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# **Study on Brand Promotion of Pre-emergence Herbicide in Kurukshetra District of State Haryana, India**

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## **Authors' contributions**

*This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.*

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## **ABSTRACT**

The Present study was conducted in the year 2022 with a sample of 100 Rice farmers in Block of Pipli district of Kurukshetra. The study reveals that the market share of Syngenta India Ltd. was found to be on the top rank in the district. The market share and key existing competitors of Rifit Plus herbicide was found to be Top Star, Sokusai Plus, Pretigan, Milfast, Butaveer. A total quantity sale (Litres) in the district of all the herbicides was 26,500 litres. The lowest market share was found to be of Butaveer ranking on 6<sup>th</sup> position among all other competitors.

**Keywords:** Market share; key-existing competitors; brand awareness; customer perception.

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## **1. INTRODUCTION**

Agriculture is the backbone of Indian Economy. Ensuring food security for more than 1.23 billion Indian population with diminishing cultivable land resource is a herculean task. Paddy (*Oryza sativa*) is the major staple food for a large population of world's population especially in South and East Asia, 65% of the Indian population's major staple food is Paddy. Major share of paddy is cultivated during Kharif season. India has the largest area followed by China and Indonesia. In respect of production, India ranks second with 131 million tons of paddy next to China. Major paddy growing states in India are Andhra Pradesh, Bihar, Uttar Pradesh, Madhya Pradesh, Punjab, Haryana and West Bengal. West Bengal has the highest paddy production followed by Uttar Pradesh and Punjab. (Agriculture statistics at a glance 2018). Paddy is grown in different environment, depending upon water availability. Generally, paddy does not thrive in a waterlogged area. Yet it can survive and grow herein and it can also survive flooding. Paddy cultivation is well suited to countries and regions with low labour costs and high rainfall [1,2]. However, paddy can be grown practically anywhere, even on a steep hill or mountain area with the use of water controlling terrace system [3-5].

Since the beginning of agriculture, farmers have struggled with weed issues and solutions. Crop rotation and preventative measures replaced the comparatively labor-intensive and ineffective pre-agricultural revolution techniques. Farmers' capacity to lessen crop-weed competition was further enhanced by the development of mechanization tools and the advent of tractors. Pesticides used to kill undesirable plants are called herbicides, also referred to as weed killers. Selective herbicide kills particular targets while largely sparing the targeted crop [6-8]. Herbicide consumption in India is expanding quickly and might quadruple in the next three years as farmers in the rice crop are forced to grow their crops with greater care due to a severe labour shortage. Herbicides are and will continue to be crucial instruments in the management of weeds, even in areas where there are a lot of resistant weeds. Herbicide sales in India was about ₹45 billion (forty-five billion rupees) in 2021. Herbicide sales help many companies increase their profit. A company increases sales of product by Brand Promotion. Brand Promotion is a common marketing strategy intended to increase product awareness, customer loyalty, competitiveness,

sales and overall company value [9,10]. A primary objective with this strategy is to increase brand awareness, which is a measure of whether people know about a company's product, services and philosophies. The aim of the present study was to increase the brand promotion of pre-emergence herbicide in Kurukshetra district of State Haryana, India.

## **2. MATERIALS AND METHODS**

### **2.1 Selection of the District**

There are 22 District Haryana state. Out of this Kurukshetra district of Haryana was selected for the present study as Kurukshetra district is known as the 'Paddy Bowl of India'.

### **2.2 Selection of Block**

There are 7 blocks in the district. Out of these Pipli was selected purposively for the study.

### **2.3 Selection of Village**

A complete list of all villages of Pipli block was obtained from the block development office. Thus, out of total villages 10% of villages were selected randomly for the present study.

### **2.4 Selection of Respondents**

From the selected village list of all the Paddy farmers obtained from the village development office in each selected village. 100 farmers were considered as respondents for the present study. The selections were done by using simple random sampling method for the purpose of the study.

