

RESEARCH NOTE

Chiku Growers' knowledge and adoption

¹ P.D. Naik, ² R.S. Vekaria and ³ P.M. Parekh

INTRODUCTION

Knowledge is one of the important components of behaviour, which plays a major role in the covert and overt behaviour of an individual. Once knowledge is acquired, it produces changes in one's thinking process which would lead to further changes in the aptitude of the individual.

Knowledge is the totally of understand information possessed by a person. Singhi and Mody (1974) conceptualised that knowledge and resources were determinants of innovative behaviour of the farmers. The knowledge of innovation is prerequisite of adoption. In order to increase the level of adoption, the farmers must be aware of the recent knowledge about the technologies.

On this ground, it is imperative to examine the knowledge and adoption level of chiku growers about modern technology of chiku cultivation

METHODOLOGY

The study was undertaken in Gandevi taluka of Valsad district of South Gujarat. Ten villages of Gandevi taluka

were selected on the basis of maximum area under fruit orchards. Total 112 chiku growers were randomly selected from the selected villages. Four improved recommended practices for chiku cultivation viz. cultural practices, manurial practices, plant protection practices, and irrigation management practices were selected for the study. The data of this study were collected by arranging personal interview with 112 respondents of the selected villages.

For measurement of knowledge and adoption of the respondents about chiku cultivation technology, the scale developed by Mayani and Kumar (1980) and Gupta (1972) were respectively used with suitable changes in the present study.

A score of one was given to correct answer to the question of knowledge test and adoption of each improved cultivation practice. Total score was calculated for each of the respondents for knowledge and adoption aspects. Then, knowledge and adoption quotient were calculated. All the respondents were grouped into three categories namely highly, medium and low on the basis of mean and standard deviation (SD).

-
1. Post graduate student, Deptt. of Extension Education, N.M. College of Agriculture, GAU, Navsari.
 2. Asstt. Professor of of Extension Education, N.M. College of Agriculture, GAU, Navsari.
 3. Professor of of Extension Education, N.M. College of Agriculture, GAU, Navsari.

Table 1 : Respondents' knowledge quotients regarding different practices of chiku crop cultivation

Sr. No.	Practices	Respondents' knowledge quotient in per cent.
I.	Cultural practices	
	1. Improved variety	81.25
	2. Spacing	61.07
	3. Ploughing	55.35
	4. Harrowing	51.78
	Mean knowledge quotients of cultural practices	62.36
II	Manurial Practices	
	1. Use of farm yard manure	42.85
	2. Timely application of f.y.m.	60.71
	3. Use of nitrogenous fertilizers	40.17
	4. Use of phosphatic fertilizers	49.10
	5. Use of potassic fertilizers	10.71
	6. Timely application of fertilizers	55.35
	7. Method of application of manure and fertilizers	83.03
	Mean knowledge quotient of manurial practices	48.84
III	Plant protection measures	
	1. Number of spraying and/or dusting of correct pesticides	41.96
	2. Number of spraying and/or dusting of fungicides	13.39
	Mean knowledge quotient of plant protection measures	27.67
IV	Irrigation practices	
	1. Number of irrigation	77.67
	2. Method of irrigation	58.03
	Mean knowledge quotient of irrigation practices.	67.85
	Overall knowledge quotient of all practices	52.16

FINDINGS AND DISCUSSION

The data presented in table 1 indicate that mean of knowledge, taking all practices together, to chiku crop cultivation was 52.16 per cent. Chiku growers' knowledge for cultural practices was 62.36 per cent, manurial practices 48.84 per cent, irrigation practices 67.85 per cent,

and plant protection measures 27.67 per cent. Respondents' knowledge regarding method of application of manures and fertilizers, improved variety and number of irrigation was found to be very high (83.03, 81.25 and 77.67 per cent respectively), while knowledge regarding number of spraying and dusting of fungicides was

found to be the lowest (13.39 per cent).

It is clear from the data presented in Tabl 2 that majority (70.54 per cent) of the chiku growers had possessed medium level

of knowledge regarding improved chiku cultivation, followed by 16.96 per cent and 12.50 per cent had low and high level of knowledge, respectively.

Table 2 : Distribution of respondents according to their knowledge level regarding chiku production technology.

N=112		
Extent of knowledge	No. of farmers	Per cent
1. Low (upto 31.14 per cent)	19	16.96
2. Medium (31.14 to 60.26 per cent)	79	70.54
3. High (Above 60.26 per cent)	14	12.50
Total	112	100.00

Table 3 : Relationship between extent of knowledge and extent of adoption of chiku crop production technology.

Extent of adoption Extent of knowledge	Low		Medium		High		X ² Value
	No	%	No	%	No	%	
1. Low	3	2.68	11	9.82	5	4.47	31.00**
2. Medium	7	6.25	63	56.25	9	8.03	
3. High	9	8.03	5	4.46	0	0.00	
Total:	19	16.96	79	70.54	14	12.50	

** Significant at 0.01 level of probability

These findings are in line with those of Gopal and Subramanyam (1979) and Tarpara (1981).

The data presented in table 3 reveal that relationship between respondents' extent of knowledge and extent of adoption of chiku crop technology was tested by computing chi-square (X²) value. It was found (31.06) to be highly significant at 1 per cent level. This indicates that more respondents' knowledge more was the adoption of chiku crop production technology. The finding is similar to the finding of Tarpara (1981).

CONCLUSIONS

1. Majority of the chiku growers had possessed medium level of knowledge and adoption regarding improved farm technology.
2. Majority of the chiku growers had possessed high knowledge in improved variety, method of application of manures and fertilizers and number of irrigation
3. Extent of adoption of improved chiku crop production technology was found dependent on level of knowledge of the cultivators.

IMPLICATIONS

Based on the finding of the study, it is implied that high priority is to be given for the spread of knowledge about improved farm technology regarding chiku cultivation.

Training programmes for farmers may be organised to improve their knowledge.

Demonstrations on plant protection measures need to be organised on the farmers' field for early and timely acceptance of plant protection measures.

REFERENCES

- | | | |
|------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gopal, R.V. and Subramanyam. | 1979 | Training needs of farmers. The Madras Agricultural Journal. <u>66</u> (3) : 199-200 |
| Gupta, T. | 1967 | A simple adoption scale for selection of farmers for high yielding varieties programme for rice, Indian journal of Extension Education. <u>3</u> (3) : 107-15. |
| Mayani, V.V. and Kumar. K. | 1980 | Existing knowledge based training needs of small farmers. Gujarat Agricultural University Research Journal. <u>5</u> (2) : 25-30 |
| Singhy, P.M. and Mody M. | 1974 | Farmers ignorance and role of television, CMA monograph No. 49, Indian Institute of Management, Ahmedabad. |
| Tarpara, N.P. | 1981 | Adoption of cultivation practices of fruit orchards. M.Sc.(Agri) Thesis, GAU, Navsari. |

**God turns his back on
those who quarrel among themselves.**

- M.K. Gandhi