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Knowledge and Attitude of Cucumber Growers in Janjgir Champa District of Chhattisgarh

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ABSTRACT: Cucumber (Cucumis sativas L.) is of the most important vegetable cum salad crops grown throughout the world, belongs to the family Cucurbitaceae. In India the total production of vegetables is 169.1 million metric tonnes in that cucumber has 1,050.10 tonnes hectare (National Horticulture Board). Janjigir District consists of 9 blocks, one block was selected on the basis of highest cultivation area under cucumber, jaijaipur block selected purposively for the present study. 120 cucumber growers were selected from 10 villages using proportionate random sampling method. A well-structured pre tested interview schedule was used for the study. The data was analysed using cumulative frequency method, percentage analysis, correlation. The study revealed that more than half of the farmers (54.16%) had medium level of knowledge followed by 33. 33 per cent high had high level knowledge. More than half of the farmers (58.33%) had medium level of Adoption followed by 33.33% per cent had high level of adoption. Multiple regression revealed that the variables namely Education, land holding, social participation shows positive significance at 0.05 level relate to extent of adoption about cucumber growers. The major production constraints faced by the farmers were low price for tubers due to influctuations in price (93.33%) , shortage of labour (87.5%), Exploitation of middleman (86.66%) were the major constraints faced by the cucumber constraints.

Introduction

Cucumber can be grown in field as well as in garden. It is commercially rested for home consumption. Fertile soils are used for the cultivation of cucumber; infertile soils result in bitter and misshapen fruits which are often rejected by consumers. Bush fallowing has been an efficient, balanced and sustainable agricultural system for soil productivity and fertility restoration in the tropics **(Ayoola and Adeniran, 2006),** but as a result of increase in the population, the fallowing periods have decreased from ten years to three years and this has had an adverse effect on the fertility restoration leading to poor yields of crops. Therefore, the

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use of external the form of farmyard manures and fertilizer has become imperative. Farmyard manure has been used as a soil conditioner since ancient times and its benefit have not been fully harnessed due to large quantities required in order to satisfy the nutritional needs of crops **(Makinde et al., 2007).** The need for renewable forms of energy and reduced cost of fertilizing crops, have revived the use of organic manures worldwide **(Ayoola and Adeniran, 2006).** Improvement in environmental conditions and public health are important reasons for advocating increased use of organic materials **(Ojeniyi, 2000; Maritus and Vleic, 2001)**. However, because it is bulky, the cost of transportation and handling constitute a constraint to its use by peasant farmers. Cucumber is a trailing annual crop which bears elongated fruits mainly used as a salad and is only of recent introduction in parts of Andhra Pradesh, although it is very popular in North India and even in the neighbouring states of Karnataka. The crop is cultivated in an area of 41,000 hectares in India with the total estimated production of 6.10 lakh MT(NHB, 2012-13) The seed of cucumber is highly nutritive due to there high oil and protein content seed protein of cucumber is comparable in nutritive value to those of legumes. Mathonine content is more in cucumber as compared to legumes. Timber is used as salad, as a pickle too. Cucumber is having 83 percent edible portion, water content is 96.3 percent, protein is 0.40 percent, mineral are 0.30 percent, carbohydrates 2.5 percent while energy is 13 k cl/100 gm. It also content 10.00 percent calcium 0.03 mg thiamine, 0.04 mg riboflavin. Cucumber is chief source of vitamin, mineral and carbohydrates.

METHODOLOGY

This study was conducted in Janjgir Champa district of Chhattishgarh, by purposive sampling Cucumber is grown in more than 5 thousand hectare area in the district. The district contributes more than 1.5 per cent and 2 per cent of total area and production of total Cucumber in the state. The farmers of Jaijaipur Block were interviewed. The total sample size for this study was 120 farmers. Data collected were tabulated on the basis of logical categorization method for calculation of Percentage, Frequency analysis purposes. The following formula was used to ascertain the technological gap in adoption of each of the considered practices.

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RESULTS AND DISCUSSION

Knowledge level : The data in Table 1 shows that the farmers do not have adequate knowledge about pH of soil, recommended doses of fertilizer and control of whithfly.

The data presented in table 2 reveals that majority

71.66 per cent of the cucumber growers were having medium level of knowledge, followed by 5.83 per cent of growers, who had low level of knowledge and 22.50 per cent of growers were having the high level of knowledge regarding cucumber cultivation.

