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Short Communication

CONSTRAINTS FACED BY THE Bt COTTON GROWER'S IN Bt COTTON CULTIVATION

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Introduction

The use of Bt cotton to control insect pests is not new. The insecticides containing Bt and its toxins have been sold for many years (Coben, 1999). What is new in Bt crop is that a modified version of the bacterial crygene has been incorporated into the plant's own DNA so that the plant's cellular machinery produces the delta endotoxin as a part of the plant's normal development. This has led to the production of insect resistant Bt transformed line of rice, cotton, corn, soyabean etc. Cotton is one of the important cash crops of India. India grew Bt cotton for the first time in 2002 with 54,000 farmers planting the crops on 45,000 hectares (Anonymous, 2003) looking to the recent introduction of Bt cotton, a study was conducted to know the constraints faced by the Bt cotton growers with following objectives.

(1) To identify the constraints faced by Bt. cotton growers.

(2) To seek suggestions form the Bt. cotton growers to overcome the constraints.

Methodology

The present study was carried out in Karjan, Sankhada, Dabhoi and Shinor talukas of Vadodara district of Gujarat state. Five cotton growing villages were randomly selected form each taluka. The total twenty villages were selected for the study and randomly eight Bt-cotton growers who had minimum one year experienced were selected from each village making a total sample of 160 respondents. For measuring constraints in Bt cotton cultivation simple frequency system was applied. The respondents were asked to give the information about the constraints faced by them. There after the frequency of each constraint as responded by the respondents was ascertained. The frequencies were converted into percentage and rank order was given from highest to lowest.

Results and Discussion

The data presented in table 1 clearly indicate that the major constraint faced by all the farmers was high price of seed, the other important constraint *viz*., heavy infection of sucking pests, improper vegetative growth and unsuitability for monsoon as the branches break down in rain were faced by 62.50, 53.12 and 50.00 per cent of the Bt cotton growers, respectively. The constraint which ranked last was difficulty in weed control, which was experienced by 38.75 per cent of the respondents.

Suggestions given by respondents to overcome the constraints

The suggestion were sought from the Bt cotton growers to overcome the constraints faced by them. Important suggestions are presented in table 2.

It is evident from the table 2 that all the respondents suggested that sucking pest resistant variety should be developed followed by seed should be available time and at low cost, which was given by 93.75 per cent of the respondents. Other suggestions were "Bt gene should be incorporated in desi variety." "Variety should be developed, which is suitable to all types of soil" and "Govt. should provide training to farmers", which were given by 62.50, 50.00 and 48.75 per cent of the Bt cotton growers, respectively.

Table 1 : Constraints faced by the Bt cotton growers.

(N = 160)

S. no.	Constraints	No.	Percentage (%)	Rank
1.	2.	3.	4.	5.
1.	High price of seed	160	100.00	I
2.	Heavy infestation of sucking pests	100	62.5	II
3.	Improper vegetative growth	85	53.12	III
4.	Not suitable for monsoon because branches break down due to rain	80	50.00	IV
5.	Difficulty in weed control	62	38.75	V

Table 2 : Suggestions given by the respondents.

S. no.	Constraints	No.	Percentages (%)	Rank
1.	2.	3.	4.	5.
1.	Sucking pest restraints variety should be developed	160	100.00	I
2.	Seed should be available in time and at low cost	150	93.75	II
3.	Bt. gene should be incorporated in desi variety	100	62.50	III
4.	Govt. should provide training to farmers	78	48.75	IV

References

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