

Knowledge of Improved Cultivation Practices of Rose Grown by the Farmers of Khamnor Panchayat Samiti District of Rajsamand, Rajasthan

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Rose is most important cut-flower. It occupies the first position in the foreign trade of cut-flower followed by Chrysanthemum and carnation. More than 140 countries are involved in the world floriculture trade. Netherland is the largest producer as well as the exporter of the cut-flowers (63 per cent) in the world. Germany, on the other hand is the largest importer. Its share in the world import has been around 37 per cent.

In India, now-a-days, domestic floriculture market has become quite large with an annual turnover of about Rs. 300 crores and is growing @ over 20 per cent per annum (Floriculture Today, May, 2000 page 19). As per the survey, estimates of Agriculture Produce Export Development Authority (APEDA), nearly one lac ha of land is under flower cultivation. The flower market in Delhi, Bangalore, Calcutta, Channai and Mumbai do have a huge business throughout the year.

The major rose growing states are Karnataka, Tamil Nadu, West Bengal, Andhra Pradesh, Maharashtra and Rajasthan. The Rajasthan has the highest area under rose cultivation after Maharashtra, Karnataka and Tamil Nadu, Pushker valley in Ajmer district, Haldi-Ghati in Rajsamand district and Girwa in Udaipur district are the main rose growing pockets in the Rajasthan. The study of level of knowledge possessed by the farmers will bring a picture of knowledge about rose cultivation technology. The results of the study would also be helpful to the planners, policy makers, administrators, programme executives of the government and NGOs in developing future programme for enhancement of production of rose. The study was taken with following objective:

- (i) To assess the knowledge level of farmers about improved cultivation practices of rose.

METHODOLOGY

The present study was conducted in Rajsamand district of Rajasthan. Rajsamand district is administratively divided into seven panchayat samities, out of which one panchayat samiti namely Khamnor was selected on the basis of maximum area for study purpose. A separate list of all the rose growing villages under the selected panchayat samiti was prepared and a sample of six villages was selected from the selected panchayat samiti by simple random sampling technique. Separate list of all the rose growers was prepared from each selected village. From the list so obtained 20 respondents will be selected from each village by random sampling method. Thus in all 120 respondents were included in the sample for the present investigation.

RESULTS AND DISCUSSION

This part of chapter deals with the existing knowledge of farmers about improved rose cultivation technology. Knowledge as a body of understood information possessed by an individual is one of the important components of behavioural aspect and plays an important role in adoption of an innovation. On this ground, it is imperative to examine the extent of knowledge of farmers about improved rose cultivation technology. The results are presented in subsequent tables.

Distribution of respondents according to their knowledge about rose production technology To get an overview of the knowledge level, the respondents were grouped into (i) low (< 50), (ii) medium (51 to 73) and (iii) high (> 73) knowledge level on the basis of calculated mean and standard deviation of the obtained knowledge scores by the respondents. The distribution of respondents in each category is given in Table 1

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Table 1. Distribution of respondents on the basis of their knowledge about improved rose cultivation practices **N=120**

Sr. No.	Knowledge level	Total	
		Frequency	Per cent
1.	Low (< 50)	43	35.84
2.	Medium (51 to 73)	60	50.00
3.	High (> 73)	17	14.16
	Total	120	100.00

Table 1 reveals that out of 120 respondents, majority of respondents (50.00%) fell in medium level of knowledge group whereas, 35.83 per cent rose growers were observed in the low level of knowledge group and remaining 14.16 per cent respondents possessed high level of knowledge about improved rose cultivation technology.

On the basis of above data, it was inferred that majority of respondents farmers possessed medium level of knowledge regarding improved practices of rose cultivation.

The present findings are in accordance with the findings of Bareth (1991) who revealed that the majority of gram growers as well as urd growers had medium knowledge level regarding improved pulse production practices. The results were also in line with Kumar (2004) who observed that 45.84 per cent respondents possessed medium level of knowledge, whereas, 19.16 and 35.00 per cent had low and high level of knowledge about gram cultivation technology.