Table:1. Distribution of respondents based on their Level of Knowledge on Cucumber improved production practices

S.NO	Statements	Knowledge Level		
		Fully	Partially	No
1	Recommended Cucumber Variety	88(73.33)	30(25.00)	2(1.66)
2	Suitable Soil	111(92.50)	8(66.66)	1(0.83)
3	Seed rate	81(67.50)	37(30.83	2(1.66)
4	Seed are planted	119(99.16)	1(0.83)	0(0.00)
5	Nodes present in setts	116(96.66)	4(3.33)	0(0.00)
6	Length and depth of sowing	90(75.00)	28(23.33)	2(1.66)
7	FYM requirement	52(43.33)	61(50.83)	7(5.83)
8	Spacing	114(95.00)	6(5.00)	0(0.00)
9	Dipping solution	41(34.16)	68(56.66)	11(9.16)
10	Important pest & Diseases	90(75.00)	28(23.33)	2(1.66)
11	Recommended Fertilizers	1(0.83)	28(23.33)	91(75.83)
12	pH of soil	2(1.66)	4(3.33)	114(95.00)

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13	Control of whitefly	7(5.83)	55(45.83)	58(48.33)
14	Growing intercrop	116(96.66)	2(1.66)	2(1.66)
15	Duration	120(0.00)	0(0.00)	0(0.00)
16	Tubers can be uprooted by	85(70.83)	35(29.16)	0(0.00)
17	Yield	113(94.16)	7(5.83)	0(0.00)
18	Post harvest management	120(0.00)	0(0.00)	0(0.00)
19	Value added product	120(0.00)	0(0.00)	0(0.00)

Table: 2.

S. No.	**Level of knowledge**	**Frequency**	**Percentage**
1.	Low (19-31)	7	5.83
2.	Medium (32- 44)	86	71.66
3.	High (45-57)	27	22.50
Total		120	100

The: table 3. shows that maximum attitude level among the respondents was in Additional labour generated through improved production practices 45.83 per cent followed by 38.33 per cent I think that cucumber cultivation is suitable only for those farmers who have irrigation facility.

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Table: 3. Distribution of respondents based on their Attitude towards Cucumber improved production practices

S.No	Statements	Attitude Level									
		SA		A		UD		DA		SDA	
		F	P	F	P	F	P	F	P	F	P
1	Additional labours generated through improved production practices	55	45.83	51	42.5	7	5.83	5	4.16	2	1.66
2	I prefer to adopt improved production practices in cucumber crop because of getting higher yield	12	10.00	43	35.83	43	35.43	14	11.66	8	6.66
3	Storage facility does not helps in distribution of cucumber	13	10.83	62	51.66	23	19.16	20	16.66	2	1.66
4	Middleman does not perform malpractices during marketing of cucumber	5	4.16	3	2.5	12	10	42	35	58	48.33
5	Improved cucumber production practices designed and developed based on the needs of the people	1	0.83	3	2.5	81	67.5	27	22.5	8	6.66
6	I need financial assistance to adopt improved production practices in cucumber	1	0.83	34	28.33	56	46.66	28	23.33	1	0.83
7	I think that cucumber cultivation is suitable only for those farmers who have irrigation facility	46	38.33	72	60.00	2	1.66	0	0.00	0	0.00
8	Cultivation of high yielding modern varieties is not always helpful to improve the economic condition of the farmers	2	1.66	8	6.66	76	63.33	30	25	4	3.33

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Table 4.

S.No.	Attitude level	Frequency	Percentage
1.	Low (8-13)	15	12.5
2.	Medium (14– 19)	65	54.16
3.	High (20 – 24)	40	33.33
Total		120	100

The table: 4. Indicate the majority of the respondents (54.16%) had medium level of overall attitude. There were 12.5 per cent and 33.33 per cent respondents who had low and high level of attitude towards cucumber cultivation practices

CONCLUSION

In the light of said finding and discussion of the present study, the following conclusion can be draw. The majority of the cucumber grower 71.66 per cent have medium knowledge level followed by 5.83 per cent belonged to low knowledge level and 22.50 per cent falls in high knowledge level.

The study demands the effective extension efforts (training, field demonstration, more interaction with the farmers) to be made to transfer the knowledge among the growers so that the knowledge level can be increased which in term will helps in the developing positive attitude towards cucumber cultivation and more profit to the cucumber growers.

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