



BUYING BEHAVIOUR OF FARMERS TOWARDS PLANT GROWTH PROMOTERS IN CHITTOOR DISTRICT OF ANDHRA PRADESH

Y. ANANYA DEVI*, S. HYMA JYOTHI, I. BHAVANI DEVI AND P. LAVANYA KUMARI

Department of Agribusiness Management, Institute of Agribusiness Management,
S.V. Agricultural College, ANGRAU, Tirupati

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ABSTRACT

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The present study was to know the factors influencing the farmers buying behaviour towards plant growth promoters and constraints faced by farmers purchasing process in Chittoor district of Andhra Pradesh. Sample farmers were cultivating mango, tomato and chrysanthemum. Chittoor district was purposively selected as it occupies first place gross area sown in Andhra Pradesh. The analytical tools employed were percentages, Garrett's ranking technique and Likert's scale technique. Price was the major constraint while purchasing of plant growth promoters, awareness towards results of the plant growth promoters was high and not much aware of different types and brands of the plant growth promoters.

KEYWORDS: Buying behaviour, Garrett's ranking and Likert's scale

INTRODUCTION

Agriculture is the primary source of livelihood up to 58 per cent of India's population. With increasing population, demand for food and agricultural production is inevitable.

Apart from the essentials like oxygen, water, sunlight, it is the hormones that modulate the growth of individual plant parts and controls various physiological activities. The plant growth regulators are also called as plant growth hormones or phytohormones which are either synthesized in the laboratory or produced naturally within the plant. Plant growth regulators are of two major groups one that promotes the growth and the other that retards the growth of the plants. The global market of plant growth regulators is driven by declining farming area coupled with increasing demand for organic food. The Humic acid global market is estimated to grow by CAGR of 14 percent by 2026 from 510.9 million USD in 2018. (Anonymous, 2018). Agriculture application being the largest segment with 55 percent market share. (Anonymous, 2022.) The common source of purchasing the plant growth promoters by farmers is through local dealers. Dealers not only sell to farmers but also play important role in the source of information about the products and their distribution function, also influencing the amount and type of plant growth promoters used by farmers. Buying decision is a set of many decisions which may involve a product, brand,

quality, dealers, time and price. The objective was set to study the buying behaviour of farmers and constraints faced by them in purchasing plant growth promoters.

MATERIAL AND METHODS

For this study Chittoor district was purposively selected as it occupies first place gross area sown in Andhra Pradesh. Two mandals of Chittoor district were selected. Three villages from each mandal were identified and from each village 10 farmers were selected randomly, making a sample size of 60 farmers. A well framed schedule was developed based on objectives. Primary data was collected using personal interview method. The data was collected for the month of August and the year 2021. Secondary data required was collected from authenticated sources and other e-resources. Descriptive statistics and appropriate statistical tools like percentage analysis, Garrett's ranking, Likert's scaling were employed in the study.

RESULTS AND DISCUSSIONS

Factors influencing and constraints faced by the farmers towards plant growth regulators

For farmers major source of information about plant growth promoters were dealers. Most of the farmers prefer credit sales, if credit sales were not available, most of the farmers had switched to dealers those providing credit

*Corresponding author, E-mail: ananyayalla2468@gmail.com

Buying behaviour to farmers in purchasing plant growth promoters

(70.00%) and if required brand is not available majority of the farmers were shifting to other brand (82.00%) and only (12.00%) of them wait for the required brand (Yeshwanth *et al.*, 2019).

Table 1. Farmer's decision during the non-availability of required plant growth promoter brand

Variable	No. of farmers	Percentage
Switch over to other dealers	42	70.00
Credit source from others	10	17.00
Reduce the quantity of application	8	13.00
Shift to other brands	53	82.00
Wait for the required brand	7	12.00
Total	60	100.00

Table 2 revealed that regarding the source of information was through dealers as farmers were not much aware of plant growth promoters, relying on dealers followed by progressive farmers, department of agriculture, company representatives, communication media, kisan call centers and cooperative societies were ranked least as there were no such provisions for farmers (Gaikwad and Jirali, 2016).

