



## Adoption behaviour of sugarcane growers regarding integrated pest and disease management practices in Nandurbar district

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### ABSTRACT

The present study was undertaken in Nandurbar district with the specific objectives to know the adoption behaviour of sugarcane grower regarding IPDM practices. It was observed that regarding practice wise adoption of IPDM, most of respondents followed cultural operations followed by mechanical practices. In distributional analysis, it was concluded that majority of the respondents (60 per cent) had medium level of adoption of IPDM practices. In relational analysis it was observed that education, land holding, area under sugarcane, annual income, socio-economic status and sources of information were positively and significantly correlated with adoption level.

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### INTRODUCTION

Sugarcane (*Saccharum officinarum*) is a second largest commercial agro industrial crop of the country with heavy investment in agricultural economy. Among the sugarcane growing countries in the world, India leads in area and production.

In India, among the important sugarcane growing states, the three namely, Uttar Pradesh, Maharashtra and Tamil Nadu are contributing nearly 60 per cent of the total area of the country. Uttar Pradesh has the highest acreage under sugarcane crop. However, Tamil Nadu has highest production per hectare in India.

Maharashtra has highest sugar recovery in India. In Maharashtra area under sugarcane was 770 thousand hectares with production of 23157 thousand tonnes and yield per hectare was 61.7 tonnes during year 2009 (Anonymous, 2010), comparatively low going on continuous decreasing due to incidence of pests and diseases.

According to an estimate of food and agriculture organization of the United Nations, the world sugarcane production is only 45 per cent of the potential production. Whereas 55 per cent is lost chiefly due to diseases and pests alone 19.2 per cent loss was because of

diseases. Continuously decreasing yield due to incidence of the same. So this point of view to control of pest and disease save money and time of farmer, to check chemical pollution is essential with help of Integrated pest and disease management (IPDM).

### Integrated pest and disease management:

Integrated pest and disease management (IPDM) aims at combining all available methods or tools of pest and disease control in a judicious manner that minimizes pesticide, insecticide and fungicides use and disturbance to the ecosystem.

Nandurbar district is one of the major sugarcane growing district having 8594 hac. Area under sugarcane, while average yield is 74 m.tonnes pre hectare, which is comparatively very low. The lower yield can be attributed to heavy attack of insect and severe damage due to diseases and their improper management. Plant protection is an important factor of successful crop production. Because of high incidence of pest and disease for this point of view integrated pest and disease management is need of today.

With a view the present investigation was conducted with specific objectives to study the

### Key words :

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