PROBLEMS IN ADOPTION OF RECOMMENDED MARIGOLD PRODUCTION TECHNOLOGY AMONG MARIGOLD FARMERS OF CHHATTISGARH

S. K. Gawle, M. K. Chaturvedi and Kedar Nath Yadaw

Department of Agricultural Extension,
Indira Gandhi Krishi Vishwavidyalaya, Raipur – 492 012 (C.G.), India
Email: gawlesantosh@rediffmail.com

Abstract: This study was carried out in Bilaspur district of Chhattisgarh during 2010 in two selected blocks. The study aims to assess major problems faced by marigold growers in adoption of recommended marigold production technology. 150 randomly selected farmers who were practicing marigold cultivation were interviewed to collect the primary data. The collected data were analyzed with the help of suitable statistical techniques to draw appropriate conclusions. The findings of this study reveal that the major problems faced by the respondents regarding recommended marigold production technology were lack of availability of labour, perceived new technology as costly, lack of training facilities on flower cultivation and excess post harvest losses, etc. The major suggestions given by the respondents for solving the problems as faced by them were market as well as cold storage facility should be increased, knowledge should be increased in various aspects of marigold production technology i.e. seed treatment, wise use of irrigation, wise use of fertilizer, use of proper dose of fungicide, insecticide, weedicide, through systematic training/regular programme, the trainings should be provided on different aspects of recommended marigold production technology, etc.

Keyword: Marigold production, Problems, Suggestions, Marigold growers

INTRODUCTION

Flowers symbolize the most sensitive, delicate and loving feelings eloquently what our words fail to express. A flower adds meaning to a life and reinforces faith in nature. It is a celebration of the spectacular colours, condenses and poesics of life. It also symbolizes the quintessence of human spirit; it adorns the surface of earth with a splendid array of colours – soft, mutated and dazzling, filling the whole atmosphere with its delicate fragrance. Flowers are grown and admired by human beings wherever he lives (Narayanaswamy, 2006).

Marigold (*Tageres erecta* (L.) Asteraceae) is not only grown as ornamental cut flower and landscape plant but also as a source of natural carotenoid pigment for poultry feed. The pigment is added to intensify the yellow-orange colour of eggs yolk by adding in the poultry feed. Today, it is one of the most commercial flowers grown world-over and in India as well, accounting for more than half of the nation's loose flower production. A native of south and Central America, precisely Mexico; by considering its easy adaptability under Indian conditions, it is presumed that *T. erecta* is of Indian origin though it is an introduction. The genus *Tagetes* comprises about 33 species, of which the commercially cultivated species includes *Tagetes erecta* L. (African/American tall marigold), *T. patula* (French/dwarf marigold), *T. minuta, T. signeta* and *T. lucida* are referred as perfume marigolds. Amongst these, *T. erecta* is commonly grown for their exquisite blooms ad also natural dye (xanthophyll) extraction, while the latter species for their essential oils. It is grown for its spectacular flowers, brilliant colours, delightful appearance, myriads of size, shapes, forms, etc. Flowers are extensively used for making garlands, floral rangolies and decoration purpose and as loose flowers in one or other forms for religious offerings and social functions. Recently, marigold is grown commercially for extraction of carotene pigments mainly xanthophylls.

Marigold also has got therapeutic values. The flowers either fresh or dried are much used in stews, soups, mixed with cheese, possets, broths and drinks. Even today, the marigold is used by herbal doctors for simple ailments. The juice extracted from leaves is used for getting relief from boils, carbuncles and earache. Floral extract is a good remedy for eye diseases and ulcers, petal juice heated with an equal quantity of ghee given thrice a day cures the bleeding piles as well as purifies the blood. The dried petals are used against ringworms, stubborn wounds, bedsores, persistent ulcer and a mouth wash for bedgums (Anonymous, 2005). Essential oil acts as a repellent against files, ants and mosquitoes. Apart from this, essential oil is used in high grade perfumes and cosmetic industries.

