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Original Research Article

Training Needs of Pomegranate Growers about Plant Protection Measures

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A B S T R A C T

The present study was conducted in Renapur, Udgir and Ausa tahsils of Latur district from Marathwada region of Maharashtra state, with an objective to find out training needs of pomegranate growers about plant protection measures. Four villages from each tahsil were selected purposively. Total twelve villages were selected for research study. Ten respondents from each village were selected randomly to comprise a sample of 120 respondents. The more than half (57.50%) of the respondents were from medium farming experience category, 59.17 per cent of them were educated up to higher secondary school level, 64.18 per cent of them were in the medium and semi medium land holding category, 78.34 per cent of them were having small to medium area under pomegranate cultivation, 46.67 per cent of them were having medium annual income. Two fifth (40.83%) of the respondents were having low social participation, 58.33 per cent had medium extension contact, 70.00 per cent respondents having medium knowledge level, 65.00 per cent were having medium economic motivation, 57.50 per cent were having medium risk orientation and 64.16 per cent of them were having medium market orientation. The more than three fifth (66.67%) of the respondents were located in medium category of overall training needs followed by 17.50 per cent and 15.83 per cent of the respondents were located in low and high category of overall training needs about plant protection measures, respectively.

Keywords

Training needs, Pomegranate growers and plant protection measures

Introduction

Pomegranate (*Punica granatum* L.) commonly known as Anar, Dalim, Matulum is an important fruit of tropical and subtropical regions of India. The wide adaptability, hardy nature, low maintenance cost, steady and high yields, fine table purpose and better keeping quality and possibilities to throw the plants into rest period when there is scarcity of irrigation water are some of the qualities which make this fruit crop ideally suitable for semiarid and arid regions. However, performance of the plant will be excellent, if maintained with protective irrigation. A number of varieties of pomegranate are cultivated and are distinguished by shape of the fruit, colour and thickness of the rind, taste and colour of the aril. In India pomegranate was previously grown in kitchen gardens and commercial plantations have come up in recent years with the introduction of some improved cultivars like Bhagwa, Ganesh, Araktha, Sindhur and Jyoti. With the recent developments in dry land horticulture, the production of this fruit has increased with increased demand in internal trade and export market. Although, the fruit is grown all over India, it is commercially exploited only in Maharashtra and Karnataka. (National Horticulture Board, 2014-15).

India is one of the leading countries in pomegranate acreage and production worldwide. The area under cultivation of Pomegranate in India has grown by 10.73 per cent during last seven years from 96.9 thousand hectare to 126.27 thousand hectare. Maharashtra experienced a very rapid growth in Pomegranate area during the last 20 years from 4.6 thousand ha to 90 thousand ha and accounts for 76.40 per cent of the total cultivated area under pomegranate in the country. India ranks sixth in the world with respect to pomegranate area and production. Other major pomegranate growing states are Karnataka (15.5 thousand ha), Andhra Pradesh (6.4 thousand ha) and Gujarat (7.4 thousand ha). In recent years, pomegranate cultivation has also been started in Rajasthan, Orissa, Chhattisgarh, Uttarakhand and Madhya Pradesh.

Pomegranates are one of the healthier foods. Pomegranate is rich in antioxidants, potassium, and vitamin C and great source of fiber. We can see those glistering red jewels inside. They are called arils and they are full nutritious sweet tart juice surrounding a small white crunchy seed. The juice of pomegranate is good for health. The outer skin of pomegranate has great medicinal value. There are various byproducts can be prepared by pomegranate. The edible part of pomegranate fruit is the juicy outgrowth of the seed, called aril. The parts of the fruit are a good source of sugars (14-16%), minerals (0.7-1.0%) and a fair source of Iron (0.3-0.7mg/100g.) and also contains considerable amount of acids, vitamins, polysaccharides, polyphones and important minerals. Pomegranate fruits are consumed fresh or processed as juice, jellies and syrup for industrial production. Among all forms, canned slices and juice are in much demand in India, constituting about 70 per cent of the production. It is proved to have high antioxidant activity and good potency of cancer prevention.

Pomegranate is wide cultivating fruit crop in all over India. As per different ecological regions, different climate conditions, various diseases, pests and physiological disorders can see in pomegranate.

