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Extent of Adoption of Recommended Practices in Respect of Hybird Sorghum Cultivation in the Selected Taluk of Mysore District*

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ABSTRACT

This study was conducted in Chamarajanagar taluk of Mysore district to find out the extent of adoption of recommended practices in respect of hybrid sorghum cultivation. The results revealed that majority of the farmers did not adopt all the recommended practices. Lack of knowledge and finance were the main reasons for non-adoption and or partial adoption of the recommended practices.

INTRODUCTION

The high yielding varieties have brought revolution in Indian agriculture and the farmers' response towards high yielding varieties has been found quite encouraging. The level of adoption of package of practices of high yielding varieties however varies considerably among the farmers. An attempt has been made to obtain as realistic a picture as possible about the situations prevailed in this district of Mysore with respect to the cultivation of hybrid sorghum.

MATERIALS AND MATHODS

The study was conducted in chamarajanagar taluk of Mysore district where hybrid sorghum was cultivated more extensively. Stratified two stage sampling method was adopted for sampling purpose, village level workers' circle within the taluk as strata, the villages as primary and the holdings as secondary units formed the basis for sampling. A list of all the villages in each V. L. W's circle wherein at least five farmers who had harvested a minimum of two crops of hybrid sorghum was prepared with the assistance of extension officer and gramasevaks of the taluk. A total of 20 villages, one from each V. L. W's circle was selected by random method. Five farmers were selected randomly in each village which formed 100 respondents in total. The respondents were interviewed with the help of a pretested schedule. The extent of adoption is measured in terms of adoption quotient.

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RESULTS AND DISCUSSION

Categories of adopters:

Only 17 per cent of the farmers were high adopters compared to medium (62 per cent) and low adopters (21 per cent). It shows that majority of the farmers did not adopt all the practices recommended for hybrid sorghum cultivation. This indicates that more efforts on the part of the extension worker are essential to encourage and help low and medium adopters to adopt the recommended practices to bring them on par with high adopters which would help in increasing production (Table 1).

Table 1. Categories of adopters based on their adoption quotient

Range of adoption quotient	Adopters categories	No. of farmers	Percentage of farmers
10—40%	Low adopters	21	21
50—80%	Medium adopters	62	62
90—100%	High adopters	17	17
Total		100	100

Number of farmers adopting recommended practices:

Practices like application of farm yard manure, use of certified seeds, proper seed rate, intercultivation and weeding were adopted by all farmers (Table 2). Nearly 50 per cent of the farmers adopted proper spacing, used iron plough to plough the land and took plant protection measures. Only one per cent of the farmers adopted the practice-removal of side tillers. Sixty per cent of the farmers used fertiliser at different levels. Since application of recommended dose of fertilizers plays an important role in increasing production, the practice was studied in detail by calculating adoption index seperately.

Table 2. Number of farmers adopting recommended practices

Practices	Respondents	
	No.	Per cent
Deep ploughing with iron plough	45	45
Application of farm yard manure	100	100
Use of certified seed	100	100
Proper seed rate	100	100
Proper spacing	45	45
Fertilization—both basal + top dressing	35	35
Basal dose only	13	13
Top dressing only	12	12
Intercultivation and weeding	96	96
Removal of side tillers	1	1
Plant protection measures	58	58

Number of farmers adopting fertilizer application:

It is seen that 40 per cent of the farmers applied recommended dose of fertilizers. The remaining 51 per cent of the farmers applied fertilizer at diffe-

rent levels but not as recommended. This was revealed by their low adoption index in that practice (Table 3).

In the present study none of the farmers followed the recommended schedule of plant protection measures. Plant protection measure was followed by 58 per cent of the farmers once or more than once but never as per recomended schedule.

The reasons expressed by the respondents for the non-adoption and partial adoption of the practices are briefly discussed in the fallowing paragraphs.

Table 3. Number of farmers adopting fertilizer application

Fertilizers	Respondents		Adoption
	No.	Per cent	
No fertilizer	40	40	—
Recommended dose of NPK	9	9	100
Recommended dose of N+different levels of P and K	5	5	55.3
Top dressing recommended dose	15	15	28.9
Recommended dose of P+different levels of N and P	13	13	57.0
Recommended dose of K+different levels of N and P	—	—	—
Different levels of fertilizers apart from the above said categories	18	18	32.5
Total	100	100	—

Hundred per cent of the farmers stated lack of knowledge as the reason for not adopting the practices like proper spacing and removal of side tillers. Eighty per cent of the farmers who did not apply fertilizer stated lack of finance to purchase as the reason for non-adoption. Majority of the non-adopters (79 per cent) of plant protection measures stated that there was no pest and disease attack, hence not adopted the practice. This could be attributed to the lack of adequate information about the benefit of plant protection measures. Fiftyeight per cent of the non-adopters expressed their doubt about the superiority of iron plough over the local and 42 per cent complaint about the

Table 4. Reasons for non-adoption of recommended practices

Practices not adopted	No. of farmers	Reasons cited by the farmers	No. of farmers cited	
			No.	Per cent
Deep ploughing with iron plough	55	a) Not proved superior over the local	32	58
		b) Cost of the implement is high	23	42
Proper spacing	55	Lack of knowledge	55	100
Fertilizer application	40	a) Organic manures better to the crop	4	10
		b) Organic manures available in plenty	4	10
		c) Lack of finance to purchase	32	80
Removal of side tillers	99	Lack of knowledge	99	100
Plant protection measures	42	a) No pest and disease attack	33	79
		b) Non-availability of finance and spraying equipments	9	21

high cost of the iron plough as reasons for not using the same.

Fifty six per cent of the farmers were not fully convinced about the benefits of the use of recommended dose of fertilizer. Lack of finance was also expressed by 29 per cent of the farmers as reason, for partial adoption. Majority of the partial adopters (31 per cent) stated that they had not adopted the practice as recommended because

Table 5. Reasons cited by the farmers for partial adoption of recommended practices

Practices	No. of farmers	Reasons cited by the farmers ror partial adoption	Farmers cited	
			No.	Per cent
Fertilizer application	55	a) Not fully convinced about the pratice	31	56
		b) Lack of finance	16	29
		c) No timely guidance by extension agency	2	4
		d) No incentives from the government	6	11
Plant proection measures	58	a) Lack of finance and equipments	15	26
		b) No incentives from the government	13	22
		c) No timely guidance by extension agency	18	31
		d) There was no pest and disease attack	12	21

there was no timely guidance by extension agency. The other reasons advanced by them were lack of purchasing powar, little knowledge about the occurrence of pests and diseases. Similar findings were reported by Bedi and Saxena (1965), Rai (1965), Rajagopalan and Jaspal Singh (1967) and Basram and Capner (1968) who identified lack of capital and lack of knowledge as reasons for non-adoption.

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