

Research Article

Constraints and suggestion made by the pomegranate growers for adoption of improved practices for control measures of oily spot disease

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SUMMARY : Pomegranate (*Punica granatum*) is a multipurpose fruit. Recommended practices, i.e. plant protection measures is an important tool in effective oily spot disease management of pomegranate. However, it is generally observed that pomegranate growers do not adopt plant protection measures on large scale. Looking to this fact, the present study was conducted in six tahsils from Latur and Osmanabad district of Marathwada region of Maharashtra. From these 120 farmers were selected on the basis of intensity of disease infestation. The present study was carried out to know the personal and socio-economic characteristics. The important constraints reported by most of the pomegranate growers were supply of input constraints, economical constraints, technological constraints, extension constraints and market constraints. The important suggestions made by the pomegranate growers adequate provision of improved varieties, plant protection measures and fertilizers in time and at cheaper rate, extending facility of crop insurance for pomegranate orchard.

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KEY WORDS :

Constraints,
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BACKGROUND AND OBJECTIVES

Horticulture occupies an important place in the agriculture economy of India. The contribution of horticulture is estimated to about 10 per cent of the total value of agriculture in the country. India is the largest fruit producing country in the world. Total production in India has been estimated up to 743.1 million tons from 107.3 million hectares of area and 6.9 million tones per ha productivity (NHB 2011-2012). Maharashtra is one of the leading state in the country in horticulture development. The diverse agro climatic conditions of the state are very congenial for cultivation of various fruit crops viz., mango, grapes, cashew, pomegranate, oranges, banana and other dry land fruit crops like ber, aonla, custard apple and tamarind. The area under fruit crops which was 12.89 lakh ha in 2002 has grown up to 13.66

lakh ha in 2011 (Anonymous, 2011)

Pomegranate (*Punica granatum*L.) is one of the most remunerative fruit crops grown in Maharashtra. Its ability to resist drought, wide adaptability to soil and climatic conditions profitable is without much care and ability to flower in all three seasons has put it way ahead than other crops. Pomegranate is originated in Iran and extensively cultivated in Mediterranean countries like Spain, Mexico, Iran, Egypt and Afghanistan. In India 2 lakh hectares area under pomegranate crop, which is mainly grown in states of Maharashtra, Gujarat followed by Rajasthan, Uttar Pradesh, Haryana, Andhra Pradesh and Karnataka. Maharashtra stands first in the country in respect of area and production of pomegranate. At present 82.0 thousands hectares area under pomegranate crops with 492.0 million tones production, 6.0 million tones per ha productivity and 66.21 per cent total share in

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production (Anonymous, 2011).

Objectives :

–To study the constraints faced by the pomegranate growers in adoption of improved practices for control of oily spot disease.

–To invite the suggestions of pomegranate growers to overcome the constraints faced in adoption of improved practices for control of oily spot disease.

RESOURCES AND METHODS

The present study was conducted during 2012-13 year in Marathwada region as considerable area under pomegranate cultivation. In Marathwada region, two districts namely Latur

and Osmanabad were selected purposively as considerable area under pomegranate cultivation. From these two districts six tahsils selected that is three tahsils from each district were selected purposively as considerable area under pomegranate cultivation. From Latur district, Chakur, Udgir, Ausa tahsils and from Osmanabad district, Tuljapur, Washi and Kalamb were selected as considerable area under pomegranate cultivation. From each tahsils five villages were selected randomly. From each village four pomegranate growers were selected randomly, thus the total sample comprised of 120 respondents for the study.

OBSERVATIONS AND ANALYSIS

The data from the Table 1 indicated that the pomegranate

Table 1: Constraints experienced by the pomegranate growers in adoption of improved practices for control measures of oily spot disease

Sr. No.	Constraints	Frequency	(n =120)	
			Percentage	Rank
I. Input supply constraints				
1.	Unavailability of guaranteed and improved varieties of pomegranate	27	22.50	XIX
2.	Non-availability of fungicides <i>i.e.</i> plant protection measures in time	70	58.30	X
3.	Non-availability of skilled labour	38	31.66	XVI
4.	Lack of availability of irrigation	90	75.00	V
5.	Lack of availability of spraying equipments	60	50.00	XI
6.	Unavailability of fertilizers and compost	51	42.50	XIV
II. Economical constraints				
1.	High rate of inputs	92	76.66	IV
2.	More cost of plant protection measures and fertilizers	101	84.16	I
3.	Lack of capital	98	81.66	II
4.	Inadequate supply of loan from cooperative society	76	63.33	VIII
5.	Cost of spraying equipment is very high	80	66.66	VII
6.	Shortage of irrigation water	92	76.66	IV
III. Technological constraints				
1.	Lack of knowledge and skill of identification of diseases	56	46.66	XII
2.	Lack of knowledge about treatment of diseases in fruit crops	43	35.83	XV
3.	Lack of knowledge about planting time and recommended spacing	37	30.83	XVII
4.	Lack of knowledge about pruning practices	55	45.83	XIII
IV. Extension constraints				
1.	The visits of the extension personnel is not in time	28	23.33	XVIII
2.	The extension personnel do not disseminate information about plant protection measures	15	12.50	XXIII
3.	Result and method demonstration are not conducted	19	15.82	XXI
4.	The visits are not organized by extension workers to the agriculture research centre etc.	11	9.16	XXIV
5.	Audio-visual aids are not used by extension workers	16	13.33	XXII
6.	Lack of availability of literature in local language	20	16.66	XX
V. Marketing constraints				
1.	Fluctuation in the prices of fruits	90	75.00	V
2.	The rates are not according to the grades of the fruits	98	81.66	II
3.	Only 'A' grade fruits are accepted for export purposes	72	60.00	IX
4.	'Middle man' take more commission	97	80.83	III
5.	More cost of packaging of fruits	87	72.50	VI