Diseases, pests and physiological disorders badly effects on the production and productivity of pomegranate. In early stage of any infection, proper curative measure is must be needed. Therefore present investigation was undertaken to study the training needs of pomegranate growers about plant protection measures in Latur district with following specific objective.

To study the profile of pomegranate growers.

To assess the knowledge of pomegranate growers about plant protection measures.

To find out the training needs of pomegranate growers about plant protection measures.

Materials and Methods

This chapter deals with the description pertaining to general information about the locale of study, selection of respondents designing of an interview schedule, procedure and techniques followed and interpretation of data and measurement concepts used in the study.

The study was conducted in purposively selected latur district of Marathwada region of Maharashtra state having considerable area under pomegranate. Three tahsil will be selected purposively from selected district on the basis of maximum area under pomegranate for research study on

pomegranate. Four villages from each talukas were selected purposively on the basis of maximum area under pomegranate. Thus total 12 villages will be selected for research study. Ten pomegranate growers from each village were selected purposively on the basis of maximum area under pomegranate for the study comprising the total sample of 120 respondents

Results and Discussion

Personal characteristics of the pomegranate growers

Personal characteristics of the pomegranate growers result find that Table 1. Majority (57.50%) of pomegranate growers had medium farming experience, while 23.33 per cent of the growers had high farming experience, whereas 19.17 per cent of them were found in low farming experience category.

Hence it can be observe that 80.80 per cent of pomegranate growers have experience in pomegranate cultivation more than 16 years. Majority 32.50 per cent growers were educated up to secondary school level, 26.67 per cent were educated up to higher school level while 17.50 per cent of them were educated up to primary school level and 13.34 per cent pomegranate growers were educated up to diploma or graduation or post-graduation. 5.84 per cent of pomegranate growers are able to read and write only whereas, 4.17 per cent of the pomegranate growers were illiterate.

More than one third (35.83%) of the cases the pomegranate growers comes in semi medium land holding, followed by those with medium 29.16 per cent, small 25.16 per cent and big 10.83 per cent size of land holding.

Higher percentage (40.00%) of pomegranate growers were found in medium area under pomegranate cultivation category, 38.34 per cent were in small area under pomegranate cultivation category while 21.67 per cent of pomegranate growers were found in large area under pomegranate cultivation category.

The result indicates that great majority (78.34%) of the respondents were with small to medium size of land under pomegranate cultivation.

Majority 46.67 per cent of pomegranate growers had medium annual income, followed by 32.50 per cent and 20.84 per cent had low and high annual income respectively.

It is observed that 40.83 per cent of pomegranate growers had low social participation, while 33.34 per cent had high social participation and 25.83 per cent of them were found in medium social participation category. It is seen that nearly three fifth (58.33%) of the respondents were found medium level of extension contact and 26.67 per cent of them were had low extension contact. Whereas, 15.00 per cent of them were had high extension contact.

Majority (70.00%) of the respondents were found medium level of knowledge and 20.00 per cent of them were had low knowledge. Whereas, 10.00 per cent of them were had high extension contact.

It is noticed that 13. 65per cent of the respondents had medium economic motivation, followed by 20.84 per cent of the respondents from region had high economic motivation while 14.16 per cent of the respondents had low economic motivation.

Table.1 Distribution of respondents according to their personal characteristics Respondents

(n=120)

