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RELATIONSHIP BETWEEN PROFILES OF FARMERS WITH THEIR KNOWLEDGE ABOUT MANAGEMENT PRACTICES OF WHITE GRUB

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ABSTRACT

The present study was conducted in the Amreli district of the Saurashtra region. Out of the eleven talukas, five talukas were randomly chosen for the study. One village was then randomly selected from each of the chosen talukas, and a total sample size of 75 farmers was taken, with fifteen farmers from each village. The study utilized an ex-post-facto research design and data was collected through surveys during the period of 2018-19.The findings of the study indicated that the majority of the farmers belonged to the middle to old age group and had attained primary to secondary education. They lived in small families and had low levels of social participation. The farmers mostly had low annual income levels and owned medium to small land holding. Additionally, most of the farmers were solely engaged in farming, had moderate access to sources of information, and displayed a high level of innovativeness. The study also revealed significant correlations between various factors and the respondents' knowledge about the management practices of white grub in groundnut. Education (0.4225) and innovativeness (0.3711) were highly and significantly correlated at a probability level of 0.01. The source of information (0.2566) was found to be significantly correlated at a probability level of 0.05. However, occupation (-0.2245) showed a negative but significant correlation at a probability level of 0.05 with the respondents' knowledge about the management practices of white grub in groundnut.

Keywords: *groundnut, knowledge, management practice, profile of farmers, white grub*

INTRODUCTION

Groundnut is one of the most important cash crops of our country. It is a low priced commodity but a valuable source of all the nutrients. Groundnut is the sixth most important oilseed crop in the world. It contains 48-50% of oil and 26-28% of protein, and is a rich source of dietary fiber, minerals, and vitamins. The world wide groundnut is grown in 26.4 million hectares with a total production of 37.1 million metric tonnes and an average productivity of 1.4 metric t/ha. Worldwide ground nut is grown over 100 countries. Developing countries constitute 97% of the global area and 94% of the global production of this crop. The production of groundnut is concentrated in Asia and Africa with 56% and 40% of the global area and 68% and 25% of the global production, respectively. In India, cultivation is mostly confined to south Indian states, viz., Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra. The other important states, where, it grown in Madhya Pradesh, Rajasthan, Uttar Pradesh and Punjab. Gujarat was the largest groundnut producer in India.

Groundnut is second most important crops followed by cotton in Amreli region and it is generally grown in irrigated pockets but last 2-3 years problem of infestation of white grub in Groundnut, which causes loss of yield. Knowledge about management practice about white grub and factor correlated with knowledge level of farmers were very important for extension functionaries to organize their training programme on it. It was therefore, an investigation entitled "Relationship between profiles of farmers with their knowledge about management practices of white grub"

OBJECTIVES

(1) To study the socio-economic characters of the respondents

(2) To find out relationship between socio-economic characters of the respondents with their knowledge about management practices of white grub in groundnut

METHODOLOGY

The present study was conducted in Amreli district of Saurashtra region. From all eleven taluka five taluka randomly selected for the study. One village randomly selected from selected taluka and fifteen farmers from each village constitute total sample size 75.

Table 1 : List of respondents selected for study

Sr. No.	Name of Taluka	Name of Village	No. of respondents
1	Dhari	Navapara	15
2	Babra	Kidi	15
3	Kukavav	Lunidhar	15
4	Savarkundla	Thordi	15
5	Amreli	Amreli	15
		Total	**75**

Ex-post-facto research design was used in the present investigation. The interview schedule was developed keeping in view the specific objectives of the study and the data was collected by survey method during 2018-19. The independent and dependent variables were measured with the help of the scales and indices developed by the past researchers as well as structured schedules which were framed for purpose. For computing the correlation coefficient 'r' the Karl Pearson method was used.

RESULTS AND DISCUSSION

Socio-economic character of the farmers

Data related to the socio economic characteristics of the respondent is depicted in Table 2.

Table 2: Distribution of the respondents according to their personal profile (n=75)

Sr. No.	Personal profile	Frequency	Per cent
1	**Age**		
	Young age (up to 30 year)	07	09.33
	Middle age (31 to 50 year)	36	48.00
	Old age (above 50 year)	32	42.67
2	**Education**		
	Illiterate	04	05.33
	Primary education	30	40.00
	Secondary education	22	29.34
	High secondary education	12	16.00
	College and above	07	09.33
3	**Family size**		
	Small (up to 5 member)	42	56.00
	Large (More than 5)	33	44.00
4	**Land holding**		
	Small (up to 5 acres)	28	37.33
	Medium (above 5 to 12 acres)	27	36.00
	Large (above 12 acres)	20	26.67
5	**Social participation**		
	No social participation	40	53.33
	Poor social participation	30	40.00
	Moderate social participation	03	04.00
	Good social participation	02	02.67
6	**Annual income**		
	Low(up to ₹ 1,00,000/-)	49	65.33
	Medium (₹ 1,00,001 to 2,00,000/-)	20	26.67
	High (Above ₹ 2,00,000/-)	06	08.00

