

# Constraints faced by orange growers in adoption of orange rootstock

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### **ABSTRACT**

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The study aimed at understanding the constraints of orange growers regarding orange rootstock. The study was conducted in Morshi Panchayat Samiti of Amravati district in Vidarbha region of Maharashtra state being more concentration of orange cultivation in this Panchayat Samiti (6220 ha). From this Panchayat, Samit 10 villages were purposively selected on the basis of large area under orange. From these villages, 150 orange growers and 16 nursery growers were selected for this study. The frequency and percentage of each constraint were worked out to measure the constraint encountered by the respondents. Constraints faced by majority of the respondents were non-availability of rootstock in time, non-availability of Rangpur lime rootstock, non- availability of disease free rootstock and high cost of rootstock. Other constraints faced by orange growers were non-availability of rootstock in large quantity and lacunae in government policies, subsidies for the rootstock.

Jadhav, R.M., Gaikwad, J.S., Suvarna B. Todmal and Torawane Kranti B. (2011). Constraints faced by orange growers in adoption of orange rootstock. *Agric. Update*, **6**(3&4): 97-98.

## INTRODUCTION

Citrus fruits have a prominent place among popular extensively grown tropical and sub-tropical fruits. Orange occupying nearly two third of the world total area. Nagpur Mandarian orange is one of the most important fruit crops of Maharashtra state. The most commonly used rootstock for propagating Mandarian or Santra in India are Jamberi or Jatti Khatti. Jamberi is commonly used as the rootstock in Madhya Pradesh, Maharashtra and Karnataka. Recently, Rangpur lime has shown great promise as rootstock for Mandarian. Jamberi is fast growing rootstock as compared to other rootstocks. On other hand, Rangpur lime is slow growing rootstock but fruit production of Rangpur lime is higher as compared to other rootstock. The present investigation was an attempt to study the constraints faced by orange growers in adoption of orange rootstock.

**Key words:** Orange, Orange rootstock, Constraints

Received: May, 2011; Revised: Jul., 2011; Accepted: Aug., 2011

#### **METHODOLOGY**

This study was conducted in Morshi Panchayat Samiti of Amravati district in Vidarbha region of Maharashtra state being more concentration of orange cultivation in this Panchayat Samiti (6220 ha).

The purposive selection of Morshi Panchayat Samiti was made on the criteria of larger area under orange in the district. In Amravati district area under orange is 63033 hectares. Out of which 6220 hectares is in Morshi Panchayat Samiti. The list of villages having cultivation of orange was obtained from Office of Panchayat Samiti, Morshi. Out of them 10 villages were purposively selected on the basis of large area under orange. The villages selected were namely Bhaipur, Maywadi, Morshi, Dapori, Pala, Hiwarkhed, Torada, Ghodadeo, Dongaryawali and Belona. From these ten villages, list of orange growers was prepared separately from each village by consulting the Talathi. From these lists, selection of respondents from each village was made by proportionate random sampling. Thus, the sample constituted 150 orange growers. In addition, 16 nursery growers from Morshi Panchayat Samiti were also selected. In total 166 respondents were selected for the study.

Constraints were found during pre-testing structured. A query was made to the

respondents to elicit their responses about the orange rootstock. The responses were recorded against the structured constraints. The frequency and percentage of each constraint were worked out to measure the constraints encountered by the respondents.

## **OBSERVATION AND ANALYSIS**

Based on various types of difficulties faced by the respondents, the constraints are presented in Table 1

It is depicted from Table 1 that 68.67 per cent of respondents were faced with constraint like non-availability of rootstock in time. Further, considerable number of respondents (43.67per cent) faced constraint like non-availability of Rangpur lime rootstock. It is followed by 40.36 per cent who faced constraint of non-availability of disease free rootstocks. Nearly one third of respondents (33.13per cent) recorded cost of rootstock was very high. Only 14.45 per cent of respondents faced the constraint like lacunae in Government policies and subsidies for the rootstock, followed by 12.04 per cent recorded constraint like non-availability of rootstock in large quantity. Ajotikar *et al.* (2001) and Bhople *et al.* (1996) also conducted studies on the production and marketing constraints faced by orange growers.

Table 1 : Distribution of the respondents according to constraints encountered by them about orange rootstock			
Sr.	Constraints	Respondents (n=166)	
No.		Frequency	Percentage
1.	The rootstocks are not	114	68.67
	available in time		
2.	Cost of rootstock very high	55	33.13
3.	Non-availability of	72	43.37
	Rangpur lime rootstock		
4.	Non-availability of disease	67	40.36
	free rootstock		
5.	Rootstock are not available	20	12.04
	in large quantity		
6.	Lacunae in Government	24	14.45
	policies and subsidies for		
	the rootstock.		

#### **Conclusion:**

From Morshi Panchayat Samiti, 150 orange growers and 16 nursery growers were selected for this study. The frequency and percentage of each constraint were worked out to measure the constraints encountered by the

respondents. Constraints faced by majority of respondents were non-availability of rootstock in time, non-availability of Rangpur lime rootstock, high cost of rootstock and non-availability of disease free rootstock. The other constraints faced by orange growers like rootstock were not available in large quantity and lacunae in Government policies and subsidies for the rootstock.

It could be concluded that the analysis of these constraints would call for the attention of the administrator of Government, Department of Horticulture and other concerned departments for planning systematic efforts to encounter these constraints and that will go long way for the development of agriculture in general and horticulture in particular.

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