

Adoption of Niger Production Technology by the Tribal of Dangs

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INTRODUCTION

Oilseed in India constitute the principal commercial crop. The bulk of vegetable oil is derived from the nine cultivated oilseeds, such as Groundnut, Mustard, Sesamum, Niger, Rapeseed, Soybean, Safflower and Sunflower forming the edible group and Castor and Linseed forming non-edible group.

Niger (*Guizotia abyssinica* Cass.) which is popularly known as Ramtil, is an important oilseed crop of hilly areas of Dangs district. Besides, direct consumption by the tribals, it is also useful for lubricant, soft soap manufacture and for cattle feed. Unfortunately the production and productivity of this crop is very low in Dangs perhaps because of lack of knowledge of recommended cultivation practices. As a substitute for edible oil, it can play a major role in the saving of foreign exchange being drained for the purchase of edible oil, if its productivity is improved. Efforts were therefore, made to encourage and persuade the tribal farmers to adopt recommended niger technology. Keeping in view, the present study was designed with the following objectives.

OBJECTIVES

1. To study the extent of adoption of niger production technology by the tribal farmers.

2. To determine the information sources consulted by niger cultivators.

METHODOLOGY

The study was conducted in Dangs district of Gujarat. Ten villages having largest area under niger were selected from the list of niger growing villages. A list of niger cultivators from each selected villages was obtained from the village level worker of the area concerned. Out of these list 20 farmers from each village were selected at random. The total sample size was 200 farmers. The information was secured by interviewing the heads of families through the schedule designed for the purpose. For the study, the recommended practice of niger cultivation viz. preparatory tillage, variety, application of chemical fertilizers, organic manure, seed treatment, seed rate, time of sowing, method of sowing, spacing and plant protection measures were selected.

FINDINGS

The findings regarding adoption of recommended niger cultivation practices by the tribal cultivators are presented in Table 1.

It is evident from Table 1 that a large majority (84.00 per cent) of the tribal farmers were adopting the proper tillage operations i.e. two ploughing and two harrow-

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Table 1 : Adoption of recommended technology by niger cultivators.

Sr. No.	Recommended niger technology	Respondents (N=200)			
		Adopted		Non-adopted	
		No.	Percent	No.	Percent
1.	Improved varieties	--	--	200	100.00
2.	Preparatory tillage	168	84.00	32	16.00
3.	Organic manures	187	93.50	13	6.50
4.	Seed treatment	--	--	200	100.00
5.	Time of sowing	142	71.00	58	29.00
6.	Method of sowing	--	--	200	100.00
7.	Seed rate	72	36.00	128	64.00
8.	Spacing	11	6.50	189	94.50
9.	Chemical fertilizers	17	8.50	183	91.50
10.	Plant protection measures	3	1.50	197	98.50

ings. About 93.00 per cent of the farmers were using organic manures. As regards time of sowing, it was observed that majority (71.00 per cent) of the farmers were sowing niger at proper time, whereas 29.00 per cent of them were found not following recommended time of sowing. With regards to use of optimum seed rate, more than one-third (36.00 per cent) of the tribal farmers had adopted seed rate as per recommendation while majority (64.00 per cent) of them were using either more or less seed rate. Only 8.50 per cent of the

tribal farmers were found using chemical fertilizers. Remaining 91.50 per cent of them were not applying chemical fertilizers. Further, it was observed that a large majority (94.50 per cent) of the farmers had not adopted optimum spacing i.e. 30 x 10 cm and over 98.00 per cent of the tribal farmers were found not using any plant protection measures against insects, pests, disease viz. aphids, powdery mildew and root rot. With respect to adoption of recommended practices like improved

Table 2 : Information sources consulted by niger cultivators.

Sr. No.	Information sources	Respondents (N=200)		
		No.	Percent	Rank
1.	Neighbours and friends	157	78.50	I
2.	Relatives	65	32.50	V
3.	Family members	82	41.00	IV
4.	Village level worker	142	71.00	II
5.	Agricultural extension officer	18	9.00	VII
6.	Other niger cultivators	123	61.50	III
7.	Agricultural research station	27	13.50	VI
8.	Farmers discussion group	9	4.50	VIII
9.	Printed literature	--	--	IX

seeds, treatment of seed and method of sowing, none of the respondents had adopted these practices. These findings are also supported by Pawar (1972) and Patel (1984). This tendency may be due to lack of knowledge of tribal farmers regarding recommended niger technology. Data in Table 2 show that neighbours and friends were the foremost consulted source of information followed by village level worker and other niger cultivators in their village. The tendency could be explained by the fact that the tribal farmers were habituated to obtain information from locally available sources. More than one third of the farmers consulted family members and relatives for getting information regarding recommended niger technology, which ranked fourth and fifty respectively. These findings are also supported by Waghmare *et al.*, (1988). The least consulted sources were agricultural research station, agricultural extension officers and farmers

group discussion, occupied sixth, seventh and eighth position respectively. It is surprising to note that none of the tribal farmers used printed literature as a source of information. This is due to fact that majority of the tribal farmers were illiterate.

CONCLUSIONS

Majority of the tribal farmers were non-adopter with respect to recommended practices such as optimum seed rate, chemical fertilizers, spacing, plant protection measures, improved seed, seed treatment and method of sowing. The limited extent of adoption necessitate intensification of extension activities by local extension agencies. Hence, the extension agency has to play an important role in pursuing farmers by frequent contact and disseminating the improved agricultural technology by conducting demonstrations on farmers field.

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