Keeping in view of the above facts in to consideration, the present study was undertaken to find out the following objectives:

1. To identify the problems faced by the marigold growers in adoption of recommended marigold production technology.
2. To obtain the suggestions from the marigold growers to solve the problems faced by them during the adoption of recommended marigold production technology.

MATERIAL AND METHOD

The present study was carried out in Bilaspur district of Chhattisgarh state. Bilaspur district has 10 blocks, out of which, only 2 blocks were purposively selected namely, masturi and Pendra because these two blocks are having fairly good marigold

production. A list of marigold farmers of the selected blocks were obtained from the office of the horticultural department of Bilaspur district and from each selected block, 75 farmers those were practicing marigold cultivation were selected randomly. In this way total 150 marigold growers were selected as respondents. Respondents were interviewed through personal interview. Prior to interview, respondents were taken in to confidence by revealing the actual purpose of the study and full care was taken in to consideration to develop good rapport with them. For the data collection well designed and pre-tested interview scheduled were used. Collected data were analyzed by the help of various statistical tools i.e. frequency, percentage, mean and standard deviation, etc.

RESULT AND DISCUSSION

Problems

Multiple responses were taken to ascertain the problems faced by the marigold growers in adoption of recommended marigold production technology those are given as shown in Table 1.

Bottleneck found by the marigold growers were lack of availability of labour (78.67%), Inputs like hybrid seeds, herbicides, fungicides, pesticides *etc.* are found to be costly (78.00%), lack of training facilities on flower cultivation (76.67%), excess of post harvest losses (74.00%), Very little technical knowledge of herbicides, fungicides, insecticides *etc.* (63.33%), unavailability of inputs in proper time (seeds, fertilizer *etc*.) (60.67%), seldom contact with the agricultural scientists along with SHDO *etc.* (58.67%), lack of knowledge about propagation method (51.33%), non availability of loan in time (50.67%), low yield of marigold (41.33%), small size of land holdings (40.00%), lack of knowledge about seed treatment (36.67%), low social participation (35.33%), lack of complete information about recommended marigold production technology (31.33%), high labour wages (26.67%), lack of irrigation facilities (25.33%), Lack of knowledge of using of herbicides, fungicides, insecticides *etc.* (23.33%), Lack of herbicides, fungicides, insecticides *etc.* (18.00%), Lack of knowledge about storage and preservation of marigold (13.33%), low market price of produces (12.00%) and marigold is not taken by the farmers in rainy season because they cultivated paddy crops. In summer season we don't have irrigation facilities, so marigold is not taken by the farmers of Chhattisgarh state (10.67%), respectively. Narayanaswamy (2006) noted almost similar findings in his study related to management of contract farming in marigold production in University of Agricultural Sciences, Dharwad.

Table 1: Problems faced by the marigold growers in adoption of recommended marigold production technology

(n=150)

S. No.	Problems	Frequency*	Percentage	Rank
1	Lack of availability of labour	118	78.67	I
2	Inputs like hybrid seeds, herbicides, fungicides, pesticides *etc*. are found to be costly	117	78.00	II
3	Lack of training facilities on flower cultivation	115	76.67	III
4	Excess post harvest losses	111	74.00	IV
5	Very little technical knowledge of herbicides, fungicides, insecticides *etc.*	95	63.33	V
6	Unavailability of Inputs in proper time (seeds, fertilizer *etc*.)	91	60.67	VI
7	Seldom contact with the agricultural scientists along with SHDO *etc.*	88	58.67	VII
8	Lack of knowledge about propagation method	77	51.33	VIII
9	Non availability of loan in time	76	50.67	IX
10	Low yield of marigold	62	41.33	X
11	Small size of land holdings	60	40.00	XI
12	Lack of knowledge about seed treatment	55	36.67	XII
13	Low social participation	53	35.33	XIII
14	Lack of complete information about recommended marigold production technology	47	31.33	XIV
15	High labour wages	40	26.67	XV
16	Lack of irrigation facilities	38	25.33	XVI
17	Lack of knowledge of using of herbicides, fungicides, insecticides *etc.*	35	23.33	XVII
18	Lack of herbicides, fungicides, insecticides *etc.*	27	18.00	XVIII
19	Lack of knowledge about storage and of marigold	20	13.33	XIX
20	Low market price of produces	18	12.00	XX

