



ISSN (E): 2277-7695  
ISSN (P): 2349-8242  
NAAS Rating: 5.23  
TPI 2023; SP-12(10): 423-426  
© 2023 TPI  
[www.thepharmajournal.com](http://www.thepharmajournal.com)  
Received: 14-07-2023  
Accepted: 25-08-2023

**Vipin Kumar**  
Assistant Professor, Department  
of Agricultural Extension and  
Communication, College of  
Agriculture, AKS University,  
Satna, Madhya Pradesh, India

**YK Singh**  
Associate Professor and Head,  
Department of Agricultural  
Extension and Communication,  
College of Agriculture,  
AKS University, Satna,  
Madhya Pradesh, India

**Anoop Shukla**  
Assistant Professor, Department  
of Agricultural Extension and  
Communication, College of  
Agriculture, AKS University,  
Satna, Madhya Pradesh, India

**Akanksha Sharma**  
Assistant Professor, Department  
of Agricultural Extension and  
Communication, College of  
Agriculture, AKS University,  
Satna, Madhya Pradesh, India

**Corresponding Author:**

**Vipin Kumar**  
Assistant Professor, Department  
of Agricultural Extension and  
Communication, College of  
Agriculture, AKS University,  
Satna, Madhya Pradesh, India

## Knowledge level of improved production technology of rose cultivation of rose growers in Kannauj district (U.P.)

**Vipin Kumar, YK Singh, Anoop Shukla and Akanksha Sharma**

### Abstract

India, being a tropical country, has several advantages in floriculture production. In Uttar Pradesh, the importance of floriculture is vast, and it is profitable in nearby cities due to higher demand increasing day by day. This research study was conducted in the Kannauj district of the western plain zone during the years 2017–18. Among the eight blocks of Kannauj district, one block was selected, and the selected block of Kannauj had the maximum area under the rose. Hence, Kannauj Block of Kannauj District was purposefully selected for the study area. In Kannauj Block, four villages were selected; from each selected village, 15 respondents were selected by cluster random sampling, resulting in a total sample size of 60 respondents. A cluster random sampling schedule was developed and used to collect the information from rose growers. The finding revealed that a maximum number of the respondents were in the middle age group, and the maximum number of respondents belonged to the Other Backward Caste, followed by the Scheduled Caste. The majority of respondents were found to be literate.

**Keywords:** Knowledge, improved floriculture technology

### Introduction

Horticulture is “the science of growing and management of fruits, vegetables, flowers, ornamental, aromatic & medicinal crops, spices, plantation crops and their processing, value addition and marketing.”

Uttar Pradesh with high geographical diversity, eleven agroclimatic zones and varied soil types is better place for production of various horticultural crops. In India production of flowers crops is 2246 mt. (1652.99 mt. loose and 593 mt. cut flower) and area 309.26 Lakh ha. In Uttar Pradesh production of flower 46.54 mt. and area 21.59 lakh ha. India is largest producer of loose flower in the world. Flower & aromatic flowers area-943 lakh ha. and production 3277 milli ton. Floriculture is a promising and important commercial enterprise as compared to other areas of horticulture crops. Many kinds of ornamental and flower plants are grown for domestic and international trade in India. floriculture is an important agribusiness gaining commercial importance in the vital scenario of Indian agriculture. India being a tropical country has several advantages in floriculture production. In Uttar Pradesh the importance of floriculture is vast and it is profitable nearby cities due to higher demand increasing day to day. Flowers, besides being a symbol of beauty and love are important for their economic use and are indispensable raw materials for the perfume industries. In India flowers are commonly used in worship of God at temples and homes. The essential oil extracted from the flowers is used in manufacturing scent, soaps, cosmetics, disinfectants and detergents and also in food and tobacco industries and Gulkand. Production of flowers depends on many factors like natural, physical, and technological.

### Materials and Methods

Socio-economic profile and knowledge level of rose growers about improved cultivation practices in western plain zone of U.P. The research study was conducted in Kannauj district of western plain zone during the year 2017-18. this district was purposively selected as these ranks first in area and production of rose.

Among the eight blocks of Kannauj district out of one block is selected and selected block of Kannauj had the maximum area under rose. Hence Kannauj block of Kannauj district were purposively selected for the study area. In Kannauj block four villages were selected from each selected village 15 respondent were selected cluster random samplings.

Total sample size of 60 respondent. In cluster random sampling schedule was developed and used to collect the information from rose growers.

The generated data were analyzed and presented by using percentage, standard deviation & correlation.

The frequency of a particular cell was divided by the total number of respondents or (MPS) in that particular category and multiplied by 100 for calculating the percentage.

