

KNOWLEDGE OF Bt AND NON Bt COTTON GROWERS

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ABSTRACT

Being major cotton growing district of South Gujarat, Bharuch district was purposely selected for the present investigation and by using the simple random sampling method; three higher producing cotton growing villages from each talukas were selected. Finally, 75 Bt and 75 non Bt cotton growers were selected from selected villages constituted the sample. This study was concluded majority of the Bt as well as non Bt cotton growers were possessing medium level of knowledge and in case of Bt cotton growers, social participation and extension contact were found positive and significantly correlated with knowledge level, while, in case of non Bt cotton growers, land holding and extension were found positive and significantly correlated with knowledge level.

INTRODUCTION

Cotton, the 'White gold' occupies an enviable place amongst commercial crops of our country. Cotton plays a dominant role in agriculture as well as in industrial economy. It is one of the prime sources of natural fibers. It gives support to prestigious textile industries and produce employment to millions of people. 9.3 million hectares area in India is Cotton cultivated. However, India ranks second in total cotton production in the world. Gujarat state is India's number one cotton producing state and it produced cotton worth Rs 8,000 crore. But still, the cotton production per unit area is comparatively low and the lower yield may be attributed to non-adoption of latest cultivation practices by cotton growers. Therefore, it was felt necessary to study the knowledge of Bt and non Bt cotton growers of Bharuch district of Gujarat state.

METHODOLOGY

Being major cotton growing district of South Gujarat, Bharuch district was purposely selected

for the present investigation and by using the simple random sampling method; three higher producing cotton growing villages from each talukas were selected. Finally 75 Bt and 75 non Bt cotton growers (150 respondents) was selected from selected villages constituted the samples. For the purpose of measurement of knowledge level structural scale was developed. To find out the relationship between independent and dependent variables, Correlation of coefficient (*r*) test was applied.

FINDINGS

1 Level of knowledge

Sufficient knowledge about any technology is very essential to carry out work effectively. To harvest better cotton yields, it is the basic requirement that the cotton growers should have knowledge of cotton crop. An attempt was therefore, made to assess the knowledge level of Bt and non Bt cotton growers. The data regarding level of knowledge about Bt cotton is presented in Table 1

Table 1: Distribution of respondents according to their level of knowledge

n=75

Sr. No.	Level of knowledge	Respondents			
		Bt cotton growers	Percent	Non Bt cotton growers	Percent
1	Low level	02	02.67	28	37.33
2	Medium level	57	76.00	41	54.67
3	High level	16	21.33	06	8.00

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The data revealed that majority of the Bt (76.00 per cent) as well as non Bt (54.67 per cent) cotton growers were possessing medium level of knowledge. 21.33 per cent and 2.67 per cent of Bt cotton growers possessed high and low level of knowledge, respectively. While, 37.33 per cent of non Bt cotton growers had low level of knowledge and 8.00 per cent of them having high level of knowledge. So from such data it can be concluded that more than three – fourth of Bt cotton growers possessed medium level of knowledge as compared to only half of the non Bt cotton growers

possessed medium level of knowledge.

2 Relationship between the personal, socio-economic and psychological characteristics of Bt and non Bt cotton growers and their level of knowledge

The association between the selected characteristics of cotton growers viz, age, education, occupation, family size, family income, land holding, social participation and extension contact and knowledge level were worked out with the help of coefficient of correlation. The findings were presented in Table 2.

Table 2: Relationship between selected characteristics and level of knowledge

n=150

Sr. No.	Characteristics	Coefficient of correlation (<i>r</i>)	
		Bt cotton growers	Non Bt cotton growers
1	Age	0.12053	0.17821
2	Education	-0.06272	-0.08119
3.	Occupation	-0.21073	-0.05306
4	Family Size	-0.07610	0.03466
5	Family Income	-0.08123	-0.14780
6.	Land Holding	0.06206	0.27346*
7.	Social Participation	0.23451*	0.01271
8.	Extension Contact	0.42224*	0.40161*

*Significant at 5 per cent probability level (Critical value +/- 0.22701)

The data manifested in Table 2 revealed that in case of Bt cotton growers, social participation (0.23451*) and extension contact (0.42224*) were found positively and significantly correlated with knowledge level, where age, education, occupation, family size, family income and land holding were non significant. In case of non Bt cotton growers, land holding (0.27346*) and extension contact (0.40161*) were found to be positively and significantly correlated with knowledge level, whereas, age, education, occupation, family size, family income and social participation were non significant.

CONCLUSION

Majority of the Bt as well as non Bt cotton growers were possessing medium level of knowledge and in case of Bt cotton growers, social participation and extension contact were found positively and

significantly correlated with knowledge level. While, in case of non Bt cotton growers, land holding and extension were found positively and significantly correlated with knowledge level.

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