21	Marigold is not taken by the farmers in rainy season because they cultivated paddy crops. In summer season we don't have irrigation facilities, so marigold is not taken by the farmers of Chhattisgarh state.	16	10.67	XXI

*****Frequency based on multiple responses.

Suggestions

Table 2: Suggestions from the marigold growers to solve the problems faced by them during the adoption of recommended marigold production technology (n=150)

S. No.	Suggestions	Frequency*	Percentage	Rank
1	Market as well as cold storage facilities should be increased	110	73.33	I
2	Knowledge should be increased in various aspects of marigold production technology i.e. Seed treatment, wise use of irrigation wise use of fertilizer, use of proper dose of fungicide, insecticide, weedicide, through systematic training/regular programme	104	69.33	II
3	The trainings should be provided on different aspects of recommended marigold production technology	98	65.33	III
4	The demonstrations and skill training should be organized at all level	93	62.00	IV
5	Good transportation facilities may be made at all level	86	57.33	V
6	Extension agents or agencies should conveyed right information at proper time	80	53.33	VI
7	Inputs like improved seeds, fertilizer, pesticides *etc.* should be made available subsidized rate at proper time	79	52.67	VII
8	Improved and hybrid seed should made available in time and sufficient in quantity	77	51.33	VIII
9	To the farmers credit should be provided without any hassles	71	47.33	IX
10	Through State Agricultural Marketing Board (SAMB) facilities of commodity market must be increased for selling the produces	30	20.00	X

*Frequency based on multiple responses.

The marigold growers suggested measures to remove the constraints as faced by marigold growers. It was observed in the Table 2 that market as well as cold storage facility should be increased as it was the main suggestion reported by 73.33 per cent of the respondents. The other suggestions were knowledge should be increased in various aspects of marigold production technology i.e. seed treatment, wise use of irrigation wise use of fertilizer, wise use of irrigation, wise use of fertilizer, use of proper dose of fungicide, insecticide, weedicide, through systematic training/regular programme (69.33%), the trainings should be provided on different aspects of recommended marigold production technology (65.33%), the demonstrations and skill training should be organized at all level (62.00%), good transportation facilities may be made at all level (57.33%), extension agents or agencies should conveyed right information at proper time (53.33%), inputs like improved seeds, fertilizer, pesticides *etc.* should be made available subsidized rate at proper time (52.67%), improved and hybrid seed should made available in time and sufficient in quantity (51.33%), to the farmers credit should be provides without any hassles (47.33%) and through State Agricultural Marketing Board (SAMB) facilities of commodity market must be increased for selling the produces (20.00%), respectively.

CONCLUSION

From the above findings it can be concluded that the important problems reported by the marigold growers were low market price of marigold flower (84.00%), lack of availability of labour, and inputs like hybrid seeds, herbicides, fungicides, pesticides *etc.* are found to be costly, *etc*. The suggestions given by the marigold growers for removing the constraints faced by them were as follows: market as well as cold storage facilities should be increased, knowledge should be increased in various aspects of marigold production technology i.e. Seed treatment, wise use of irrigation wise use of fertilizer, use of proper dose of fungicide, insecticide, weedicide, through systematic training/regular programme *etc*.

REFERENCES

Anonymous, (2005). Flower industry in India. *Agriculture Today*, **5**: 25-28.

Narayanaswamy, S. (2006). Management of Contract Farming in Marigold (*Tagetes erecta* L.) Production. M.B.A. (Agribusiness) Thesis, University of Agricultural Sciences, Dharwad.