P-ISSN: 2618-0723
E-ISSN: 2618-0731

NAAS Rating: 5.04
www.extensionjournal.com

International Journal of Agriculture Extension and Social Development

Volume 7; Issue 7; July 2024; Page No. 548-550

Received: 05-04-2024
Accepted: 16-05-2024

Indexed Journal
Peer Reviewed Journal

Knowledge of the respondents towards improved Rose cultivation practices in Prayagraj district of Uttar Pradesh

[1]Vaibahv Singh and [2]Dr. Jahanara

[1]Researcher, Department of Agricultural Extension and Communication Sam Higginbottom University of Agriculture, Technology & Sciences, Prayagraj, Uttar Pradesh, India

[2]Professor & Head, Department of Agricultural Extension and Communication Sam Higginbottom University of Agriculture, Technology & Sciences, Prayagraj, Uttar Pradesh, India

DOI: https://doi.org/10.33545/26180723.2024.v7.i7h.855

Corresponding Author: Vaibahv Singh

Abstract
The study was conducted district of Uttar Pradesh to assess the knowledge of the respondents towards improved rose cultivation practices. A total number of 25 respondents were selected purposively from 8 villages under Chaka block because productivity, production and area under rose cultivation were found to be maximum. The data were collected by interview method by using pre structured schedule and later appropriate statistical analysis was done to find out the meaningful results. The findings also revealed that majority (52.80%) of the respondents have medium knowledge level followed by 32.80 per cent of those having high and 14.40 per cent of those having low knowledge level toward improved rose cultivation practices.

Keywords: Rose, rose growers, knowledge

Introduction

Floriculture is a branch of horticulture addressing flower and ornamental plant cultivation and propagation of flowering plants for gardens, greenhouses, nurseries and landscape comprising the floral industry. Floriculture crops include bedding plants, houseplants, flowering gardens and potted plants, cut cultivated greens and cut flowers. It is old farming activity in India having immense potential for generating gainful self-employment among small and marginal farmers. In the recent years it has emerged as a profitable agri-business in India and worldwide.

According to statistics indicated in the Handbook on Horticulture Statistics 2014, the total area under flower crops in 2012-13 was 232.70 thousand hectares. Total area under floriculture in India is second largest in the world and only next to China. Production of flowers was estimated to be 1729.2 MT of loose flowers and 76731.9 million (numbers) of cut flowers in 2012-13.

Rose is a symbol of beauty, love and tranquility; forms the soul of garden and convey the message of nature to mankind. It is one of the nature's beautiful creations and is universally known as "queen of flowers". It is a woody perennial flowering plant of the genus Rosa, in the Rosaceae family. There are over three hundred species and thousands of cultivars. It is grown for various purposes, such as garden flowers, aesthetic value, cut flower, rose oil. rosewater, etc. Rose ranks first among the top ten cut flowers the international flower market. For cut flower use, the old rose varieties like Queen Elizabeth, Super Star, Montezuma, Papa Meilland, Eiffel Tower, Kiss of fire, Golden Giant, etc. are still popular.

The fragrance of roses and tube rose flowers would now spread in Trans-Yamuna belt of the Sangam city as authorities of district horticulture department take up a rose cultivation project in Chaka block of the district. Rose is planted commercially by men and women both Prayagraj city and nearby areas.

Objective

To assess the knowledge of the respondents towards improved rose cultivation practices.

Research Methodology

Descriptive research design was adopted for the study as it describes the characteristics or phenomena that are being studied. The study is carried out in the Prayagraj district of Uttar Pradesh. Out of 20 blocks, one block namely Chaka was selected purposively based on maximum area under rose cultivation. From the selected bock, 8 villages were selected purposively based on maximum area under rose cultivation making the sample of 125 respondents.

Results and Discussion

Table 1: Content analysis of level of knowledge of improved cultivation practices by respondents