growers experienced a number of problems while adopting improved practices for control measures of oily spot disease. For input supply constraints about 22.50 per cent of the pomegranate growers had faced constraints about lack of availability of improved varieties, while lack of availability of compost and chemical fertilizer 42.50 per cent, lack of availability of plant protection measures (Bordeaux mixture, copperoxychloride and streptomycin) 58.30 per cent. Spraying equipments 50.00 per cent, lack of availability of irrigation 75.00 per cent and skilled labour 31.66 per cent were other constraints faced by the pomegranate growers. For economical constraints most of the pomegranate growers 76.66 per cent had faced the constraints about high rate of inputs while more cost plant protection measures (Bordeaux mixture, copperoxychloride, also for bactericides like streptomycin) 84.16 per cent, spraying equipment costs 66.66 per cent, lack of capital 81.66 per cent, inadequate supply of finance by cooperative societies in time 63.33 per cent, shortage of irrigation water 76.66 per cent were other constraints faced by the pomegranate growers. For technological constraints about lack of knowledge and skill of identification of diseases 46.66 per cent, treatment of disease in fruit crop 35.83 per cent, planting time and spacing 30.83 per cent, pruning practices 45.83 per cent were other constraints faced by the pomegranate growers. For extension constraints it was observed that 23.33 per cent of the pomegranate growers had faced the constraints about visit of the extension personal is not in time while extension personnel do not disseminate information of fungicides and bactericides 12.50 per cent. Result and method demonstration are not conducted 15.82 per cent, visit are not organized by extension workers to the agricultural universities etc. 9.16 per cent and audio visual aids are not used by extension workers 13.33 per cent and unavailability

of literature in local language 16.66 per cent were the other constraints faced by the pomegranate growers. For marketing constraints most of the pomegranate growers 75 per cent had constraints about fluctuations in the prices of fruits, while rate are not according to the grade of the fruit 81.66 per cent, 'A' grade fruits are accepted for export purposes 60.00 per cent. Middle man takes more commission 80.83 per cent were the other constraints faced by the pomegranate grower.

Considering the constraints experienced by the pomegranate growers in improved practices for control measures of oily spot disease of pomegranate, they were asked to offer the solutions in order to overcome the constraints and to increase the quality of fruits. The suggestions as rendered by the pomegranate growers are presented in Table 2. In the present investigation all the farmers suggested regarding timely availability of resistant varieties to diseases 39.16 per cent, grafts or seedlings made available in time with reasonable price 46.66 per cent, plant protection measures should be available in time and at cheaper rate 76.66 per cent, extending facility of crop insurance for pomegranate orchards 80.33 per cent, loan and subsidy should be provided in time 74.16 per cent and literature should be available in local language 35.83 per cent. Pomegranate growers also suggested result and method demonstration should be conducted regularly 54.16 per cent. Co-operative organization should be established for marketing 60.00 per cent. More than 50 per cent of the pomegranate growers 72.50 per cent suggested providing knowledge of improved varieties, plant protection measures and pruning practices. Government should provide soil testing and water testing facility 44.16 per cent and 63.33 per cent of providing subsidy for fertilizer and plant protection measures.

Table 2 : Suggestions of the pomegranate growers to overcome the constraints

(n=120)

Sr. No.	Suggestions	Frequency	Percentage	Rank
1.	Seedlings or grafts should be made available in time with reasonable price	56	46.66	VIII
2.	Disease resistant varieties of pomegranate should be made available	47	39.16	X
3.	Plant protection measures should be available in time at cheaper rate	92	76.66	II
4.	Extending limit of crop insurance for pomegranate orchards	97	80.83	I
5.	Loan and subsidy should be available in time	89	74.16	III
6.	Training should be conducted at the KVK centers by expert	55	45.83	VII
7.	Literature should be available in local language	43	35.83	XI
8.	Result and method demonstration should be conducted regularly	65	54.16	VII
9.	Cooperative organization should be established for marketing	72	60.00	VI
10.	Providing knowledge of improved varieties, plant protection measures and pruning practices	87	72.50	IV
11.	Government should provide soil testing and water testing facility on large scale	53	44.16	IX
12.	Providing subsidy for chemical fertilizers and plant protection measures	76	63.33	V

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