

# A Study on Adoption Behaviour of Chrysanthemum Growers and Their Consultancy Pattern in Dharwad District of Karnataka State\*

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**Abstract :** The study conducted in Dharwad district revealed that 60, 73.33, 61.67 and 95 per cent of the farmers adopted the practices like row to row spacing, basal dose application of fertilizer, top dressing and timely planting, respectively. Progressive chrysanthemum growers were the most consulted source of information followed by Agricultural Assistant and Assistant Horticultural Officer. The study also revealed that lack of knowledge, non availability of inputs and non-possibility to adopt were the important reasons for partial or non adoption of recommended practices.

## Introduction

With the rapid development of urban areas and the hotel industry, there is an increasing demand for flowers and ornamental plants. Chrysanthemum is one of the flowers which is demanded in large quantities specially during festive seasons.

Understanding the multidimensional behaviour of the farmers is quite essential to induce and stabilise adoption of the improved chrysanthemum cultivation practices by the farmers.

Hence, the investigation was undertaken i) to know the extent of adoption of recommended practices of chrysanthemum cultivation, ii) to find out the reasons for non-adoption or partial adoption of recommended cultivation practices of chrysanthemum and iii) to know the information sources consulted by the chrysanthemum growers.

## Material and Methods

The study was conducted in Dharwad

district during 1988-89. Dharwad district was purposively selected for the study because it is the major chrysanthemum producing district in North Karnataka with 338 hectares of land under chrysanthemum during 1987-88 and ranked second in total area under the crop in the state. Gadag taluk in the district was selected for the study as it constituted 60 per cent (200 hectares) of the total area in the district. Eight villages were selected for the study based on the criterion of minimum of 10 hectares of area under chrysanthemum in each village. From each village 15 farmers from the list were selected on systematic random sampling basis. Hence, in all 120 respondents were finally chosen as respondents for the study.

## Results and Discussion

### *Extent of adoption of recommended practices of Chrysanthemum*

A perusal of Table 1 brings to light some important findings about adoption of recommended cultivation practices of

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chrysanthemum. Majority of the respondents had adopted practices like row to row spacing, basal dose of fertilizer application, top dressing and timely planting. But it was disheartening to note that less percentage of the respondents had completely adopted the recommended key practices like variety, recommended number of cuttings per acre, chemical treatment of the cuttings, farm yard manure application and plant protection measures. Majority of the respondents had also not followed the practice pinching, which is an important practice.

The reason for full adoption of row spacing by majority of the respondents may be that it was convenient to adopt. Non-availability of farm yard manure might have forced them to adopt the recommended dose of fertilizer. The partial adoption of practices like plant to plant spacing and recommended use of cutting per acre may be due to the difficulty in following the recommended practices.

The possible reason for non-adoption of the practices like plant protection measures and pinching may be lack of knowledge about the recommended practices. The above findings are on par with those of Anonymous (1968), Siddalingappa (1978) and Kumbar (1983).

*Reasons for partial adoption or non-adoption of recommended cultivation practices*

It may be seen from Table 2 that 47.25 per cent of the respondents said that they did not adopt the recommended variety due to non-availability of seed material. Not suitable to this area (26.38%), Yields less (20.88%) and susceptible to pests and diseases (5.49 per cent) were the other reasons for non adoption of recommended variety.

Recommended number of cuttings per acre was not adopted because they felt that it was not possible to adopt (62.24%) and they did not have the necessary knowledge. (37.76%).

Lack of knowledge was the major reason for non-adoption of the practices like

use of chemical for treating cuttings, row to row spacing and plant to plant spacing.

A close look of the table reveals that respondents did not adopt the recommended application of farm yard manure owing to the varied reasons like non availability (70.37%), cost is high (19.75%) and not necessary (9.8%). High cost of fertilizers and lack of knowledge were the main reasons for partial or non-adoption of recommended dose of fertilizers.

About 63 per cent of the respondents attributed the reason as not necessary for non-adoption of important practice of pinching. Lack of knowledge (25.26%) and non availability of labours (11.11%) were the other two reasons stated by them.

The main reasons for partial or non-adoption of recommended plant protection measures for the control of thrips and aphids were high cost of pesticides (60.56%) and not noticed the pests (39.44%). Lack of knowledge (34.48%) and high cost (56.32%) were the important reasons for partial or non-adoption of recommended chemical for the control of leaf eating caterpillar. Majority of the respondents expressed lack of knowledge and high cost of fungicides as the important reasons for the partial or non-adoption of recommended use of fungicides for the control of leaf spot disease. The above findings in general, are in conformity with Sheshachar (1980), Naik (1983) and Hegde (1985).

*Sequential order of Information Sources Consulted by the Chrysanthemum Growers*

Progressive farmer was rated as the most consulted source of information and was ranked first in the sequential order of consultancy because he is considered to be pioneer in growing this crop for a long time, and is easily accessible and his profits also easily convince other farmers.

