CONSTRAINTS FACED BY BANANA GROWERS IN ADOPTION OF IPM

ABSTRACT

Integrated pest management (IPM), also known as Integrated Pest Control (IPC) is a broad-based approach that integrates practices for economic control of pests. Constraints mean hindrances or obstructions in the way of banana growers in adoption of integrated pest management practices. Keeping this in view, an attempt has been made to study constraints faced by banana growers of in adoption of IPM. The present study was conducted in Anand district of the Gujarat state in India. Total sample size for this research study was 100 banana growers adopting integrated pest management practices. Major constraints faced by farmers in adopting IPM were; lack of quality inputs for IPM in time, lack of training to the banana growers about IPM, high cost of chemicals and spraying equipments for IPM and un-availability of technical guidance for IPM in time. The major suggestions given by the banana growers to overcome the constraints faced by them in the adoption of IPM were; training should be given to the farmers regarding IPM practices, timely supply of quality IPM inputs and proper technical guidance for IPM.

Key words : Constraints, IPM (Integrated Pest Management), banana growers

INTRODUCTION

Insect pests of banana can cause significant damage to fruits. Integrated pest management is a system approach to pest control which combines biological, cultural and other novel approaches with the judicious use of pesticides. Integrated pest management (IPM), also known as Integrated Pest Control (IPC) is a broad-based approach that integrates practices for economic control of pests.

Anand is the major banana producing district under the jurisdiction of Anand Agricultural University in the state. In Anand district, area under banana crop is estimated to 12,500 ha with production of 5,00,000 metric tonne (Anon., 2006).

Constraints means hindrances or obstructions in the way of doing something. Alot of constraints are faced by banana growers in adoption of integrated pest management practices in banana cultivation. Its not easy as a conventional method of banana cultivation. Proper combination of physical, chemical and biological methods should be adopted scientifically at right time and at right condition of the crop for effective control of pest attack. Keeping this in view, an attempt has been made to study constraints faced by banana growers of Anand district in adoption of IPM.

OBJECTIVE

1. To study the constraints faced by banana growers in adoption of IPM
2. To seek the suggestions to overcome the constraints faced by banana growers in adoption of IPM

REVIEW OF LITERATURE

Mulawe (2007) reported that inadequacy of labours and high wages rate of undertaking the manual work like hand picking of eggs/larvae destruction of affected fruiting by, detopping removal of rested flowers etc, non-availability of bio-agent of seed treatment, eggs of chrysopa, trichogramme HNPV, lacking knowledge about yellow sticky pan for control of white fly on cotton were the major constraints as perceived by the cotton growers in adoption of integrated pest management technology in cotton.

Patel (2006) found that unavailability of bio-agents, adequate knowledge about use of pheromone traps and lack of technical know how about economic injury level were the major constraints as perceived by the pigeon pea growers in adoption of integrated pest management technology in pigeon pea. He also stated that suggestions as sought from pigeon pea growers to overcome the constraints were: benefits of integrated pest management should be extended to all pigeon pea growers in village, kit and literature about integrated pest management programme should be made available and training on integrated pest management technology should be imparted.

Rajesh (2011) reported that quality aspects of bio-control are not assured, sporadic uses of bio-control agents and lack of government support were major constraints faced by farmers in adoption of bio control measures of plant protection.

Gulshan (2012) revealed that lack of knowledge, lack of skill, non availabilities of inputs and tools of IPM were major constraints.

METHODOLOGY

The present study was undertaken in Anand district of Gujarat state in India. The level of knowledge of banana growers about IPM was studied with the help of the developed test. Five villages having fairly good number of banana growers adopting integrated pest management practices were selected from each of the Anand and Petlad taluka purposively. 10 banana growers adopting integrated pest management practices were randomly selected from each village. Thus, total sample size was 100 banana growers adopting integrated pest management practices.

Measurement of Constraints Faced by Banana Growers in Adoption of IPM

Based on discussion with farmers, extensional personnel and review of literature, a list of constraints was made. Thus, a questionnaire in local language Gujarati with open ended questions were made for getting response regarding the constraints faced by the banana growers. Personal Interview method was adopted for getting the response. The constraints faced in adopting IPM in banana cultivation were obtained from each respondent. To find out their degree of importance, respondents were asked to give their responses in three point continuum i.e. very important, important and not important. The score assigned was two, one and zero for very important, important and not important responses, respectively. Then, the mean score for each constraint was calculated for ranking them in terms of its importance.

