



Adoption Pattern and Marketing Channels of Rose Cut Flower Growers

C R Rahul, M T Lakshminarayan, M S Ganapathy and Siddayya

Department of Agricultural Marketing, Co-operation and Business Management
University of Agricultural Sciences, Bangalore

ABSTRACT

The present study was carried in Anekal taluk of Bangalore Urban district of Karnataka state during 2020-21 to know the extent of adoption of recommended cultivation practices by flower growers and to identify the marketing channels of flower growers. Sixty flower growers were interviewed using a pre-tested interview schedule. Ex-post facto research design was employed for the present study. The results revealed that a majority of flower growers (51.67%) were having high overall adoption of recommended cultivation practices, while one-fourth (25.0%) and 23.33 per cent of the flower growers were having medium and low overall adoption of recommended rose cultivation practices, respectively. Further it was found out that Channel I (Producers → Commission Agents → Retailers → Consumers) (Rank I) was most preferred marketing channel for marketing of rose cut flowers by the respondents followed by Channel II (Producers → Local Traders → Retailers → Consumers) (Rank II), Channel III (Producers → IFAB → Retailers → Consumers) (Rank III) and Channel IV (Producers → Exporters → Retailers → Consumers) (Rank IV) in the order of importance.

Key Words: Adoption, Consumers, Extension activities, Flower growers, Marketing channels.

INTRODUCTION

Growing of cut-flowers is one of the significant industry catering the needs of the demand of corporate houses, hotels and restaurants *etc.*, in the world. Due to the entry of corporate, there is a significant development in the floriculture sector and the corporate are producing cut flowers in adequate quantity to fulfill the ever rising demand of floricultural products to various countries across the globe. The rose is one of the leading cut flowers in the global floriculture trade and used at almost every event in both local and international markets. Rose cut flowers in the country are mostly grown under cover in Nasik, Pune, Hosur, Kodaikanal, Kalimpong, Ooty, Darjeeling, Bangalore, Solan, Palampur, Shimla, Srinagar, Delhi, Ludhiana and Kolkatta. A good number of recommended cultivation practices are advocated by the farm

scientists and horticulture extension functionaries to the rose cut flower growers for getting increased and sustained yield. However, it is found that there is slow adoption of the cultivation practices by the rose growers resulting in low yield (Sunilkumar, 2019). Hence, the present study is conducted to know the extent of adoption of recommended cultivation practices by rose cut flower growers and to identify the marketing channels.

MATERIALS AND METHODS

The study was carried out during 2020-2021 in Bangalore urban district purposively selected being the largest producer of roses in the Southern districts of Karnataka. Rose was cultivated in an area of 1082 ha in the district during the year. Out of the five taluks in the district, Anekal taluk was purposively selected since rose was cultivated in

656 ha as compared to Bangalore East (257 ha), Yelahanka (132 ha), Bangalore South (26 ha) and Bangalore North (11 ha) taluks. Twelve villages were randomly selected in Anekal taluk for the study. Five rose growers were randomly selected in each of the 12 sampled villages. Thus, the total sample constituted 60 rose growers. Ex-post-facto technique was adopted for the study.

A set of 24 recommended cultivation practices were identified and score of three, two and one was given to the rose growers who had completely adopted, partially adopted and not adopted respectively for each of the cultivation practices. The minimum and maximum score one could get was 24 and 72, respectively. Further, the respondents were grouped into low, medium and high adoption based on mean (56.02) and half standard deviation (6.50).

Category	Criteria	Score
Low	< (Mean – ½ SD)	<52.77
Medium	(Mean ± ½ SD)	52.77-59.27
High	>(Mean + ½ SD)	>59.27

The respondents were asked to mention the marketing channels they preferred for selling the rose cut flowers and it is expressed in terms of frequency and percentage and ranks. Local traders, retailers, commission agents, exporters and International Flower Auction Board were the prevailing marketing channels for rose cut flowers in the study area.

RESULTS AND DISCUSSION

Adoption of specific recommended cultivation practices by rose cut flower growers

A perusal of data in Table 1 revealed that all the flower growers (100.0%) had grown rose in red soil as recommended, while 70.0 per cent had grown the recommended varieties (Tajmaha 1 (Red)/ Gold Strike Yellow)/ Nobles (Light Pink)/ Rock Star Orange) /Peach (Avalaunch). Eighty

five per cent of the respondents had followed the recommended row spacing (35-40 cm), while three-fourth had followed the recommended plant spacing (16-17 cm) (75.0%). All the flower growers had used grafted plants (100%) for growing rose and a majority of flower growers (58.33%) had followed the recommended time of planting grafts (September to October months).

