

Adoption of indigenous practices of Groundnut Cultivation by Groundnut Growers in South Saurashtra Zone

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INTRODUCTION

Saurashtra is the bowl of groundnut edible oil where the groundnut crop is the dominant crop in terms of area and production. Some farmers of this area adopt several indigenous practices of groundnut cultivation and get economically good returns. However these practices are not known and adopted by all the farmers of the area.

Keeping this in view the study was carried out with following specific objectives.

OBJECTIVES

1. To know the adoption level of groundnut growers with respect to the indigenous practices of groundnut cultivation.
2. To know the constraints in adoption of the indigenous practices related to groundnut cultivation.

METHODOLOGY

In order to achieve the above objectives a sample of 120 respondents representing eight villages from four talukas from South Saurashtra zone was drawn by using random sampling technique.

The adoption index exercised by Manju (1996) was used with slight modification according to the local situation. Adoption index for each practice adopted by the respondents was calculated and ranked. The respondents were asked to mention the constraints in adoption of indigenous practices. They were grouped into six major heads. The mean scores for all the constraints were calculated, and on the basis of mean score all the constraints were assigned ranks within the groups. The overall ranks to all constraints were also assigned and calculated. The data were collected by personal interview and analysed in the light of objectives.

RESULTS AND DISCUSSION

The results regarding the adoption of the selected indigenous practices of groundnut are presented in Table 1. From the data presented in Table 1, it can be observed that the adoption above 70 per cent were found in the practices viz. use thresher for post harvest technology of groundnut and use of groundnut decorticator for seed separation from kernels (98.63 per cent), use of seed bowl by rural artisans (95.21 per cent), use of multi purpose tool bar (SANTI) (82.21 per cent), application of morrum (TANCH)

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Table 1 : Adoption of the selected indigenous practices of Groundnut crop by the farmers (N=120)

Sr. No.	Item / practices	Adoption	Rank
1.	Winter ploughing for Groundnut crop	26.04	XVI
2.	Use of multipurpose tool bar (SANTI)	82.21	IV
3.	Use of 'U' band at sowing coulters tool while sowing Groundnut crop	50.63	VIII
4.	Testing of soil moisture with reference to soil compactness (DHADA)	68.42	VII
5.	Application of morrum (TANCH) in the furrow before sowing of Groundnut	75.41	V
6.	Application of nitrogenous fertilizer as a top dressing In Groundnut	74.21	VI
7.	Alternate furrow irrigation for premonsoon Groundnut in scarce water condition	35.63	XIV
8.	Til (sesamum) as a rotational crop of Groundnut	25.21	XVII
9.	Use of Groundnut decorticator for seed separation from kernels	98.63	I
10.	Use of thresher for post harvest technology in Groundnut	98.63	I
11.	Use of open-ups furrow before onset of monsoon	49.21	X
12.	Use of harrowing Immediately after Groundnut sowing	45.63	XII
13.	Castor as a rotational crop	28.21	XV
14.	Pigeonpea as a rotational crop	22.42	XVIII
15.	Use of almanac for storage of Groundnut	9.21	XX
16.	Use of sheep penning	12.61	XIV
17.	Use of special modification of santi for interculturing (choko)	50.42	IX
18.	Use of special curved blade for Groundnut harvesting	45.21	XIII
19.	Use of Zipta tool bar for collecting left-over kernels	48.42	XI
20.	Use of seed bowl made by rural artisans	95.21	III

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furrow before groundnut sowing (75.41 per cent) and application of nitrogenous fertiliser as a top dressing in groundnut (74.21 per cent).

As per the above said results farmers want mechanisation in agriculture so they have adopted groundnut thresher, decorticator and multipurpose tool bar. They are being made and repaired by rural artisans working at grass root level. Besides that the problem of scarcity of labour is also one of the reasons for the adoption of the practices.

Incorporation of morrum in the furrow of groundnut crop might be due to the fact that this parent material helps in conserving the moisture at the root of groundnut plant by making soil porous. Thus the groundnut crop can be survived during moisture stress condition. The practice of application of nitrogenous fertilizer as top dressing might be adopted due to the fact that groundnut crop is becoming yellowish at 45 to 60 days after sowing (DAS) (flowering and pegging stage). To overcome the problem of yellowish in groundnut, farmers are applying ammonium sulphate and ureas as a top dressing.

The adoption of about 50 per cent were found in the practices viz; testing of soil moisture (68.42 per cent), use of special modification of santi for interculturing (50.42 per cent), use of opened furrow before onset of monsoon (49.21 per cent), use of "Zipta" tool bar (48.42 per cent) and use of harrowing immediately after groundnut sowing (45.63 per cent).

Out of twenty practices, the adoption below 10 per cent was found in only practice

that is 'use of almanac for the storage of groundnut'. This might be due to the fact that the knowledge of astrology and astronomy is lacking by farmers, or they may not be believing in those proverbs coming from generation to generation.

The results regarding the constraints in the adoption of indigenous practices of groundnut cultivation are presented in Table 2. The constraints are classified into six major groups.

Biophysical constraints

It is obvious from Table 2, that out of three constraints; soil fertility variation and appearance of periodic drought spells during cultivation were perceived as first and second by the groundnut growers, respectively.

Technological constraints

Among technological constraints, lack of sound research and development of ecological farming and lack of information about proper technology for integrated pest management were ranked first and second respectively within the group.

Extension constraints

Among extension constraints, lack of awareness about indigenous practices, lack of publication on proven indigenous technologies and lack of organised extension machinery for the dissemination of indigenous technology were ranked first, second and third respectively within the group.

IMPLICATIONS

Identification, documentation and rationality of indigenous practices in various

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Table 2 : Constraints in the adoption of indigenous practices of Groundnut growers.

Sr. No.	Constraints	Mean Score	Rank
A.	BioPhysical Cosntraints		
	1. Apperance of periodic drought spells during cultivation	1.02 (123)	II
	2. Soil fertility variation	1.15 (138)	I
	3. Poor water retention capacity of the soils	0.97 (116)	III
B.	Technological Constraints		
	1. Lack of pest and diseases resistant varieties	0.86 (103)	IV
	2. Lack of short duration varieties	1.05 (126)	III
	3. Lack of sound research and development on ecological farming	2.25 (270)	I
	4. Lack of information about proper technology for integrated pest management	1.08 (130)	II
C.	Extension Constratints		
	1. Lack of organised extension machinery to disseminate the proven indigenous technologies	1.40 (168)	III
	2. Lack of publications on proven indigenous practices	1.59 (191)	II
	3. Lack of awareness about indigenous practices	1.97 (237)	I
	4. Lack of proper training facillity	1.32 (158)	IV
	5. Poor contact of extension workers with farmers	0.72 (87)	VI
	6. Poor mobility facilities	1.17 (140)	V

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crops are needed in other parts of the state which calls for sincere efforts on the parts of agricultural scientists and extension machinery.

Integrating indigenous knowledge systems and research station technologies after receiving the feed back information concerning

indigenous knowledge systems, the research scientists should systemically classify the information according to discipline. On station and on farm research projects should be conducted by the respective scientists based on the classified indigenous knowledge system. If the results proved to be useful they should be recommended for the peasantry.

REFERENCES

Manju, S. P. (1996) Indigenous practices in coconut farming in Thrissur district. M.Sc. (Agri.) Thesis (Unpublished), Kerala Agric. Uni. Thrissure, Kerala.

THOSE WHO
WILL ADJUST
AND CHANGE
WITH THE TIMES
WILL BE
WINNERS, OTHER
WILL FALL BY
THE ROADSIDE.