



STUDY ON BRAND AWARENESS AND CONSUMER'S BUYING BEHAVIOUR OF Fisto Fipronil (Nichino) INSECTICIDE IN MUZAFFARNAGAR DISTRICT OF UTTAR PRADESH

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ABSTRACT

This study focused on the brand awareness and consumer's buying behaviour of Fisto Fipronil insecticide in Muzaffarnagar District of Uttar Pradesh. A sample of 110 respondents from 3 randomly selected villages were selected for the study. The study revealed several factors influencing in consumer buying behaviour and brand awareness of Fisto Fipronil in the study area such as marketing and advertising, product packaging and design, performance and quality, brand reputation, distribution of insecticides, availability of insecticides, price and value proposition, and social media presence. The study found that around 13.63% of farmers prefer buying a product based on brand reputation, 16.36% on performance and quality, and 09.09% on product packaging and design, 10.00% on distribution and followed by farmer prefer Fisto Fipronil over factor like availability, social media presence etc. Based on the availability factor, 57.25% of respondents indicated availability at wholesaler shops. Under the quality factor, 50.90% of respondents indicated that Fisto Fipronil is curative in nature. Under price factor, 60% of respondents indicated that the price of the Fisto Fipronil is medium as compared to the other insecticide available in the area. Under packaging category, most respondents (44.55%) indicated small pack. Under performance category, 33.63% respondents indicated that the performance of the insecticide was excellent.

Keyword: Brand Awareness and Consumer's Buying Behaviour

INTRODUCTION

Over 70% of India's population is employed in or dependent upon the agricultural industry, which is vital to the country's economy. Increasing industrial output and productivity requires the use of Insecticide, which include fungicides, rodenticides, molluscicides, nematocides, and plant growth regulators (Ajay 2019). Due to its

effects, organochlorine (OC) Insecticide—which were once widely used to treat typhoid and malaria—have been banned or subject to limitations in many industrialised countries; in contrast, their usage is less than 1 kilogramme per acre in nations like the US and Japan. There are obstacles in reducing food crop losses, which now stand at 35–

45% as a result of pests, illnesses, and inadequate storage facilities (Bhattacharya 2018). These constraints include limited knowledge, resources, and available land. With 13th-place exports and fourth-place agrochemical production after the US, Japan, and China, India has become a major participant (Anwar, 2019). In 2020, the Indian herbicide market was estimated to be worth ₹ 232 billion. Applying Insecticide to seeds, soil, irrigation water, and crops at recommended dilution levels is essential for managing pests, weeds, and diseases. India's reliance on agriculture and its ability to produce and export pesticides highlight the need for better storage, efficient weed control, and methods to reduce food grain waste. These factors led to the conducting of a study titled "Study on Brand Awareness, and Consumer Buying Behaviour of Insecticide (Fisto Fipronil) in Muzaffarnagar District, Uttar Pradesh" with four main goals: identifying the socioeconomic profile of herbicide users among farmers; analysing factors influencing consumer purchasing decisions; assessing barriers in herbicide marketing; and examining the herbicide market and brand awareness. This two-month study was carried out in a few villages in Shahpur block in Muzaffarnagar district of Uttar Pradesh

RESEARCH METHODOLOGY

The methodology used to select the district, the blocks, the villages and the respondents was purposively cum random sampling. The district of Muzaffarnagar was selected in order to avoid the inconvenience and time constraints on the investigator. All the blocks falling within the district of

Muzaffarnagar were selected, and the block of Shahpur was selected based on the majority of respondents involved in sugarcane cultivation. A separate list of villages was prepared for the selected block, and five percent of the villages from the selected block with a high number of respondents cultivating sugarcane were randomly selected. From the villages, a list of all Sugarcane cultivating farmers was prepared and then broken down into five size categories based on their land holding size. Marginal (less than 1 hectare), Small (1-2 hectares), Semi-medium (2-4 hectares), Medium (4-6 hectares), and Large (more than 10 hectares) were the size groupings. Using proportional random selection, 120 farmers who were cultivating sugarcane were chosen at random from the list. From the wholesalers/traders/retailers, 5 each were selected to study brand awareness and consumer buying behaviour in the study area. Primary data was collected through suitable designed schedule. Secondary data was collected from books/journal/report/records of district/blocks headquarters. Data from respondents were collected through survey methods via direct personal interview. Statistical tools were used to analyse the data and present the result. Data pertained to the agricultural year of 2023-2024.

ANALYTICAL TOOLS

Likert scale

Likert scale (2, 4, 5, or 7) is a common classification format used in studies. Respondents rank a product or service's quality (data) from highest to lowest, and from better to worse.

RESULT AND DISCUSSION

Table 1: Brand awareness of Fisto Fipronil in the study area.