The research results pertaining to manures and fertilizers reveals that two-third of the flower growers had completely adopted the recommended quantity of farm yard manure/compost (62.5t) (63.33%) and top dressing of NPK (47.5:47.5:47.5) (66.66%). The basal dose of fertilizer (15:30:30) was not adopted by 26.66 per cent of the flower growers, while 25.0 per cent and less than half (48.33%) of the flower growers had partially and completely adopted the basal dose of fertilizer, respectively. One-tenth of the respondents (10.00%) had non adopted the micronutrients as recommended (50g MnSO₄+37.5g MgSO₄+25g FeSO₄+12g B), whereas 50.0 and 40.0 per cent of the flower growers had partially and completely adopted the recommended quantity of micronutrients to the rose crop. As high as 45.0 per cent of the respondents had not applied the recommended quantity of growth regulators (Giberlic acid (1.5-2ml/l) to the rose crop, while 36.64 and 18.33 per cent of the flower growers had partially and completely adopted the recommended quantity of growth regulators, respectively. All the rose cut flower growers (100.0%) had adopted drip method of irrigation to the rose crop.

In the case of intercultural operations, a majority of the flower growers had followed the recommended practices such as: bending technique (88.33%), wild shoot removal (91.66%). deshooting and disbudding (86.66%), and using yellow trap for attracting pests (53.33%). With respect to the plant protection measures for control of insect pests, it was found that 65.0 per cent of the flower growers had not adopted any control measure for controlling the white grub, while 21.66 and 13.33 per cent of the

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Table 1. Adoption of recommended cultivation practices by rose cut flower grower. (n=60)

Sr. No.	Rose production technologies	Rose cut flower growers					
		Complete adoption		Partial adoption		Non adoption	
		No.	%	No.	%	No.	%
1.	Soil type (Red soil)	60	100.00	00	0.00	00	0.00
2.	Recommended rose varieties Tajmahal (Red)/ Gold Strike(Yellow) Nobles (Light Pink)/ Rock Star(Orange)/Peach (Avalaunch)	42	70.00	00	0.00	18	30.00
3.	Spacing						
a.	Row to Row (35-40 cm)	51	85.00	00	0.00	9	15.00
b.	Plant to Plant (16-17cm)	45	75.00	00	0.00	15	25.00
4.	Propagation						
a.	Grafted plants	60	100.00	00	0.00	00	0.00
b.	Time of planting grafts (September- October)	35	58.33	00	0.00	25	41.67
5.	Manures and fertilizers (ha)						
a.	Quantity of FYM/compost (62.5t)	38	63.33	22	36.67	00	0.00
b.	Basal dose of NPK (15:30:30)	29	48.33	15	25.00	16	26.66
c.	Top dressing of NPK (47.5:47.5:47.5)	40	66.66	14	23.34	06	10.00
d.	Quantity of micronutrients (50 g MnSO ₄ + 37.5 g MgSO ₄ + 25g FeSO ₄ +12.5g B)	24	40.00	30	50.00	6	10.00
e.	Quantity of bio –fertilizers (5 kg Azospirillum and Phospho-bacteria mixed with 250 g FYM in pit weekly)	15	25.00	23	38.00	22	36.00
f.	Quantity of growth regulators - Giberlic acid (1.5-2ml/l)	11	18.33	22	36.64	27	45.00
6.	Irrigation method (Drip irrigation)	60	100.00	00	0.00	00	0.00
7.	Inter cultural operations						
a.	Bending technique	53	88.33	00	0.00	07	11.67
b.	Wild shoot removal	55	91.66	00	0.00	05	8.34
c.	Deshooting and disbudding	52	86.66	00	0.00	08	13.34
d.	Yellow trap (used to attract pest)	32	53.33	10	16.67	18	30.00
8.	Plant protection measures						
a.	Insect pests control						
i.	White grub (Phosalone 35EC@ 2ml/l)	8	13.33	13	21.66	39	65.00
ii.	Red spider mite (Abamectin 1.9 EC @ 0.5 ml/l)	45	75.00	12	20.00	03	5.00
iii.	Thrips ,aphids , leaf eating caterpillars: (Acetamidrid @ 0.3 g/l)	48	80.00	9	15.00	03	5.00

