

RESEARCH NOTE

Correlates of Knowledge about Ginger Production Technology

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INTRODUCTION

The per unit production of ginger mainly depends upon the technical know-how and extent of its use by the ginger growers. Therefore, it was thought opportune to probe into the level of knowledge of the ginger growers about the recommended ginger production technology.

Keeping this background in view, the present research study was planned during the year 1997 with the objectives as :

(1) To ascertain the knowledge level of the Ginger growers about recommended technology of the ginger production.

(2) To find out the relationship between the selected characteristics of the Ginger growers and their level of knowledge of the recommended Ginger production technology.

METHODOLOGY

The research study was carried out in purposively selected Satara district of Maharashtra State because of more area under ginger crop. For the purpose of study two tehsils namely Satara and Koregaon from the Satara district were selected. Five villages

each from satara and Koregaon tehsils were selected. Thus, totally 10 villages were selected with the help of two stage random sampling technique. From the selected villages, 150 ginger growers were sampled by using equal interval method of random sampling. The data were collected with the help of a specially structured schedule.

For the measurement of knowledge, a comprehensive list of the package of practices recommended for crop was prepared in consultation with horticulture experts. Accordingly, 12 critical practices were identified for study viz. soil type, primary tillage, improved varieties, seedrate, seed treatment, sowing time, sowing methods, fertilizer management, interculturing, water management, pest and disease control and harvesting. The scores were assigned as 2, 1 and zero for complete, partial and no knowledge about the recommended practices of Ginger production technology respectively. After summing up the total scores of all the practices for each ginger grower, they were categorised into three groups as under :

- i Low - Score upto 38
- ii Medium - Score 39 to 54
- iii High - Score 55 and above

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Table 1 Practicewise knowledge of Ginger growers about recommended Ginger cultivation practices.

Sr. No.	Recommended practices	Complete		Partial		No knowledge	
		No.	Per cent	No.	Per cent	No.	Per cent
1.	Soil type (Medium well drained)	150	100.00	-	-	-	-
2.	Primary tillage						
	a. One ploughing	140	93.33	10	6.67	-	-
	b. 2-3 Harrowing	138	92.00	12	8.00	-	-
	c. 20-25 C.L. FYM	104	69.34	24	16.00	22	14.66
3.	Knowledge about varieties						
	a. Rio-de-Janero	34	22.66	48	32.00	68	45.34
	b. Mahim	150	100.00	-	-	-	-
	c. Mokya	120	80.00	20	13.33	10	6.67
	d. Angria	105	70.00	35	23.33	10	6.67
4.	Seedrate (1500 kg/ha)	85	56.67	45	30.00	20	13.33
5.	Seed treatment						
	a. 0.4 % B.H.C.	80	53.33	30	20.00	40	26.67
	b. 0.25 % mercurious fungicides	63	42.00	20	13.34	67	44.66
6.	Sowing						
	a. April-May	112	74.67	25	16.67	13	8.66
	b. June-July	25	16.67	13	8.66	112	74.67
7.	Sowing methods						
	a. Flat beds	134	89.33	16	10.67	-	-
	b. furrow methods	45	30.00	38	25.34	67	44.66
8.	Fertilizer management						
	a. Nitrogen (75 kg/ha)	37	24.66	22	14.66	91	60.68
	b. Phosphorus (50 kg/ha)	29	19.33	15	10.00	106	70.67
	c. Potassium (50 kg/ha)	25	16.67	22	14.66	103	68.67
9.	Interculturing						
	a. Weeding	132	88.00	18	12.00	0	0.00
	b. Earthing up	101	67.33	29	19.33	20	13.34
	c. Cover of green manure	96	64.00	46	30.66	8	5.34

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Sr. No.	Recommended practices	Complete		Partial		No knowledge	
		No.	Per cent	No.	Per cent	No.	Per cent
10.	Water management						
	a. 10 to 12 days intervals	141	94.00	9	6.00	0	0.00
	b. After developing 'Hurde-Band' Regular.	126	84.00	24	16.00	0	0.00
11.	Pests and disease control						
	a. Rhizom-fly (Resgar, 0.05% Ekalux)	91	60.66	20	13.34	39	26.00
	b. Root disease (0.017 Serosan)	58	38.68	40	26.66	52	34.66
	c. Leaf spot Bordeaux mixture 4:4:50	45	30.00	45	30.00	60	40.00
12.	Harvesting						
	a. After 6 month	25	16.67	92	61.33	33	22.00
	b. After sowing 8 to 12 months.	98	65.33	20	13.33	32	21.34
	c. Ratoon crop (Double season)	63	42.00	32	21.35	55	36.65

