

## Attitude of Cotton Growers towards Bt and Non Bt cotton

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### ABSTRACT

*The study was conducted among the comparative study on Bt and non Bt cotton growers of Bharuch district of Gujarat state. Ex-post Facto research design was used and by using the proportionate random sampling technique used. The study was consisted of 75 Bt and 75 non – Bt cotton growers as respondents were obtained for the present study. The study concluded that the majority of the Bt cotton growers had favourable attitude towards Bt cotton, followed by of Bt cotton growers with highly favourable attitude towards Bt cotton growers had less favourable attitude towards Bt cotton and non Bt cotton growers, half of them had favourable attitude and nearly half of non Bt cotton growers had less favourable attitude towards Bt cotton and non Bt cotton growers had highly favourable attitude towards Bt cotton growers.*

**Keywords:** attitude, cotton, favourable, Bt. Cotton, Non Bt. Cotton

### INTRODUCTION

Cotton is the most important commodity throughout the world, which shares considerably in the Indian economy. Cotton is one of the major cash crops of India. Cotton seed and seed cakes are important sources of concentrate and feed to animals. It is also being used in manufacturing synthetic rubber, soaps, cosmetics, plastics, explosive etc. Considering its importance, cotton is grown on a large scale throughout the world. Cotton being cultivated in 93 m. hectares, which covers about 25 per cent of total area of the country however, in which context to production, India securing second rank with 18 per cent of production of the world. ( Khadi, 2005). Hybrid cotton cultivation about 70 per cent of total cotton area is a significant milestone achievement in Indian Agricultural scenario. Basically, it is cultivated in three distinct agro-ecological regions viz., North, Central and South, of which, 21 per cent area is under cultivation in North zone which is 100 percent irrigated and contributes 25 per cent of the total production. The Central zone is predominantly rainfed and occupies more than 56 per cent of the total area, but contributing less than 50 per cent of the total production and hybrid cultivation is dominant in this zone. In South zone is representing all types of cotton, viz., irrigated and rainfed, hybrids (inter and intra-specific, diploids, and tetraploids)

and varieties (diploids and tetraploids). Bt cotton technology provides new avenues for the Indian textile industry by ensuring availability of good quality raw cotton on regular basis which was a major concern a few years back. In India about 30 per cent of the cotton crop losses were due to pests, diseases and weeds. Of which 10 per cent is due to one major pest i.e. American bollworm (*Helicoverpa armigera*). For the control of this particular major pest alone about US \$ 264 million worth pesticides were used in India. Cotton occupies 5 per cent of the total cultivable area consumed 55 percent of the totally used pesticides in all crop cultivation (Barwale *et al.*,2004).

Keeping in view of this importance, the present study was undertaken with following specific objectives:

### Study the Attitude of cotton growers towards Bt and non Bt cotton

### METHODOLOGY

Bharuch is one of the major cotton growing district in south Gujarat. This district has eight talukas. Out these eight talukas, Ankaleshwar, Amod, Bharuch, Wagara and Walia have highest area under Bt cotton. All these five talukas were purposively selected. A list of cotton growing villages was obtained from the District Agricultural Officer, Department

of Agriculture, Bharuch. Out of these, fifteen villages were selected purposely. The lists of Bt and non Bt cotton growers of selected villages were obtained from Talati-cum-mantri. Out of total, five Bt cotton growers were selected randomly while, five non Bt cotton growers of same village were selected by considering actual cultivated area of Bt cotton growers. This way, the study was consist of 75 Bt and 75 non Bt cotton growers as respondents. In all one hundred fifty respondents were considered as sample size for the present study. The basic method was used for the collection of data by personal interview from 150 respondents of 15 villages' of selected Bharuch talukas by the investigator. Ex-post-facto research design was used. This design was considered appropriate because the phenomenon has already occurred. Keeping in the view, the objectives of study, the interview schedule was prepared and respondents were interview at

their home.

## RESULTS AND DISCUSSION

### Attitude of cotton growers towards Bt and non Bt cotton

All Port (1935) define attitude as a mental and or neutral status of readiness, organized through experience, exerting a direct and dynamic influence on individual response to all objects and situations with which he is related. As we know that the success or failure of any reform would mainly depends on up the people's attitude towards it. By and large, attitude of farmers forms an essential component for the adoption of Bt cotton to get higher yield. Against this background, an attempt was made to measure the attitude of cotton growers towards Bt cotton. The data regarding attitude of cotton growers towards Bt cotton was collected and presented in table 1.

**Table 1: Distribution of respondents according to their level of attitude towards bt cotton and non bt cotton**

n=150

Sr. No.	Level of attitude	Respondents			
		Bt cotton growers	Per cent	Non Bt cotton growers	Per cent
1	Less favourable attitude (Up to 21 score)	04	5.33	34	45.33
2	Favourable attitude (Between 22 to 41 score)	52	69.33	38	50.67
3	Highly favourable (42 score and above)	19	25.34	03	4.00

Mean =31.43

S.D=9.89

It is apparent from Table 1 that majority of the Bt cotton growers (69.33 percent) had favourable attitude towards Bt cotton, followed by 25.34 per cent of Bt cotton growers with highly favourable attitude towards Bt cotton and only 5.33 per cent of Bt cotton growers had less favourable attitude towards Bt cotton.

Among the non Bt cotton growers, half of them (50.67 per cent) had favourable attitude and nearly half of non Bt cotton growers (45.33 per cent) had less favourable attitude towards Bt cotton and only 4.00 per cent of non Bt cotton growers had highly favourable attitude towards Bt cotton growers.

From the above table, it could be concluded that more than half percent of Bt and non Bt cotton growers had favourable attitude towards Bt cotton due to resistance against bollworm complex.

As such the hypothesis set for this study that "there is a less favourable attitude towards Bt cotton of Bt and no Bt cotton growers" is rejected.

This finding is in the agreement with the findings of Patel *et al.* (1990), Sriram and Palaniswamy (1999), Meti and Sambrani (2005) and Naik *et al.* (2008).

## CONCLUSION

The finding of the study suggest that the majority of the Bt cotton growers had favourable attitude towards Bt cotton, followed by of Bt cotton growers with highly favourable attitude towards Bt cotton growers had less favourable attitude towards Bt cotton and non Bt cotton growers, half of them had favourable attitude and nearly half of non Bt cotton growers had less favourable attitude towards Bt cotton and non Bt cotton growers had highly favourable attitude towards Bt cotton growers.

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