Table 3 depicted that most of the farmers were purchasing plant growth promoters from private dealers as they were getting information of plant growth promoters, followed by both the sources from private dealers and agriculture department, among them farmers highly preferring private dealers alone, agriculture department and cooperative societies alone were least ranked as they were not aware of such provisions (Yeshwanth *et al.*, 2019).

Table 2. Source of information on plant growth promoters

Particulars	Total score	Garrett's mean score	Rank
Department of agriculture	3406	56.76	3
Cooperative society	1494	24.90	7
Progressive farmers	4194	69.90	2
Kisan Call Centre	1806	30.10	6
Plant growth promoter dealers	4506	75.10	1
Communication media	2713	45.21	5
Company representatives	2874	47.90	4

Constraints faced by the farmers during plant growth promoters purchase from private dealers

Table 4 revealed that the major constraint faced by the sample farmers was high price of plant growth promoters followed by high interest on credit as most of the farmers in the study area were purchasing plant growth promoters on credit basis and dealers making it as an advantage, they imposing high price for the borrowed. The other constraints were in the order offer of adulteration, poor quality of the products, no discount during bulk purchases which was not forth coming, lack of credit availability, and non-availability of preferred brands (Dharmaraj *et al.*, 2013 and Jain *et al.*, 2017).

Awareness of farmers towards plant growth promoters

Table 5 depicts that sample farmers awareness was first ranked among the factors was effect of plant growth promoters on crops, followed by usage methods, time of usage, followed by dosage of plant growth promoters and least ranked on the awareness of different types and brands (Sreekanth, 2018).

1. Major source of information regarding plant growth promoters were dealers.

2. Majority of the plant growth promoters purchases were from private dealers on credit basis and shift over to dealer who provide credit if, credit sales were not available.

Table 3. Source of plant growth promoters purchase by sample farmers

Particulars	Total score	Garrett's mean score	Rank
From private dealers, agriculture department, cooperative society	3147	52.45	4
Only from cooperative society	1260	21.00	7
Both from private dealer and agricultural department	3630	60.50	2
Only from agriculture department	2580	43.00	5
Both from agriculture department and cooperative society	2040	34.00	6
Both from private dealers and cooperative society	3273	54.55	3
Only from private dealers	4675	77.91	1

Table 4. Constraints during the purchase of plant growth promoters from the private dealers

Particulars	Total score	Garrett's mean score	Rank
Poor quality products	3147	52.45	4
High interest on credit borrowing	3986	66.43	2
Preferred brands are not available	1260	21.00	7
High price	4714	78.56	1
Fear of adulteration	3273	54.55	3
Lack of credit availability	2193	36.55	6
No discount	2418	40.30	5

Table 5. Awareness of farmers on usage of plant growth promoters

Particulars	Completely aware		Moderately aware		Aware upto some extent		Unaware		Total Score	Mean score	Rank
	NR	S	NR	S	NR	S	NR	S			
Usage methods	22	88	23	69	11	22	4	4	183	3.05	2
Plant growth promoter dosage	12	48	37	111	9	18	2	2	179	2.98	4
Different brands of plant growth promoters	18	72	25	75	13	26	4	4	177	2.95	5
Effect of plant growth promoters on plants	26	104	16	48	16	32	2	2	186	3.10	1
Time of usage	17	68	29	87	12	24	2	2	181	3.02	3
Different types of plant growth promoters	21	84	18	54	15	30	6	6	174	2.90	6

NR : No. of respondents, S : Score

Buying behaviour to farmers in purchasing plant growth promoters

3. If required brand was not available most of them were shifting to other brands, few of them were waiting for the required brand.

4. Most of the farmers were purchasing from private dealers only, none of them were purchasing from agriculture department or cooperative society exclusively.

5. High price was the major constraint faced by the farmers during the purchase of plant growth promoters from private dealers.

6. Farmers awareness was first ranked with effect of plant growth promoter on crops. Different kinds and different types of brands were ranked fifth and sixth respectively.

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