

Constraints faced by cotton growers in adoption of integrated weed management practices

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ABSTRACT

This study was carried out in Vadodara District of middle Gujarat state because of larger area under cotton cultivation with objective to find out constraints faced by cotton growers in adoption of integrated weed management practices and this investigation revealed that major constraints faced by the respondents in integrated weed management practices were: shortage of labour force for weeding (70.83 %), high cost of herbicides(70.00 %) and lack of technical guidance about different weed management approaches(50.00 %).

Key Words : Constraints, Cotton growers, Weed management

INTRODUCTION

Cotton “King of Fibre” is one of the most ancient and important commercial crop next only to food grains is being cultivated in seventy countries of the world with a total coverage of 32.30 m ha. India was the first country in the world to commercialize cotton hybrids and area wise it ranks first in global scenario (about 33 per cent of ha world cotton area) but ranks second next to china as far as production is concern. About 70% of cotton production is contributed by just 3 states – Gujarat (33%), Maharashtra (26%) and A.P. (17%) and are characterized by rainfed cultivation coupled with aberrant precipitation pattern over the years leading to large scale fluctuation in production. Among all the states, Gujarat has highest production but productivity point of view it ranked fifth after Tamil Nadu, Haryana, Punjab and Rajasthan. However, still there exist a wide gap between the production potential and the actual production realized by the cotton growers. The lower yields are attributed to infestation of the crop by insects- pests in general and weeds in particular and also due to non adoption of plant protection measures for control of these. Integrated weed management is one of the important tool in weed management. This is the area which required more attention. It is therefore, necessary to find out existing level of knowledge and extent of adoption of integrated weed management practices in cotton and also to identify constraints faced by them in adoption of this approach. It is also essential to identify constraints faced by them in adoption of integrated weed management practices belonging to different personal, situational and socio-economic categories and the study shall attempt to find out the selected variable with constraints faced by them in using integrated weed management practices with given objective:

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1. To find out the constraints faced by cotton growers in adoption of integrated weed management practices.
2. To seek suggestions from cotton growers to overcome such constraints.

METHODOLOGY

The present study was conducted in Vadodara district of Gujarat state. Twelve villages from two talukas of Vadodara district with higher potentiality of cotton cultivation were selected for the study. Ten respondents from each selected villages were selected randomly and thus total 120 farmers were selected as respondent.

In the present study, constraints were operationalized as those factors which hindered the successful adoption of integrated weed management practices as perceived by the cotton growers. With a view to identify these constraints, an open ended questionnaire was made and on the basis of frequencies and percentage of respondents, the ranks were given.

RESULTS AND DISCUSSION

Constraints in adoption of new technology never end. However, they can be minimized. Constraints in this study were operationalized as the item of difficulties faced by the farmers in weed management practices. The cotton growers were requested to express the constraints faced by them. The percentage for each constraint was worked out. The results regarding the same are summarized in Table 1.

Sr. No.	Constraints	Frequency	Per cent
1.	Shortage of labour force for weeding	85	70.83
2.	High cost of herbicides	84	70.00
3.	Lack of technical guidance about different weed management approaches	60	50.00
4.	Lack of awareness about application of herbicides	32	26.67
6.	Inadequate finance according to their need.	19	15.83
7.	High rate of labour	15	12.50
8.	Inadequate stock of recommended herbicide in nearer market.	14	11.66
9.	Lack of timely and appropriate extension services.	13	10.83
10.	Lack of knowledge about biological measures of weed management	12	10.00

The constraints were shortage of labour force for weeding (70.83 %), high cost of herbicides(70.00 %), lack of technical guidance about different weed management approaches(50.00 %), lack of awareness about application of herbicides(26.67 %), inadequate finance according to their need(15.83%), high rate of labour(12.50 %), inadequate stock of recommended herbicide in nearer market(11.66 %), lack of timely and appropriate extension services(10.83 %) and lack of knowledge about biological measures of weed management (10.00 %).

Table 2 shows that, majority (64.16 %) of cotton growers suggested that herbicides should be available at the affordable rate, followed by proper technical guidance should be given to the farmers as and when they need (48.33%), more training should be imparted for the farmers related to integrated weed management. (54.16 %), literatures and kits related to weed management should be easily available

CONSTRAINTS FACED BY COTTON GROWERS IN ADOPTION OF INTEGRATED WEED MANAGEMENT PRACTICES

Table 2 : Suggestion made by the cotton growers to overcome from the constraints faced by them in adoption of integrated weed management practices (n= 120)			
Sr. No.	Suggestions	Frequency	Per cent
1.	Herbicides should be available at the affordable rate	77	64.16
2.	More training should be imparted for the farmers related to integrated weed management.	65	54.16
3.	Proper technical guidance should be given to the farmers as and when they need.	58	48.33
4.	Literatures and kits related to weed management should be easily available.	47	39.16
5.	Loan and subsidy should be easily available	38	31.66
6.	Weed resistant variety should be developed	20	16.66
7.	Timely and appropriate extension services should be available.	14	11.66

(39.16 %), loan and subsidy should be easily available (31.66 %), weed resistant variety should be developed (16.66 %) and timely and appropriate extension services should be available (11.66 %) were offered as important suggestion by cotton growers.

Conclusions :

To epitomize the results it can be said that shortage of labour force for weeding, high cost of herbicides and lack of technical guidance about different weed management approaches were the major constraints experienced by the majority of the cotton growers in adoption of integrated weed management practices. Herbicide should be available at the affordable rate and more training should be imparted for the farmers related to integrated weed management were the major suggestions offered by the farmers.

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