Agricultural Assistant was ranked second. This may be because of its availability

Table 1. Extent of adoption of recommended practices of chrysanthemum cultivation.

Recommended practices	Extent of adoption	Respondents	
		No.	%
1. Variety	A	29	24
	NA	91	76
2. Number of cuttings per acre	A	22	18
	NA	98	82
3. Treatment of cuttings	A	5	4
	NA	115	96
4. Spacing :			
a) Row to row	A	72	60
	NA	48	40
b) Plant to plant	A	24	20
	NA	96	80
5. Application of FYM	FA	39	33
	PA	77	64
	NA	4	3
6. Use of fertilizers:			
a) Basal dose	FA	88	73
	PA	31	26
	NA	1	1
b) Top dress	FA	74	62
	PA	33	27
	NA	13	11
7. Time of planting	A	114	95
	NA	06	5
8. Attending pinching	A	30	25
	NA	90	75
9. Plant protection measures:			
a) Thrips & aphids	FA	49	41
	PA	65	54
	NA	06	5
b) Leaf eating caterpillar	FA	33	28
	PA	51	42
	NA	36	30
c) Leaf spot disease	FA	28	23
	PA	65	54
	NA	27	23

A = Adoption;

FA = Full adoption;

NA = Non adoption

PA = Partial adoption

in rural areas and his ability to give information on chrysanthemum. Assistant Horticultural Officer occupied the third rank because study villages are situated very near to the taluk Head Quarters. He is not only a competent source of information but also visits village regularly. The next frequently consulted source of information was the input dealer. When the farmers visit the input agency for the purchase of inputs, they also consult the agent regarding chrysanthemum cultivation. Friends occupied fifth rank. Friends, generally exercise influence on the adoption of new technology. Assistant Director of Horticulture occupied the Sixth rank. Usually these officers are entrusted with more administrative work. It might not have been possible for him to interact with the farmers frequently or the farmers might have found it difficult to meet the officer. Neighbours were given seventh rank followed by Village Leaders, Extension Guides and District Horticultural Officers. The above findings are in partial agreement with the findings reported by Dudhani and Rao (1968), Dwarkinath *et al.* (1975) and Reddy (1983).

To convince the farmers about adoption of improved practices in chrysanthemum cultivation, educational efforts regarding the practices, increasing the number of Horticultural Assistants with proper training on chrysanthemum cultivation and conducting result and method demonstrations are recommended.

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# A Study on Adoption Behaviour of Chrysanthemum ...

**Table 2.** Reasons for the non-adoption and partial adoption of recommended practices of chrysanthemum cultivation.

Sl. No.	Recommended practices & reasons for non-adoption and partial adoption	Freq- uency 'n'	Per cent
1	2	3	4
<b>1. Variety</b>			
a)	Non availability of seed material	43	47.25
b)	Not suitable to this area	24	26.38
c)	Yields less	19	20.88
d)	Susceptable to pest & disease	05	05.49
		<u>91</u>	
<b>2. Number of cuttings per acre</b>			
a)	Not possible to adopt	61	62.24
b)	Lack of knowledge	37	37.76
		<u>98</u>	
<b>3. Treatment to cuttings</b>			
a)	Lack of knowledge	79	68.70
b)	Non availability	36	31.30
		<u>115</u>	
<b>4. Spacing</b>			
i) Row to row			
a)	Lack of knowledge	39	81.25
b)	High plant population	9	18.75
		<u>48</u>	
ii) Plant to plant			
a)	Lack of knowledge	69	71.88
b)	High plant Population	27	28.12
		<u>96</u>	
<b>5. Application of FYM</b>			
a)	Non availability	57	70.37
b)	Cost is high	16	19.75
c)	Not necessary	08	09.88
		<u>81</u>	

**Table 2 Contd....)**

1	2	3	4
<b>6. Fertilizer application</b>			
i) Basal dose			
a)	High Cost	17	53.12
b)	Unfavourable conditions	08	25.00
c)	Lack of knowledge	07	21.88
		<u>32</u>	
ii) Top dress			
a)	High Cost	23	50.00
b)	Lack of knowledge	19	41.30
c)	Unfavourable condition	04	08.70
		<u>46</u>	
<b>7. Attending pinching</b>			
a)	Not necessary	57	63.33
b)	Lack of knowledge	23	25.56
c)	Non availability of labour	10	11.11
		<u>90</u>	
<b>8. Time of planting</b>			
a)	Unfavourable conditions	6	100.00
<b>9. Plant protection measures</b>			
i) Thrips and aphids			
a)	High cost	43	60.56
b)	No incidence	28	39.44
		<u>71</u>	
ii) Leaf eating caterpillar			
a)	Lack of knowledge	30	34.48
b)	High cost	49	56.32
c)	No incidence	08	09.20
		<u>87</u>	
iii) Leaf spot disease			
a)	High cost of fungicide	37	40.22
b)	Lack of knowledge	51	55.43
c)	No incidence	04	04.35
		<u>92</u>	

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