Aspect-wise knowledge of respondents about improved rose cultivation technology Further more the per cent of farmers having knowledge about different aspects of recommended cultivation practices of rose was analyzed separately. The relative importance of all

the aspects of recommended cultivation practices of rose was highlighted by ranking them on the basis of the per cent of farmers having knowledge about these recommended cultivation practices of rose. The data has been presented in Table 2. From the Table 2, it is evident that 74.7 per cent farmers had knowledge about "Recommended time of picking" and was ranked first. The second highest percentage of farmers (70.3 MPS) were having knowledge about "Recommended method of irrigation", which was ranked second, followed by "Recommended cutting treatment" (67.4 MPS), "Name of the recommended high yielding varieties (62.7 MPS) and "Recommended transplanting time in nursery" (59.3 MPS) which were ranked third, fourth and fifth respectively.

Nearly Fifty five per cent farmers had knowledge about the soil treatment followed by application of nitrogen fertilizers(49.6 MPS), time of pruning (47.9 MPS), application of phosphatic fertilizers(43.3 MPS) and application of potassic fertilizers (41. 7 MPS). They were given rank as sixth, seventh, eight, nineth and tenth respectively.

The practices of rose cultivation like, disease control quantity of insecticides and pesticides and nursery disease control were given rank eleventh twelfth and thirteen respectively.

Table 2. Knowledge about different aspects of recommended cultivation practices of rose

S.No.	Improved practices	Total	
		MPS	Rank
1.	Soil treatment	55.3	VI
2.	High yielding varieties	62.7	IV
3.	Cutting treatment	67.4	III
4.	Nursery disease control	31.1	XIII
5.	Time of transplanting	59.3	V
6.	Recommended nitrogen fertilizer	49.6	VII

7.	Recommended phosphate fertilizer	43.3	IX
8.	Recommended potassium fertilizer	41.7	X
9.	Method of irrigation	70.3	II
10.	Quantity of insecticides and pesticides	35.8	XII
11.	Plant protection measures	37.9	XI
12.	Time of pruning	47.9	VIII
13.	Time of picking	74.7	I

From the findings it is also evident that majority of the farmers were having high knowledge about the recommended time of picking, recommended method of irrigation, recommended cuttings rate, name of the recommended high yielding varieties and recommended planting time in nursery. This might be due to the reason that majority of the farmers were regularly growing rose for market purpose and these practices are most critical from the point of view of the rose production. A slight carelessness in these practices may reduce the production of rose drastically, so the farmers remain most careful about these practices. Also for producing good quality rose, they mostly remain in contact with the extension agencies, sales agents etc., resulting in gain in knowledge about these recommended cultivation practices. Also most of the farmers under study were literate hence they might know about these practices by reading the related literature. They also remain in contact with the neighbours, friends, progressive farmers and with subject matter specialists etc. Farmers due to their experience usually able to indicate the flowering time of rose by seeing the size, colour and flavours of the rose flower.

The farmers had low knowledge about name of the hormones for cuttings treatment. This might be due to the reason that the farmers might not understand the instructions written on the pack of chemicals because of its complex language, as the instructions are mostly written in English or in typical Hindi language or in the language of the particular state where the insecticides, fungicides, hormones etc. are manufactured.

The findings of the study are in conformity with the findings of Agarwal (2000), Jangid (2001), Meena (2001) and Meena (2002).

CONCLUSION

It was found that 50.00 per cent of the total respondents possessed medium level of knowledge while, 35.84 and 14.16 per cent rose growers had low and high level of knowledge about improved rose cultivation technology. It was observed that respondents have more knowledge recommended time of picking, method of irrigation and recommended cuttings rate where as low knowledge about name of chemicals for cuttings treatment and name of hormones for cutting treatment.

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