**Results and Discussion**

**Knowledge level of rose growers on different improved production technology practices**

It is obvious from table 2 that all 11 agriculture practices of commercial scientific flower cultivation technology, pruning (80.00%), was rank at 1<sup>st</sup> as far as knowledge possessed by respondent was concerned followed by The practice field preparation at rank 2<sup>nd</sup> (75%), irrigation management at rank 3<sup>rd</sup> (70%), environment condition at rank 4<sup>th</sup> (60%).

**Table 1:** Knowledge level of rose growers on different improved production technology practices

S. No	Practices	Respondent	Percentage	Rank
1.	Variety	12	20.00	XI
2.	Environment	36	60.00	IV
3.	Propagation	24	40.00	VII
4.	Pruning	48	80.00	I
5.	Plantation time	18	30.00	IX
6.	Field preparation	45	75.00	II
7.	Irrigation	42	70.00	III
8.	Pest control	15	25.00	X
9.	Yield	30	50.00	V
10.	Marketing channel	26	43.33	VI
11.	Research center	20	33.33	VIII

crop yield at rank 5<sup>th</sup> (50%), marketing channel at rank 6<sup>th</sup> (43.33%), propagation practice at rank 7<sup>th</sup>(40%), research center at rank 8<sup>th</sup> (33.33%), plantation practice at rank 9<sup>th</sup> (30%), pest control at rank 10<sup>th</sup> (25%), and variety 11<sup>th</sup> (30%), The overall knowledge index was calculate to be 28.72%. It can be calculated that the extent of knowledge about commercial flower scientific flower cultivation technology seems to satisfactory.

**Table 2:** Knowledge level of rose growers on production technology practices: N=60

Knowledge level	Respondent	Percentage
Low (UP to4)	15	25.00
Medium (5-9)	16	26.67
High10 and above	29	48.33

Mean=24, S.D. = 16.75

The data given in a table 2-indicate that out of 60 respondent (25%) respondent observed low knowledge level and followed by (26.67%) respondent are medium level of knowledge and (48.33%) respondent observed high level of knowledge respectively in commercial flower production.

**Knowledge level of Rose growers improved technology in agricultural Practices.**

**Table 3:** Distribution of respondent on the basis of knowledge of field preparation: N=60

S. No.	Categories	Respondent	Percentage
1	NO knowledge	9	15
2	Partial knowledge	11	18.33
3	Complete knowledge	40	66.67

Mean=25.16 S.D. = 16.26

The table 3 indicate that out of 60 respondent (66.67%) respondent observed complete knowledge, followed by (18.33%) respondent observed partial knowledge and (15%) respondent are observed no knowledge in field preparation respectively.

**Table 4:** Distribution of respondent on the basis of knowledge of environment: N=60

S. No.	Categories	Respondent	Percentage
1	NO knowledge	10	16.67
2	Partial knowledge	22	36.66
3	Complete knowledge	28	46.67

Mean=23 S. D.=7.01

The data given in table 4 Indicate that out of 60 respondent (46.67%) respondent observed complete knowledge of environment, followed by (36.66%) respondent are observed partial knowledge in environment and (16.67%) respondent observed no knowledge in environment respectively.

**Table 5:** Distribution of the respondent on basis of propagation methods. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	12	20
2	Partial knowledge	26	43.33
3	Complete knowledge	22	21.67

Mean =21.66 S. D. =5.12

The data given in Table 5 Indicate that out of 60 respondent (43.33%) respondent observed partial knowledge in propagation followed by (21.67%) respondent are observed complete knowledge in propagation and (20%) respondent observed no knowledge in propagation respectively.

**Table 6:** Distribution of the respondent on basis of variety. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	25	41.67
2	Partial knowledge	21	35
3	Complete knowledge	14	23.33

Mean=18.16, S.D. = 4.79

The data given in table 6 Indicate that out of 60 respondent (41.67%) respondent observed no knowledge in variety, followed by (35%) respondent are observed partial knowledge in variety and (23.33%) respondent were observed complete knowledge in variety respectively.

**Table 7:** Distribution of the respondent on basis of plantation time. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	15	25
2	Partial knowledge	25	41.67
3	Complete knowledge	20	33.33

Mean =20.83, S. D. =3.76

The data given in Table 7 Indicate that out of 60 respondent (41.67%) respondent observed partial knowledge in plantation time, followed by (33.33%) respondent are observed complete knowledge in plantation time and (25%) respondent observed no knowledge in plantation time respectively.

**Table 8:** Distribution of the respondent on basis of pruning. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	8	13.33
2	Partial knowledge	12	20
3	Complete knowledge	40	66.67

Mean =25.33, S.D. =16.13

The data given in Table 8 Indicate that out of 60 respondent (66.67%) respondent observed complete knowledge in pruning, followed by (20%) respondent are observed partial knowledge in pruning and (13.33%) respondent observed no knowledge in pruning respectively.