iv	Leaf miner (Imidacloprid @ 0.5 ml/l)	36	60.00	15	25.00	09	15.00
b	Disease control						
i	Black spot disease (Carvebdazim 1g/l)	33	55.00	19	31.66	08	13.34
ii	Powdery mildew (Wettable sulphur 2g/l)	38	63.33	15	25.00	07	11.67
9.	Time of harvest (Morning)	52	86.66	08	13.34	00	0.00

respondents had partially and completely adopted the recommended plant protect measure to control the white grub (Phosalone 35EC@ 2ml/l (90%), respectively. On the other hand, a majority of flower growers had completely adopted the recommended plant protection measures for controlling the pests such as thrips, aphids, leaf eating caterpillars (Acetamiprid @ 0.3 g/l) (80.0%), red spider mite by using Abamectin 1.9 EC @ 0.5 ml/l (75.0%) and leaf miner (Imidacloprid @ 0.5 ml/l (60.0%).

It was found that a majority of the flower growers had completely adopted the recommended control measures for black spot disease (Carbendazim 1g/l) (55.0%) and powdery mildew (Wettable sulphur 2g/l). It was also noticed that a overwhelming number of flower growers (86.66%) had harvested the rose flowers during morning hours for getting optimum yield. Similar findings were reported by Neha and Jahagiridar (2018).

The major reason for majority of the flower growers for having completely adopting almost all the recommended cultivation practices in rose cultivation was due to the good knowledge possessed by the respondents on recommended rose cultivation practices. Possessing good knowledge is a prerequisite for the adoption of recommended cultivation practices. It was also observed from the study that the production technologies which are simple to practice, non- cash and low cost was completely adopted by the flower growers.

However, it was found that the a sizable number of respondents had not completely adopting the recommended rose cultivation practices such as, application of right quantity of manures and fertilizers, and controlling of insect pests and diseases. Lack of knowledge of the rose cut flower

growers on the above cultivation practices and due to high cost of manures, fertilizers and plant protection chemicals, the respondents have not completely adopted the recommended quantity of manures and fertilizers. More or less similar findings were reported by Uddin *et al* (2018).

Overall adoption of recommended cultivation practices by rose cut flower growers

The results also revealed that a majority of the flower growers (51.67%) were having high overall adoption of recommended cultivation practices, while one-fourth (25.0%) and 23.33 per cent of the flower growers were having medium and low overall adoption of recommended rose cultivation practices, respectively. It is evident that more than three-fourth of the flower growers (76.67%) were having medium to high overall adoption of recommended cultivation practices. Frequent contact with farm scientists and horticultural extension personnel and regular participation in horticulture extension activities were the reasons for more than three-fourth of the flower growers (76.67%) for having medium to high overall adoption of recommended rose cultivation practices.

Marketing channels preferred by rose cut flower growers

A bird eye view of Table 2 reveals that Channel I (Producers → Commission Agents → Retailers → Consumers) (Rank I) was most preferred marketing channel for marketing of rose cut flowers by the respondents followed by Channel II (Producers → Local Traders → Retailers → Consumers) (Rank II), Channel III (Producers → IFAB → Retailers → Consumers) (Rank III) and Channel IV (Producers → Exporters → Retailers → Consumers) (Rank IV) in the order of importance. The respondents have used more than

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Table 2. Marketing channels of rose cut flower growers

(n=60)

Sr. No.	Particular	Channels *	Rose cut flower growers		
			No.	%	Rank
1	Channel-I	Producers → Commission Agents → Retailers → Consumers	55	91.66	I
2	Channel-II	Producers → Local Traders → Retailers → Consumers	46	76.66	II
3	Channel-III	Producers → IFAB+ → Retailers → Consumers	20	33.33	III
4	Channel-IV	Producers → Exporters → Retailers → Consumers	08	13.33	IV

*Multiple response; *IFAB =International Flower Auction Board

one marketing channel for marketing of rose cut flowers. Commission agents and local traders are providing credit for purchasing agricultural inputs to the rose cut flowers growers and also they are paying more price for the rose cut flowers compared to International Flower Auction Bangalore Limited (IFAB) and exporters, hence the respondents are selling the produce to commission agents and local traders. Similar finding was reported by Sumana *et al* (2018).

CONCLUSION

It can be concluded that more than three-fourth of the rose cut flower growers (76.67%) were having medium to high overall adoption of recommended rose cultivation practices. The respondents have used more than one marketing channel for marketing rose cut flowers and the

most preferred marketing channel by 91.66 per cent of the rose cut flower growers was Producers → Commission Agents → Retailers → Consumers.

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Received on 1/7/2021

Accepted on 2/9/2021