### **2.5 Analytical Tools**

#### **Garrett Ranking:**

Garrett's Ranking Technique is applied to study the preference, change of orders of constraints and advantages into numerical scores.

#### **(Garrett and Woodsworth, 1969):**

$$\text{Percentage position} = [100 (R_{ij} - 0.5)] / N_j$$

Where,

$R_{ij}$  = rank given for  $i^{th}$  problem by  $j^{th}$  individual  
 $N_j$  = number of problems ranked by the  $j^{th}$  individual

**Table 1. Main competitors and market share of paddy herbicides in Kurukshetra District**

Sr. No.	Trade Name	Manufacturer	Quantity Sales (Litre)	Market Share (%)	Rank
01	Rifit Plus	Syngenta	15,000	56.5%	1
02	Top Star	Bayer	2,250	8.5%	4
03	Sokusai plus	IFFCO-Mc	3,300	12.5%	2
04	Pretigan	Adama	1,930	7%	5
05	Milfast	IIL	2,300	9%	3
06	Butaveer	Chambal Fertilizer	1,720	6.5%	6
<b>Total</b>			<b>26,500</b>	<b>100</b>	

**Percentage Formula:**

The percentage formula is used to find the share of a whole in terms of 100. Using this formula, you can represent a number as a fraction of 100.

$$\text{Percentage} = (\text{Value}/\text{Total Value}) \times 100$$

$$\% \text{ increase} = [(\text{New number} - \text{Original number})/\text{Original number}] \times 100$$

**Market Share Formula:**

$$\text{Market Share (\%)} = (\text{Company Sales}/ \text{Total Market Sales})$$

### 3. RESULTS AND DISCUSSION

The result is a presentation of the findings of the given study, purely based on the objective:

- To assess market share of Rifit plus and other competitors in pre-emergence herbicide.

The Syngenta company is in competition with both national and multinational companies like Bayer, UPL, IFFCO-Mc, Adama, IIL, Chambal Fertilizer, Pesticide India, etc are some of the major competitors. These companies with early entry in business of Herbicide have large customers base and were able to capture more market share. Table 1 reveals that the highest market share i.e., 56.5% was found in Rifit Plus of Syngenta India. The IFFCO-Mc was the biggest competitor with the product Sokusai Plus contributing with 12.5% of market share and with 2<sup>nd</sup> rank followed by IIL company with product Milfast having market share of 9% ranking 3<sup>rd</sup>. The other competitor like Bayer (Top Star) with 8.5% share ranking 4<sup>th</sup> Adama (Pretigan) with 7% of market share and ranking 5<sup>th</sup>, Chambal Fertilizer (Butaveer) with 6.5% ranking 6<sup>th</sup>.

### 4. CONCLUSION

Agriculture is the backbone of Indian Economy. After China and Indonesia, India has the largest area. In terms of production, India ranks second with 131 million tons of paddy next to China. Andhra Pradesh, Bihar, Uttar Pradesh, Madhya Pradesh, Punjab, Haryana and West Bengal are the major paddy growing states in India. Herbicides, commonly known as weed killers, are and will be essential tools in weed management, even for those with a great number of resistant weeds. Herbicide sales help many companies increase their profit.

The market share of Herbicides in Kurukshetra district of Syngenta India Ltd. Company is about 15,000 litres. There are many competitors for the herbicide (Rifit Plus) in Pipli block of Kurukshetra district and the Syngenta (Rifit Plus) is the major player ranking on number 1 position followed by IFFCO-Mc (Sokusai Plus) 2<sup>nd</sup> ranking. IIL (Milfast rank on 3<sup>rd</sup> and other competitors like Bayer (Top Star) ranking 4<sup>th</sup>, Adama (Pretigan) and Chambal (Butaveer) on 5<sup>th</sup> and 6<sup>th</sup> position respectively.

### COMPETING INTERESTS

Authors have declared that they have no known competing financial interests or non-financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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