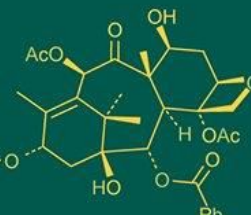
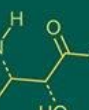
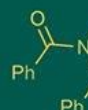


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Mamathalakshmi N
Assistant Professor,
Department of Agricultural
Extension, College of
Horticulture, University of
Horticultural Sciences,
Bagalkot, Karnataka, India

Ramegowda GK
Assistant Professor
Department of Agricultural
Entomology, College of
Horticulture, University of
Horticultural Sciences,
Bagalkot, Karnataka, India

Vikram Appanna
Assistant Professor,
Department of Agricultural
Microbiology, DSLD
CHEFT, University of
Horticultural Sciences,
Bagalkot, Karnataka, India

Dayamani KJ
Assistant Professor,
Department of Agricultural
Microbiology, College of
Horticulture, University of
Horticultural Sciences,
Bagalkot, Karnataka, India

Corresponding Author:
Mamathalakshmi N
Assistant Professor,
Department of Agricultural
Extension, College of
Horticulture, University of
Horticultural Sciences,
Bagalkot, Karnataka, India

A study on farmer's practices of Rose cv. Charisma cultivation and its impact on socio-economic status of growers

Mamathalakshmi N, Ramegowda GK, Vikram Appanna and Dayamani KJ

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Abstract

Flower business in our country has been changing from conventional flowers to cut flowers for export orientation. In India as well as in Karnataka the commercial value of Rose cv. Charisma is attaining more significance. Hence, it was considered worth to assess the status of the Rose cv. Charisma cultivation, farmer's practices and impact on socio-economic status of growers. With the ex-post facto research design study is carried out in Kolar, Chikkaballapur, and Bangaluru Rural districts drawing 30 samples from each district (n = 90). With Ex-post facto research design, personal interview method by using structured interview schedule and random sampling technique were employed to collect, by using suitable statistics collected data were analyzed to obtain results. The finding reveals that forty percent of them belonged to medium adoption behaviour followed by high (36.67%) and (23.33%). The critical practices like disbudding (91.11%), pruning (90.00%), soil testing (77.78%) and micronutrients (70.00%) were adopted to a lesser extent by majority of the respondents. Technical assistance from extension agencies would be very much required in motivating the farmers to realizing the importance of these practices to improve the production level of Rose cv. Charisma. Before growing rose cv. charisma 43.33 percent of the respondents belong to medium socio-economic status whereas after growing rose cv. charisma 60.00 percent of the respondents belong to high socio-economic status. This implies the need for additional efforts which leads to professionalization of their traditional skills through training. The respondents were using excess inorganic fertilizer which affects the soil health and crops. The concerned authority should educate farmers about ill effects of application of excess chemical fertilizers particularly NPK and also need to educate them about importance of micro nutrients on crop growth and soil health immediately through some educational training programs.

Keywords: Rose cv. charisma, socio-economic status, adoption behaviour disbudding, economical yield years

Introduction

Floriculture is the hopeful and significant viable venture when compared remaining horticulture crops. There are plenty evidences to articulate that floriculture has tremendous potential for export earnings. In addition, there is a rising demand for domestic utilization. Flower cultivation is attracting Indian farmers due to its higher unit of production, increased net returns, generation of employment and for export. The floriculture industry is growing at a rate of 17 percent per annum (Singhal, 2003) [4]. India has recognized flowers cultivation as a upcoming sector and accorded it 100 percent export oriented status. Due to its stable raise in demand, flowers cultivation has attained commercial value. The main flower growing area of the country is located in Southern Peninsula. Karnataka has the pride of place both in terms of area and production. Among the flowers rose is one of the most important crop growing in Karnataka. Belonging to the Rosa genus (*Rosa 'Charisma'*), charisma is a hybrid variety of rose; United States is believed to be where charisma originates from. Today, charisma rose is becoming a booming enterprise in the state, where is largely growing under open field condition. The commercial value of Rose cv. Charisma is fetching higher value in terms of its area and production in the country as well as in the state. This reflects its value to recognize the position secured by this crop in the state, where it is rising as one of the main flower crop so that proper extension strategies could be used to increase the area under this

crop besides knowing the socio-economic impact of charisma rose cultivation on growers and constraints existing in adoption and marketing of this crop. With this background the study is taken up with the specific objectives *viz.*, 1. To understand the farmer's practices of Rose cv. Charisma cultivation. 2. To assess impact of Rose cv. Charisma cultivation on socio-economic status of growers. 3. To study the adoption constraints of Rose cv. Charisma cultivation.

Materials and Methods

The research survey is conducted in Kolar, Chikkaballapur, and Bangaluru Rural districts drawing 30 samples from each district (n = 90). With Ex-post facto research design, personal interview method by using structured interview schedule and random sampling technique were employed to collect, by using suitable statistics collected data were analyzed to obtain results.

Results and Discussion

Table 1: Distribution of Rose cv. Charisma Growers according to their Overall Adoption Behaviour of Recommended Cultivation Practices

Adoption Behaviour	Number	Per cent
Low (< 6)	21	23.33
Medium (7-15)	36	40.00
High (> 15)	33	36.67
Total	90	100.00

The result shows that, nearly half of the growers (40.00%) fall under medium adopter category followed by high (36.67%) and low adopter (23.33%) category, respectively. The rational would be that, Rose cv. Charisma is a profit-making and extremely remunerative crop. The growers who were intending to take up this crop seek as much information as possible from available resources. Farmers' experience in flower cultivation, agriculture as primary livelihood may be the reason for this result.

