

resistant cultivars. The groundnut entries, which are identified as resistant, are to be used in breeding programme to evolve disease resistant variety.

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Research Notes

Adoption of improved practices in mango cultivation by small and big farmers in Dharmapuri district

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Fruit crop cultivation is a new trend for the farmers of dryland areas. Due to the frequent field crop failures in several parts of the state in recent times and of good progress made in dryland horticulture research, majority of the dryland farmers made an attempt to shift from usual crop farming to growing of fruit orchards in their lands. Mango cultivation has been a component of the dryland horticulture and being given importance at this diversion. Under mango improvement programme, researchers have recommended improved technologies for higher production. Farmers extent of adoption on the improved practices of mango cultivation is inevitable to boost up the production of mango.

Keeping this in view, an attempt was made to study the level of adoption of the mango growers with respect to the recommended technologies and also problems faced by them.

In Tamil Nadu, Dharmapuri district is having maximum area under mango cultivation. Hence, this district was selected purposively for the study. From this, two blocks were selected and two villages in each of the selected block was chosen based on the maximum area under mango, the sample were drawn using proportionate random sampling method from the four selected villages. A sample size of 120 respondents were studied. The data were collected through a well structured interview

Table 1. Constraints in adopting the mango cultivation practices

S.No. Constraints	Respondents*		
	No.	%	Rank
1. Inadequate market facilities	98	81.66	I
2. High transport cost	81	67.50	II
3. Lack of transport facilities	76	63.33	III
4. Lack of technical guidance	68	56.66	IV
5. Non-availability of credit facilities	65	54.16	V
6. Failure of seasonal rains	62	51.66	VI
7. High cost of pesticides	56	46.66	VII
8. Price fluctuation	42	35.00	VIII
9. High cost of labour	36	30.00	IX
10. Non-availability of quality seedlings	12	10.00	X

* : Pooled (due to multiple responses, the total will exceed 100%)

shedule and the collected data were analysed using percentage analysis.

1. Practicewise adoption of mango cultivation practices by farmers

To facilitate the comparative study of small and big farmers the data collected regarding their practicewise adoption are analysed and presented below. The results indicate that all the farmers of both the categories had selected red soil type. Majority of the big farmers had adopted the practices like pit size (96.66%), growing regular bearing varieties (90.0%), plant population (88.33%) thinning once in a year (75.0%), filling materials 10 kg FYM and top soil used (86.66%), chemicals used in the pit (80.0%), irrigation once in a week (71.66%) and intercropping with groundnut (70.0%). The other practices namely early varieties grown, fertilizer application for more than 6 years old tree, intercropping with pulses and time of application of fertilizer, spacing were adopted by more than 50 per cent of the respondents. Very limited persons had used growth regulators and pest and disease control (below 20%).

Among the small farmers, it was found that there existed very low level of adoption of practices like plant population, (36.66%) chemical used in the pit, (33.33%) irrigation once in a week, (33.33%) and fertilizer application, (30.0%). Growth regulators and pest and disease control measures were not at all followed by them.

The big farmers had better adoption than the small farmers, Hence, the extension agents should take efforts to impart training and make conviction about improved mango cultivation practices for the benefit of the mango growers. This will also help to lead better adoption thus resulting higher production.

This finding is in confirmity with the finding of Reddy and Ratnakar (1993).

II. Differential adoption level of small and big farmers

The data to assess the adoption of mango growing technology among farmers were processed and presented below.

Results revealed that fifty per cent of the respondents had medium level of adoption, followed by 27.50 per cent at low level and 22.50 per cent at high level.

Generally, the big farmers were better adopters than small farmers. The practicewise adoption between the groups, 33.34 per cent of big farmers had high level of adoption as against 11.67 per cent of small farmers. Only 13.33 per cent of big farmers were low adopters, as against 40 per cent small farmers. This might have been due to their higher socio-economic status.

This finding is in line with the finding of Nataraju *et al.* (1995).

III. Constraints faced by the farmers in adopting the mango cultivation practices

Table 1 revealed that inadequate market facility was the major constraint as reported by more than three-fourth of (81.66%) the respondents. This suggests for the establishment of mango based processing industries in this district. High transport cost was the other constraint followed by lack of transport facilities, lack of technical guidance, non-availability of credit facilities and failure of seasonal rains. Similar views and findings was reported by Govinda Gowda and Lakshminarayan (2001). The other constrains expressed by the farmers were high cost of pesticides, price fluctuation, high cost of labour and non-availability of quality seedlings at a reasonable price from reliable sources.

Majority of the mango growers were medium level adopters of selected recommended technologies. Plant protection aspects were observed to be negligible in adoption. Inadequate market, high cost of transport, lack of transport facilities and technical guidance were emerged as major constraints. Intensive and speedy, organised efforts of the extension functionaries especially in horticulture is required. Field demonstrations, field visits, imparting technical knowledge through seminars, symposium, brain storming etc., are to be attempted to gain knowledge by the growers and gain conviction on the technologies which will enable them to follow the recommendations without any deviation. Mango based preservation and processing industries may be established in the district either by government or through potential groups with the financial aid from NABARD/ Nationalised banks. This would help to solve the major said constraints.

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