides. It is observed that dealers faced major constraints of competition among dealers followed by low margins. Companies should plan for effective field demonstrations, so that, chilli growers can get the knowledge to identify the adulterations in insecticides and important steps to be taken care of before use. Companies should also keep growers updated with the latest schemes and benefits launched time to time.

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