Table 2 : Level of knowledge of the Ginger growers

Level of knowledge	No. of respondents (n=150)	Percentage
Low	36	24.00
Medium	101	67.33
High	13	08.67
	Total 150	100.00

Table 3 : Correlations of characteristics of Ginger growers with their knowledge

Sr. No.	Independent Variable	Correlation coefficient 'r' value
1.	Age	-0.183*
2.	Educational status	0.627**
3.	Size of family	-0.104NS
4.	Size of land holding	0.331**
5.	Size of irrigated land holding	0.195*
6.	Annual gross income	0.367**
7.	Social participation	0.683**
8.	Cosmopolitaness	0.179*
9.	Socio-economic status	0.437**

** Significant at 0.01 per cent level

* Significant at 0.05 per cent level

NS = Non-Significant.

RESULTS AND DISCUSSION

Extent of knowledge

The data on recommended practicewise knowledge (Table 1) revealed that cent per cent of the ginger growers were aware about proper soil type and Mahim variety of Ginger. The growers had knowledge about flat bed method of sowing (89.33 per cent), intercalating like weeding (88.00 per cent), regular water management (84.00 per cent) and variety Mokya (80.00 per cent). Further, the majority of them were completely aware about-recommended sowing time i.e. April-May (74.67 per cent); Angria variety (70.00 per cent); FYM application (69.34 per cent), intercalating like earthing up (67.33 per cent), harvesting of crop after 8 to 12 months of sowing (65.33 per cent), cover of green manure (64.00 per cent), control of

Rhizomefly Pest (60.66 per cent) and required seedrate (56.67 per cent).

The data further indicated that a majority of them had partial knowledge about harvesting of Ginger after 6 months (61.33 per cent). Nearly thirty per cent of them were, however, partially aware about the variety Rio-de-Janero, required seedrate, cover of green manure and control of leaf spot disease of ginger.

It is worthwhile to note that though Ginger was grown on large scale in that area, majority of the Ginger growers did not know about the recommended dose of chemical fertilizers viz; nitrogen (60.68 per cent); phosphorus (70.67 per cent) and potassium (68.67 per cent). Nearly seventy five per cent of them had no knowledge of sowing of Ginger in June-July. Data also revealed that

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the Ginger growers had no knowledge about variety Rio-de-Janero (45.35 per cent), seed treatment with 0.25 per cent mercurious fungicides and furrow method of sowing (44.66 per cent) and control of leaf spot disease of Ginger (40.00 per cent). Rade and Pawar (1983), Pawar and patil (1990) also reported the similar observations while studying the Ginger growers.

Based on overall knowledge, it is observed from the data in Table 2 that the highest percentage (67.33 per cent) of Ginger growers had medium level of knowledge followed by those having low (24.00 per cent) knowledge level. These findings were in conformity with those of Sivaraman and Palanippan (1984), Pawar and Patil (1990) regarding Turmeric and Ginger growers respectively.

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The correlation analysis between independent variables and knowledge

(Table 3) revealed that out of nine selected independent variables, seven had positive and significant relationship with knowledge. However, variable 'age' was found to have negative but significant relationship with knowledge of the Ginger growers and size of family had negative but non-significant relationship with knowledge of the ginger growers. The variables education, size of land holding, annual gross income, social participation and socio-economic status had highly significant relationship with knowledge at 0.01 level of probability while size of irrigated land holding and cosmopolitaness both were significant at 0.05 level of probability. It is quite obvious that person with higher education, more size of land holding and more annual gross income would keep himself abreast with latest know-how regarding Ginger cultivation. These findings are in line with the findings of Jagtap (1984) and Pandya & Vekaria (1994) regarding Potato and Banana growers respectively.

❖ It is better for you to be free of fear lying upon a pallet, than to have a golden conch and a rich table and be full of trouble

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