Suggestions to Overcome the Constraints faced by the Banana Growers in Adoption of IPM

Based on discussion with farmers, extensional personnel and review of literature, a list of suggestions was made. Thus, a questionnaire in local language Gujarati with open ended questions were made for getting response regarding the suggestions . Personal Interview method was adopted for getting the response. Considering the constraints faced by the banana growers in adopting IPM in banana cultivation, they were asked to give their valuable suggestions. To know their degree of importance, respondents were asked to give their response in three point continuum viz., very important, important and not important, the scores assigned were two, one and zero, respectively. Then, the mean score for each suggestion was calculated for ranking them in terms of its importance.

RESULTS AND DISCUSSION

CONSTRAINTS FACED BY BANANA GROWERS IN ADOPTION OF IPM

In the present study, some constraints faced by banana growers in adoption of IPM in banana cultivation were also studied. The data in this regard are given in Table 1.

Table 1: Constraints faced by banana growers in adoption of IPM

n=100

No.	Constraints	Mean	Rank
1	Un-availability of technical guidance for IPM in time	0.80	IV
2	Lack of quality inputs for IPM in time	0.89	I
3	Lack of training to the banana growers about IPM	0.85	II
4	High cost of chemicals and spraying equipments for IPM	0.84	III
5	High cost of tissue culture seedlings of resistant variety	0.77	VI

	of banana		
6	Lack of financial support for adopting IPM practices in banana crop	0.73	VII
7	Inadequacy and high wage rate of skilled labours for IPM practices	0.78	V

It can be seen from the Table 1 that major constraints faced by banana growers in adoption of IPM in descending order of rank were; lack of quality inputs for IPM in time (I), lack of training to the banana growers about IPM (II), high cost of chemicals and spraying equipments for IPM (III), un-availability of technical guidance for IPM in time (IV), inadequacy and high wage rate of skilled labours for IPM practices (V), high cost of tissue culture seedlings of resistant variety of banana (VI), lack of financial support for adopting IPM practices (VII).

SUGGESTIONS TO OVERCOME THE CONSTRAINTS FACED BY BANANA GROWERS IN ADOPTION OF IPM

The Table 2 shows major suggestions given by the banana growers to overcome the constraints faced by them in the adoption of IPM in banana cultivation.

Table 2: Suggestions to overcome the constraints faced by banana growers in adoption of IPM

n=100

No.	Suggestions	Mean	Rank
1	Proper technical guidance for IPM should be given to farmers in time	0.86	III
2	Timely supply of quality IPM inputs	0.89	II
3	Training should be given to the farmers regarding IPM practices	0.91	I
4	Cost of chemicals and spraying equipments for IPM should be minimized	0.84	IV
5	Tissue culture banana seedlings of resistant variety should be made available at low cost	0.82	V
6	Incentives should be provided to the farmers for adopting IPM practices in banana crop	0.81	VI

The result indicated that major suggestions given by the banana growers in descending order of rank were; training should be given to the farmers regarding IPM practices (I), timely supply of quality IPM inputs (II), proper technical guidance for IPM should be given to farmers in time (III), cost of chemicals and spraying equipments for IPM should be minimized (IV), tissue culture banana seedlings of resistant variety should be made available at low cost (V), incentives should be provided to the farmers for adopting IPM practices in banana crop (VI).

CONCLUSION

Results of the above study revealed that major constraints faced by banana growers in adopting IPM were lack of quality inputs for IPM in time, lack of training to the banana growers about IPM, high cost of chemicals and spraying equipments for IPM, un-availability of technical guidance for IPM in time, inadequacy and high wage rate of skilled labours for IPM practices. Major suggestions given by the banana growers to overcome the constraints faced by them in adopting IPM were training regarding IPM practices, timely supply of quality IPM inputs, proper technical guidance for IPM in time and the reduction in cost of chemicals and spraying equipments for IPM.

To overcome the existing constraints faced by the farmers, the solutions of these constraints need to be investigated. The major suggestions of the banana growers will be effective in the practical situation to overcome the constraints faced by them in full adoption of IPM practices in banana cultivation. The authority and concerned action agencies should take care to implement these suggestions for better and successful adoption of IPM in banana cultivation.

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