

Original Research Article

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## Constraint Faced by *Bt* Cotton Growers for Control of Pink Bollworm

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### ABSTRACT

The present study on knowledge of *Bt* cotton growers for control of pink bollworm was conducted in Parbhani district of Marathwada region in Maharashtra State. The data were collected through personal interview with the help of interview schedule by contacting 120 respondents. The data was processed by making primary and secondary tables. The distributional analysis pertaining to age of the farmers indicated that (50.00%) of the respondents belonged to middle age category. It was found that, majority (30.00%) of the respondents belonged to primary education category, majority (54.16%) of the respondents had medium level of area under *Bt* cotton of respondents, 47.50 per cent of the respondents had semi-medium land holding (2.01 to 4.00 ha), 67.50 per cent of the respondents had medium annual income (Rs.98,000 to Rs 2,98,000). While majority (50.00%) of the respondents had medium level of social participation, 50.00 per cent of the respondents had medium economic motivation, larger proportion (50.00%) of the respondents belonged to medium innovativeness, 41.66 per cent of the respondents had medium risk orientation, 55.00 per cent of the respondents had medium level of farming experience, majority (58.33%) of the respondents had medium level of source of information of source of information, 66.68 per cent of the respondents had medium level source of irrigation, 58.33 per cent of the respondents had medium extension contract.

#### Keywords

Pink bollworm,  
Constraints,  
Bt gene, etc.

#### Article Info

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### Introduction

Cotton the 'White Gold' is played a vital role in updating Indian economy and evolution of human ethical, moral and cultural values. Cotton plays a key role in national economy in terms of both employment generations and foreign exchange earnings. Cotton is a basic raw material for Textile Industry. The Indian Textile Industry has an overwhelming presence in the economic life of the Country.

Apart from providing one of the basic necessities of life, the Textile Industry also plays a pivotal role through its contribution to industrial output, employment generation and export earnings of the Country. Cotton is the second most important field crop in India for the production of table oil; 13.7 per cent of the 7.88 million tons of table oil produced in India is obtained from Cotton seed. Control of pink bollworm can be done by various tools in a way that minimizes economic, health and

environmental risks. Control involves an eliminate or prevents pest problems before they established. Pink bollworm has now emerged as a major pest of cotton in all cotton growing areas in India. The pest mainly fed on seeds causing economic loss. Infestation occurs in mid and late stages of the crop; it remains undetected due to feeding behavior and causes loss of yield quality. It impacts boll opening, coinciding with the second picking of cotton in most areas. To minimize losses caused by Pink bollworm, concerned state, farm input suppliers, ginneries owners, cotton market yards, Agriculture Universities and State Agriculture Department have initiated mass awareness campaign to alert cotton production stakeholders viz., farmers committees, seed producers, pheromone traps producers, pesticides companies, Krishi Vigyan Kendras, Central Integrated Pest Management Centers etc., to initiate action at their ends.

### **Results and Discussion**

The study was conducted in randomly selected Parbhani district of Marathwada region.

In Parbhani district there are 9 talukas. Out of these three talukas Parbhani, Purna and Pathri was selected randomly as area and infestation of pink bollworm was more in these region. The names of villages which come under the selected talukas were collected from the secondary source. To obtain the desired no of respondent of villages this comes under Parbhani district. Ten *Bt* cotton growers were selected randomly from each village to comprise the sample of 120 respondents for study. Respondents were selected according to the considerable area under *Bt* cotton growers.

The study sample consists of having 120 respondents from three talukas. The Data were analyze by using mean, S.D., and coefficient of correlation methods were used for data analysis.

### **Observation and Analysis**

#### **Constraint faced by *Bt* cotton growers in knowledge and adoption of for control of pink bollworm**

The findings of the study as well as discussion have been showed under the following tables:

From the data reported in above table, Majority (91.66%) of farmers faced problem of high wage rate of labor during sowing and harvesting time, while 85.83 per cent of farmers had problem of lack of biological agents, 79.16 per cent of respondent faced the problem of high cost of *Bt* cotton; while 66.66 per cent faced the problem of non-availability of pheromone trap. 45.83 per cent farmers lacked knowledge about identification of insect pest. Near about 8.33 per cent farmers faced problem of non availability of insecticide.

The research data revealed the constraints faced by *Bt* cotton growers in knowledge and for control of pink bollworm. Majority of farmers faced problem of high wage rate of labour during sowing and harvesting, lack of biological agent, high cost of *Bt* cotton, lack of availability of pheromone traps, followed by lack of knowledge about identification of insect pest and minority of farmers have problem of non availability of insecticides.

**Table.1** Constraint faced by respondents in knowledge and adoption for control of pink bollworm

Sr. No.	Statements	Frequency	Per cent
1	Non availability of insecticides	10	8.33
2	Lack of knowledge about identification of insect pest	55	45.83
3	Non availability of pheromone traps	80	66.66
4	High cost of <i>Bt</i> cotton seed	95	79.16
5	Lack of biological agents	103	85.83
6	High wage rate of labour during sowing and harvesting time	110	91.66

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