Sl. No.	Category	Frequency	Percentage
1)	**Farming Experience**		
	Low (Up to 15)	23	19.17
	Medium (between16 to 23)	69	57.50
	High (23 and above)	28	23.33
2)	**Education**		
	Illiterate	5	4.17
	Can read and write only	7	5.84
	Primary School Level (v th to VII thstds.)	21	17.50
	Secondary School Level (VIII th to X thstds.)	39	32.50
	Higher School Level (XI th to XII thstds.)	32	26.67
	Diploma/ Graduate /Post Graduate	16	13.34
3)	**Land holding**		
	Small farmers (up to 2.00)	29	24.16
	Semi-medium farmers (2.01 – 4.00)	43	35.83
	Medium farmers (4.01 – 10.00)	35	29.16
	Big farmers (above 10)	13	10.83
4)	**Area under Pomegranate Cultivation**		
	Small (Up to 1.00 ha)	46	38.34
	Medium (between1.00 to 2.00 ha)	48	40.00
	Large (2.00 ha and above)	26	21.67
5)	**Annual income**		
	Low (Up to Rs. 1,50,000)	39	32.50
	Medium (Rs. 1,50,000 to 3,00,000)	56	46.67
	High (3,00,000 and above)	25	20.84
6)	**Social participation**		
	Low (Up to 2)	49	40.83
	Medium (2 to 6)	31	25.83
	High (6 and above)	40	33.34
7)	**Extension contact**		
	Low (Up to 6)	32	26.67
	Medium (6 to 16)	70	58.33
	High (16 and above)	18	15.00
8)	**Knowledge**		
	Low (Up to 4)	24	20.00
	Medium (4 to 10)	84	70.00
	High (10 and above)	12	10.00
9)	**Economic motivation**		
	Low (Up to 12)	25	20.84
	Medium (12 to 21)	78	65.00
	High (21 and above)	17	14.16
10)	**Risk orientation**		
	Low (Up to 11)	21	17.50
	Medium (11 to 20)	69	57.50
	High (20 and above)	30	25.00
11)	**Market orientation**		
	Low (Up to 17)	20	16.67
	Medium (17 to 26)	77	64.16
	High (26 and above)	23	19.16

Table.2 Distribution of respondents according to their Knowledge

Sl. No.	Category	Respondents (n=120)	
		Frequency	Percentage
1.	Low (Up to 4)	24	20.00
2.	Medium (4 to 10)	84	70.00
3.	High (10 and above)	12	10.00
	Total	**120**	**100**

Table.3 Distribution of pomegranate growers according to their overall training needs about recommended pomegranate plant protection measures (n=120)

Sl. No.	Category	Respondents	
		Frequency	Percentage
1.	Low (Up to 26)	21	17.50
2.	Medium (26 to 43)	80	66.67
3.	High (43 and above)	19	15.83
	Total	**120**	**100**

The data revealed that 57.50 per cent of the respondents had medium risk orientation, followed by 25.00 per cent of the respondents had high risk orientation and 17.50 per cent of the respondents had low risk orientation.

It is observed that more than three fifth (64.16 per cent) of pomegranate growers had medium marketing orientation while, 19.16 per cent of the growers had high marketing orientation, followed by 16.67 per cent of the growers low marketing orientation.

Knowledge of pomegranate growers about plant protection measures

It has been observed that Table 2. Majority 70.00 per cent of the respondents were found medium level of knowledge and 20.00 per cent of them were had low knowledge.

Whereas, 10.00 per cent of them were had high extension contact. From above it is clear that nearly four fifth of the pomegranate growers had medium to high knowledge. It may be because of cultivation of fruit crop consist various technical aspects. Proper knowledge must be needed to perform any operation.

Overall training needs of pomegranate growers

It has been observed that (Table 3)66.67 per cent of the pomegranate growers were belonged to medium category while, 17.50 per cent of them were in low and lastly 15.83 per cent which belonged high category of training needs on pomegranate recommended plant protection measures.

This study provides us profile of pomegranate growers. They were from medium farming experience category, majority of the pomegranate grower were educated up to secondary school level and were having medium to semi-medium land holding. Most of the pomegranate grower had medium area under pomegranate cultivation. Majority respondents belonged

to medium category of annual income.

Most of the pomegranate growers had low social participation and most of them had medium extension contact also had medium knowledge about plant protection measures.

Majority of the respondents had medium economic motivation and risk orientation. Most of the respondents had medium level of market orientation.

Most of the pomegranate growers expressed medium level of training needs in furrow layout, manure application, water stress management, disease resistant variety, pest control, management of physiological disorders, planting method, time of planting, method of fertilizer application, fertilizer dose and drip irrigation.

References

Chiranthan, G. 2013. Training needs of citrus regarding cultivation technology. *Indian research journal. Extn.Edu.13 (4):122-125.*

Chwang, J.K and K.K. Jha 2010. Training needs of paddy cultivator in Nagaland. *Indian research Journal Extn. edu.* 10(1):156-158.

Sasane, 2011. Training needs of lemon growers. M.Sc. (Agri.) thesis MPKV, Rahuri. (M.S.).

Yadav Sandeepkumar, Prajapatir. R., Prajapatim, R. and Patel V.T. 2016. Training Needs and Relative Suitability for Training Programmes of Tomato Growers in Jaipur District of Rajasthan State. *International Journal of Agriculture Sciences 8(13):0975-3710.*