**Table 9:** Distribution of the respondent on basis of irrigation. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	10	16.67
2	Partial knowledge	18	30
3	Complete knowledge	32	53.33

Mean =23.66, S.D. =9.58

The data given in Table 9 Indicate that out of 60 respondent (53.33%) respondent observed complete knowledge in irrigation, followed by (30%) respondent are observed partial knowledge in irrigation and (13.33%) respondent observed no knowledge in irrigation respectively.

**Table 10:** Distribution of the respondent on basis of insect and pest control. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	9	15
2	Partial knowledge	15	25
3	Complete knowledge	36	60

Mean =24.5, S.D. =12.78

The data given in Table 10 Indicate that out of 60 respondent (60%) respondent observed complete knowledge in insect and pest control, followed by (25%) respondent are observed partial knowledge in insect and pest control and (15%) respondent observed no knowledge insect and pest control respectively.

**Table 11:** Distribution of the respondent on basis of disease control. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	14	23.33
2	Partial knowledge	21	35
3	Complete knowledge	25	41.67

Mean =21.83, S.D. = 4.30

The data given in Table 11 Indicate that out of 60 respondent (41.67%) respondent observed complete knowledge in disease control, followed by (35%) respondent are observed partial knowledge in disease control and (23.33%) respondent observed no knowledge disease control respectively.

**Table 12:** Distribution of the respondent on basis of yield. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	13	21.67
2	Partial knowledge	25	41.67
3	Complete knowledge	22	36.66

Mean =21.5, S.D. =4.41

The data given in Table 12 Indicate that out of 60 respondent (41.67%) respondent observed partial knowledge in yield, followed by (36.66%) respondent are observed complete knowledge in yield and (21.67%) respondent observed no knowledge yield respectively.

**Table 13:** Distribution of the respondent on basis of marketing channel. N=60

S. No.	Categories	Respondent	Percentage
1	No knowledge	20	33.33
2	Partial knowledge	22	36.67
3	Complete knowledge	18	30

Mean =21.83, S.D. =4.30

The data given in Table 13 Indicate that out of 60 respondent (36.67%) respondent observed partial knowledge in marketing channel, followed by (33.33%) respondent are observed no knowledge in marketing channel and (30%) respondent observed complete knowledge in marketing channel respectively.

### Conclusion

In rose production improved technology was no complete knowledge in some farmers those which are illiterate and some farmers are literate which is concerned well knowledge regarding to improved production of rose flower .A maximum number of the respondents were finding in the age group middle and maximum numbers of the respondents were belonging to Other Back ward caste followed by scheduled caste The maximum of respondents were found to be literate. The literate farmer was achieved higher production as well as economic return regarding money. These farmers create marketing value and by product of flower. All agriculture practices of rose flower cultivation technology, environment condition as far as knowledge of other activities possessed by respondent were concerned. The practice of irrigation management at followed by pruning as well developed and manage by the cultivation respectively.

### References

1. Billi RB. Leadership behavior of presidents of Panchayat Raj Institutions for horticulture development in Bijapur district of Karnataka. M.Sc. (Agri) Thesis submitted to University of Agricultural Sciences, Dharwad; c2008.
2. Jarve, Chandan. An analytical study on impact of NHM among the beneficiaries in Khargone district (M.P.). M.Sc. (Ag.) Thesis submitted to Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalyaya, Gwalior (M.P.); c2011.

3. Karthikeyan C, Chandra Kandan K. Profile and problems of cut- flower growers. Madras Argil. J. 2001;87(7):500-503.
4. Kharqa BD, Pradhan KA, Rakesh R. Explaining the cognitive attributes of flower cultivators regarding scientific floricultural enterprises in Darjeeling district of West Bengal. J Inter academician. 2011;15(3):474.480.
5. Nagoormeeran N, Jayaseelan MJ. Socio-personal, socio-economic and socio-psychological profile of shrimp farmers. J Ext. Edu. 1999;10(2):2445-2448.
6. Ravindra Kumar, Singh Dan, Singh VK, Yadav RN, Singh DK. Determine the psychological and communicational characteristics and adoption behaviour of cut flower growers in relation to post harvest technology of Gladiolus. Annals of Horti. 2009;2(1):106-107.
7. Tawade ND, Jangam PV, Bhairmkar MS. Awareness of village about medicinal plants and their use. Maharashtra J Ext.Edu. 1998;17:270-273.
8. Vijayakumar C. A study on knowledge of improved cultivation practices among rose growers. M.Sc. (Agri.) Thesis submitted to University of Agricultural Sciences, Bangalore; c1997.
9. Bhoite. Study on knowledge, adoption and appropriateness of technologies among flower growers in Nagpur district of Maharashtra state. Dept. of Agri. Ext. Edu. Uni. Agri. Sci. Bangalore; c2001.
10. Vinay Kumar. A study on knowledge and adoption of rose growing farmers in Karnataka. M.Sc. (Agri.) Thesis submitted to University of Agricultural Sciences, Dharwad, Karnataka (India); c2005.