Categories	Respondents Number	Respondents					Percentage (%)
		Marginal	Small	Semi- medium	Medium	Large	
Brand Reputation	29	9	6	3	4	1	20.90
Performance and Quality	19	5	4	3	3	3	16.36
Product Packaging and Design	15	4	5	2	2	2	13.63
Distribution Availability	14	2	3	5	2	2	12.72
Social Media Presence	13	5	3	2	2	1	11.81
Marketing and Advertising	11	4	2	2	2	1	10.00
Price and Value Proposition	10	4	1	1	2	2	09.09
Total	120	34	25	21	18	12	100.00

Table 1, demonstrates that various factors, as reported by various categories of respondents, influence the degree of brand awareness of Fisto-fipronil in the study area. These factors include brand reputation (20.90%), performance and quality (16.36%), product packaging and design (13.63%), insecticide distribution (12.72%), availability of insecticide (11.81%), social media presence (10.00%), marketing and advertising (09.09%), and price and value proposition (05.45%).

Table 2: The breakdown of respondents based on Fisto-Fipronil availability.

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi medium	Medium	Large	
Availability of Fisto-Fipronil	Wholesaler	63	23	17	14	4	5	57.27
	Retailer	42	11	7	5	13	6	38.18
	Online	05	0	1	2	1	1	04.55
Total		110	34	25	21	18	12	100.00

Table 2, indicates that the availability of Fisto-Fipronil at wholesaler shops (57.27%), retailer shops (38.18%), and online platforms (04.55%) was found to be a factor influencing the purchasing Behaviour of respondents across various categories during the study.

Table 3: Fisto-Fipronil Quality Distribution

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi- medium	Medium	Large	
Quality of Fisto- Fipronil	Preventive	56	17	14	13	5	7	50.90
	Curative	32	11	6	5	7	3	29.09
	Safe to Applicator	22	6	5	3	6	2	20.00
	Total	110	34	25	21	18	12	100.00

Table 3, shows that the study's findings on the quality factors influencing respondents' decisions to purchase Fisto-Fipronil in three separate categories—preventive (50.90%), curative (29.09%), and safe to apply (20.00%)—were made.

Table 4: How respondents are ranked based on Fisto-Fipronil price

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi- medium	Medium	Large	
Price of Fisto- Fipronil	Low	28	8	10	4	4	2	25.45
	Medium	66	19	13	15	12	7	60.00
	High	16	7	2	2	2	3	14.55
	Total	110	34	25	21	18	12	100.00

Table 4, shows that the study's findings indicate that price has an impact on respondents' purchasing decisions for Fisto-Fipronil in three separate categories: low price (25.45%), medium price (60.00%), and high price (14.55%).

Table 5: Packaging of Fisto-Fipronil breakdown of respondents.

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi- medium	Medium	Large	
Price of Fisto- Fipronil	Small pack	49	16	9	11	9	4	44.55
	Large pack	28	11	7	5	3	2	25.45
	Packet Quality	25	5	6	4	5	5	22.72
	Packaging quality	08	2	3	1	1	1	07.27
Total		110	34	25	21	18	12	100.00

Table 5, indicates that the study's findings about the impact of packaging factors on

respondents' purchasing decisions across many categories include availability in small packs (44.55%), big pack (25.45%), packet quality (22.72%), and package quality (07.27%). correspondingly

Table 6: Number of respondents based on Fisto-Fipronil Performance availability.

General	Categories	Respondents Number	Respondents					Percentage (%)
			Marginal	Small	Semi medium	Medium	Large	
Performance of Fisto- Fipronil	Poor	30	9	9	7	4	1	27.27
	Average	34	12	6	5	6	5	30.90
	Excellent	37	13	10	9	8	6	33.63
Total		110	34	25	21	18	12	100.00

Table 6, According to the study, there are performance factors that influence the purchasing decisions made by respondents in different categories. These factors include poor performance (27.27%), average performance (30.90%), and excellent quality (33.63%) of the product.

CONCLUSION

Currently, and in the near future, Insecticides have a promising future because the need for Insecticides is increasing year by year. The farmers rely on Insecticides which shows the increasing need for Insecticides. Farmers don't want to spend time in the field. They want easy solutions to any problem in the field. Therefore, they effectively use the Insecticides. The use of Insecticides and PGR helps the farmers to produce more crops. Therefore, they continue to use the Insecticides & PGR. The effectiveness of the Insecticides is due to the fact that they kill the target weed in less time. Maximum farmers are using the excessive amount of Insecticides. Some farmers claim that excessive herbicide use harms the field and they only use it when it is absolutely necessary for the crop. According to farmers, Insecticides are essential for the growth of the crop because without Insecticides, the crop cannot grow effectively. All stages of the plant, including leaves and stems, are attacked by Insecticides. Therefore, Insecticides are

necessary for farming purposes. Every farmer wants to get high yield for low investment. To get high yield, PGR is used. PGR provides all micro nutrients to Sugarcane and controls the growth of the relevant plant. Muzaffarpur is one of the top Sugarcane producing district. Sugarcane growers use agrochemicals from various companies like Syngenta, Dow, Bayer, Sumitomo, Dhanuka, UPL etc. On the whole, Nichino is performing well. However, we need to implement better promotion. In Muzaffarnagar area, Nichino has good chances of capturing market share. We need to increase our promotion activities in Muzaffarnagar area and focus on novel products. Nichino has a good brand image and reputation in the Muzaffarnagar region. We need to use these strengths to increase our market share and sales.

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