S.no.	Statements	Responses					
		Fully correct		Partially correct		Not correct	
		f	%	f	%	f	%
1.	Improved and HYVs of rose should be used for commercial cultivation	77	61.60	41	32.80	7	5.60
2.	Soil testing is very important before transplanting	40	32.00	65	52.00	20	16.00
3.	The recommended spacing is 75 cm × 75 cm	39	31.20	78	62.40	8	6.40
4.	The diameter and depth of pit is around 30 cm for planting rose	55	44.00	60	48.00	10	8.00
5.	Bright sunlight, humid, moderate temperature ranging from 15 °C-28 °C is ideal for rose cultivation	30	24.00	80	64.00	15	12.00
6.	The best season to plant rose is between September to October.	50	40.00	60	48.00	15	12.00
7.	Soils rich in organic matter and well drained sandy loam soil are more suitable for rose cultivation	50	40.00	70	56.00	10	8.00
8.	Rose is mostly sown through cuttings and budding method	73	58.40	47	37.60	5	4.00
9.	The recommended rate of cuttings for rose per ha is 50000- 60000/ha	21	16.80	84	67.20	20	16.00
10.	The recommended rate of FYM is 8-10 kg/pit	23	18.40	72	57.60	30	24.00
11.	The recommended rate of NPK is 8:8:16 g/plant	34	27.20	72	57.60	19	15.20
12.	The irrigation should be done once in a week	26	20.80	77	61.60	22	17.60
13.	Weeding and hoeing should be carried out after every alternate irrigation	36	28.80	65	52.00	24	19.20
14.	Pruning is done in second year after planting and then in subsequent years	40	32.00	60	48.00	25	20.00
15.	Best time for pruning is onset of winter (Mar) and end of monsoon (Oct)	49	39.20	60	48.00	16	12.80
16.	Caterpillar, thrips, aphids, leaf hopper are the common pests of rose	50	40.00	60	48.00	15	12.00
17.	Recommended pesticides: Caterpillar: Methomyl @1ml/L Thrips, aphids and leaf hopper: Carbofuran 3g-5g/plant	40	32.00	60	48.00	25	20.00
18.	Leaf spot, powdery mildew, dieback are the common disease of rose.	30	24.00	77	61.60	18	14.40
19.	Recommended control measures for disease: Leaf spot: Mancozeb @2.5g/L Powdery mildew: Dusting 80% Sulphur or 0.2% Karathane fungicide. Dieback: mancozeb or bavistin 2g/L	45	36.00	60	48.00	20	16.00
20.	The plants will start flowering in first year and will give economic yield from second year onwards.	49	39.20	66	52.80	10	8.00
21.	Harvesting should be done early in the morning when flower is fully opened	55	44.00	60	48.00	10	8.00
22.	Bed method of sowing is more beneficial for commercial cultivation	27	21.60	79	63.20	19	15.20
23.	The yield obtained can be around 90 stems/plant/year (10 lakh flowers/ha/year)	8	6.40	62	49.60	55	44.00

Table 2: Overall distribution of respondents according to their knowledge level.

S.no.	Knowledge level	Frequency	Percentage
1.	Low (50-55)	18	14.40
2.	Medium (56-61)	66	52.80
3.	High (62-70)	41	32.80
	Total	125	100.00

Table 3: Relationship between socio economic profiles of the respondents with their knowledge level.

S.no.	Independent variable	Correlation coefficient (r)
1.	Age	0.989*
2.	Education	0.502*
3.	Occupation	0.576*
4.	Type of house	0.979*
5.	Land holding	0.085^{NS}
6.	Annual income	0.439**
7.	Family type	0.395**
8.	Social participation	0.686*
9.	Extension contacts	0.781*
10.	Mass media exposure	0.672*
11.	Risk orientation	0.720*

***** Significant at 0.05 per cent level of probability
** Significant at 0.01 per cent level of probability
NS= Non- Significant

The data presented in the table 2 reveals that majority (52.80%) of the respondents have medium knowledge level followed by 32.80 per cent of those having high and 14.40 per cent of those having low knowledge level with regards to the improved cultivation practices of rose.

From table 3, it can be observed that 11 socio-economic characteristics has been studied among which characteristics like age, education, occupation, type of house, social participation, extension contacts, mass media exposure and risk orientation had positive and significant association with the knowledge level of the respondents at 5 per cent level of significance. Meanwhile, annual income and family type had positive and significant association with the knowledge level of the respondents at 1 per cent level of significance Thus, it can be inferred that had positive influence to enhance the extent of knowledge about improved rose cultivation practices. Therefore, the null hypothesis is rejected for these variables. Land holding had positive and non- significant association with the knowledge level which means land holding neither have negative or positive significant influence over knowledge. Therefore, the null hypothesis is accepted for this variables.

Conclusion

It was concluded that majority of the respondents were living in medium level of socio economic status. The study clearly brought out that the majority (52.80%) of the respondents have medium knowledge level followed by 32.80 per cent of those having high and 14.40 per cent of

those having low knowledge level about improved rose cultivation practices. It was also found that knowledge level of respondents was positively and significantly correlated with age, education, occupation, type of house, annual income, family type, social participation, extension contacts, mass media exposure and risk orientation whereas land holding had non- significant association with the knowledge level.

References

1. Kumar V, Singh YK, Shukla A, Sharma A. Knowledge level of improved production technology of rose cultivation of rose growers in Kannauj district (U.P.). The Pharma Innovation J. 2023;12(10):423-426.
2. Mathivanan B. A study on rose cultivation and marketing pattern in Housr Taluk. J Exclus Manag Sci. 2013;2(12):2277-5684.
3. Singh BK, Rakesh ES, Yadav VPS, Singh DK. Adoption of commercial cut flower production technology in Meerut. Indian Res J Ext Educ. 2016;10(1):50-53.
4. Sudhakar G. Awareness, knowledge and adoption of recommended cultivation practices of medicinal plant growers in Thiruvannamali District. M.Sc. (Ag) Thesis (Unpublished). Annamalai University, Annamalainagar; c2017.
5. Wani NI, Dar MA, Nazki IT, Wani MY, Showkat A. A study on the knowledge and adoption of recommended production and management practices of registered Gladiolus growers of Srinagar and Budgam districts of Kashmir Valley. J Pharmacogn Phytochem. 2017;6(4):1872-1877.