

## Knowledge And Adoption Of Integrated Pest Management Practices By Irrigated Cotton Growers

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### ABSTRACT

The present study was conducted in Shirpur Tahasil of Dhule District ( M.S.) in year – 2002-03 to assess the knowledge and adoption of IPM practices and to know the constraints faced by irrigated cotton growers in adoption of IPM practices. The results revealed that majority to a considerable proportion of the cotton growers adopted cultural practices while; a very few of them adopted the mechanical and biological practices of IPM. Nearly half proportion of the cotton growers had high level of knowledge while majority to them had low to medium level of adoption of recommended IPM Practices in cotton. It is also apparent from the results of the study that lack scientific knowledge and training on IPM, non-availability of bio-agent and pheromone traps were the major constraints reported by the irrigated cotton growers

**Key words :** IPM, bio-agents, knowledge, adoption, constraints

### INTRODUCTION

Plant protection is an important component in crop production. However, excessive and indiscriminate use of pesticide leads to problem of chemical residues in food, environmental pollution and soil pollution resulting the human life in danger, besides developing resistance in insect pests to pesticides and destruction of natural enemies. In order to avoid these and restore ecological balance, it has been necessitated to integrate all the available pest management techniques in most compatible manner with least use of chemicals, which is the major principle of pest management.

Integrated Pest Management is a pest management system that in the context of the associated environment and the pollution dynamics of the pest species utilizes all suitable techniques and methods in as compatible a manner as possible and to maintain the pest population at level below those causing economic injury. IPM, therefore, emphasizes not only the reduction in use of pesticides and keeping level of pest causing economic injury but also it facilitates the use of cultural, physical, mechanical, chemical and biological methods of pest control. It thus imply that the farmers need to learn the principles of IPM and to acquire the minimum knowledge and skill necessary to make self decision based on specific farm condition and discourage the indiscriminate

use of pesticides. Considering these facts, Maharashtra Government has decided to promote IPM programme from 1994 – 95.

Cotton being a major a cash crop of Khandesh region in Maharashtra State. Therefore, the present investigation was carried out with the specific objectives. To assess knowledge and extent of adoption of IPM practices by the irrigated cotton growers and to study the constraints faced by the irrigated cotton growers in adoption of IPM practices.

### MATERIALS AND METHODS

The present investigation was carried out in Shirpur tahsil of Dhule district (M.S.) in year- 2002-03. That tahasil was purposively selected for the study as there is a largest area under irrigated cotton. The list of villages was prepared and from that list ten villages were purposively selected on the basis of large area under irrigated cotton. Then a list of irrigated cotton growers from the selected villages was prepared. A sample of 120 respondents was drawn proportionately by the n<sup>th</sup> number method of random sampling.

The study utilized the exploratory research design of social research. Data were collected from 114 cotton growers with the help of personal interview schedule specially structured for the purpose. Data thus collected were subjected to simple analysis such as frequencies and percentages and the results emerged have been interpreted and presented as below.

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