Table 2: Growers' Adoption Behaviour about Rose cv. Charisma Cultivation Practices

S. No.	Practice	Adoption		Non adoption	
		No.	%	No.	%
1.	Soil Testing	20	22.22	70	77.78
2.	Planting Season	90	100.00	-	-
3.	Ploughing	90	100.00	-	-
4.	Type of Planting Material	90	100.00	-	-
5.	Method of Planting	90	100.00	-	-
6.	Spacing	90	100.00	-	-
7.	Disbudding	8	8.89	82	91.11
8.	Pruning	9	10.00	81	90.00
9.	Weeding	90	100.00	-	-
10.	Irrigation	90	100.00	-	-
11.	Farm Yard Manure	90	100.00	-	-
12.	Fertilizers				
	a. Nitrogen	90	100.00	-	-
	b. Phosphorus	90	100.00	-	-
	c. Potash	90	100.00	-	-
	d. Micronutrients	27	30.00	63	70.00
13.	Identification of Pests and Diseases	90	100.00	-	-
14.	Control Measures of Pests and Diseases	90	100.00	-	-
15.	Harvesting Time	90	100.00	-	-
16.	Stage of Harvest	90	100.00	-	-
17.	Yield	90	100.00	-	-
18.	Economical Yield Years	90	100.00	-	-

From the above table 2, it is noticed that 100 percent of the growers fully adopted the practices *viz.*, planting season, ploughing, type of planting material, method of planting, spacing, weeding, irrigation, farm yard manure, application of NPK, pests and diseases identification and its control measures, harvesting time, stage of harvest, yield and economical yield years. The reason for full adoption of land preparation practices may be due to the fact that study area is well suited to the agronomic conditions required for the Rose cv. Charisma cultivation and as well as their growing experience.

In the study area farmers were applying more than recommended dosage of NPK and 70.00 percent of them were not applying micro nutrients. The causes of inappropriate adoption of nutritional practices may be lack of proper knowledge about macro and micro nutrients and its role in crop growth and also its consequence on soil health. The respondents were fully adopted plant protection measures to save their crops from pest and diseases but they

are not contacting any extension functionaries/scientists for appropriate solution. They fully depend on personnel of pesticide shops.

With respect to cultural practices 91.11 percent of the growers were not following disbudding operation followed by 8.89 percent had adopted it. Similarly, 90.00 percent of them were not adopted pruning followed by 10.00 percent had following pruning. This may be due to the lack of correct knowledge and also lack of conviction among the farmers regarding the possible benefit of these practices. In the present investigation, cent percent of the growers had full adoption behaviour about the harvest and post-harvest practices like harvesting time, stage of harvest, yield and economical yield years. Being a commercial flower Rose cv. Charisma requires correct harvest and post-harvest practices otherwise it results in both qualitative and quantitative loss also due to their long experience they had adopted these practices.

Technology adoption takes place as results of variables such as awareness, efforts, of extension system, complexity of technology, inputs avail at right time, farmers adoption behaviour and so on. At the same time all the innovations will not be diffuse at same phase and it depends on innovation attributes, farmer's behavior and supporting system.

Table 3: Impact of Rose cv. Charisma on Socio-Economic Status of Growers

Socio-economic Status	Before		After	
	Number	Per cent	Number	Per cent
Low (Up to 97 score)	34	37.78	08	8.89
Medium (98 to 172 score)	39	43.33	28	31.11
High (More than 172 score)	17	18.89	54	60.00

Table 3 depicts that before growing Rose cv. Charisma 43.33 percent growers belong to medium socio-economic status whereas after growing Rose cv. Charisma 60.00 percent growers belong to high socio-economic status thereafter medium (31.11%) and low (8.89%). This shows that growing of Rose cv. Charisma profitable to growers which in turn facilitated in improving their socio-economic status.

Table 4: Adoption Constraints of Rose cv. Charisma

Sl. No.	Adoption Constraints @	Score	Rank
1.	Insufficient irrigation facilities	167	I
2.	Limited and irregularity of power supply	162	II
3.	Non-availability of labour for harvesting	143	III
4.	Problems of pests	132	IV
5.	Problems of diseases	130	V
6.	Market price fluctuation	130	VI
7.	Non-availability of skilled labour for pruning	92	VII
8.	Plant protection chemicals higher cost	81	VIII
9.	More cost of fertilizers	75	IX
10.	Lack of skill on disbudding & pruning	52	X
11.	Improper knowledge on balanced fertilizer usage	38	XI
12.	High cost of planting material	26	XII

Insufficient irrigation facilities (rank I), limited and irregularity of power supply (rank II) and non-availability of labour for harvesting (rank III) were the major adoption constraints faced by respondents. Technologies/line departments/SAUs should focus on these constraints and finds solutions for them.

The adoption behaviour was medium regarding Rose cv. Charisma cultivation. This reflects the need of educational activities such as capacity building programmes, demonstrations, exhibitions, field days effectively and frequently and follow-up studies by concerned people. The latest know how should reach Rose cv. Charisma growers. The critical practices like disbudding, pruning, soil testing and application of micro nutrients were adopted to a lesser extent. Technical assistance from extension agencies would be very much required in motivating the farmers to realizing the importance of these practices to improve the production level of Rose cv. Charisma. This implies the need for additional efforts which leads to professionalization of their traditional skills through training. The respondents were using excess inorganic fertilizer which affects the soil health and crops. The concerned authority should educate farmers about ill effects of application of excess chemical fertilizers particularly NPK and also need to educate them about

importance of micro nutrients on crop growth and soil health immediately through some educational training programs.

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