Sr. No.	Personal profile	Frequency	Per cent
7	**Innovativeness**		
	Low level of innovativeness	03	04.00
	Medium level of innovativeness	26	34.67
	High level of innovativeness	46	61.33
8	**Information source**		
	Low level of information Source	09	12.00
	Medium level of Information Source	50	66.67
	High level of Information Source	16	21.33
9	**Occupation**		
	Farming	41	54.67
	Farming + A.H	27	36.00
	Farming + Horticulture	04	05.33
	Farming + A.H + Horticulture	03	04.00

Age

It can be observed from the table that 48.00 per cent of respondents were middle age group followed by 42.67 percent and 09.33 percent of them who were old age group and young age group farmers, respectively. It might be due to responsibility for doing farming take over by middle and old age group of farmers in area. The findings is similar with Rathwa *et al* (2021).

Education

Regarding education 40 per cent of the respondents had primary education followed by 29.34 per cent, 16.00 per cent and 09.33 percent of them who had Secondary education, High Secondary education and college and above level of education, respectively. Only 05.33 per cent of the respondents were illiterate. The reason was that up to secondary level of education available at village level.

Family size

In case of family size majority of the respondents 56.00 per cent had small family size followed by 44. 00 per cent had large family.

Land holding

Regarding land holding have had by the respondent found that 37.33 per cent of the respondents had small land holding whereas, 36.00 per cent and 26.67 per cent of the who had medium and large land holding respectively.

Social participation

Majority of the respondents 53.33 per cent had no social participation followed by 40.00 per cent and 04.00 per cent of them who had poor social participation and moderate social participation. Only 02.67 per cent of the respondents had good social participation.

Annual income

As per annual income it was revealed that majority of the respondents 65.33 per cent had low annual income followed by 26.67 per cent and 08.00 per cent of them who had medium and high annual income respectively. It might be due to small land holding and majority of the respondents do only farming. The findings is similar with Rathwa *et al.*(2021).

Innovativeness

In case of innovativeness majority of the respondents (61.33 per cent) had high level of innovativeness followed by 34.67 per cent and 04.00 per cent of them who had medium level of innovativeness and low level of innovativeness, respectively. The findings is similar with Rathwa *et al.* (2021).

Information source

Majority of the respondents (66.67 per cent) had medium level of information Source followed by 21.33 per cent and 12.00 per cent of them who had high level of information source and low level of information source, respectively.

Occupation

It was found that the majority of the respondents 54.67 per cent had do only farming followed by 36.00 per

cent and 05.33 per cent of them who had farming with animal husbandry and farming with horticulture. Only 04.00 per cent of the respondents do farming with animal husbandry and horticulture.

Relationship between socio-economic characters of the respondents with their knowledge about management practices of white grub in groundnut

The data pertaining to the relationship between the profile of the respondents and their knowledge about management practices of white grub in groundnut was presented in Table -3.

Table: 3 Correlation between socio-economic characters of the respondents with their knowledge about management practices of white grub in groundnut (n=75)

Sr. No.	Variable	Correlation
X_1	Age	0.0858 NS
X_2	Education	0.4225**
X_3	Size of family	-0.1360 NS
X_4	Land Holding	0.0333 NS
X_5	Social participation	-0.0212 NS
X_6	Occupation	-0.2245*
X_7	Innovativeness	0.3711**
X_8	Information Source	0.2566*
X_9	Annual Income	0.0677 NS

Note: * Significant at 0.05 level, ** Significant at 0.01 level, NS Non significant

The data in this regard presented in Table -3 clearly revealed that education (0. 4225) and innovativeness (0.3711) was highly significantly correlated at 0.01 level of probability with the knowledge of respondents about management practices of white grub in groundnut. Thus, it rejects the null hypothesis. So it can be concluded that education and innovativeness highly influence the knowledge of respondents about management practices of white grub. The probable reason might be due to fact that education is directly related to knowledge of people and also educated people can read farm magazine or might be the reason of using famers app, internet. The findings was supported by the finding of Madhu *et al.* (2020) and their level of knowledge about Integrated Pest Management which might be due the frequent contacts with extension functionaries was also supported by finding of .Chaudhary et al. (2022), Chaudhari and Chauhan, (2017), Dobariya *et* al. (2017) and Sardhara *et* al. (2020).

Information source 0 .2566 was found significantly correlated at 0.05 level of probability with the knowledge of respondents about management practices of white grub in groundnut. Thus, it rejects the null hypothesis. So it can be concluded that information sources significantly influence the knowledge of respondents about management practices of white grub. The probable reason might be due to fact that they offer diverse perspectives, access to specialized knowledge, current information. This result is similar with finding of kumar *et al.* (2018).

Occupation (-0.2245) was found negatively but significantly correlated at 0.05 level of probability with the knowledge of respondents about management practices of white grub in groundnut. Thus, it rejects the null hypothesis. So it can be concluded that occupation negatively influence the knowledge of respondents about management practices of white grub. The probable reason might be due to fact that respondents engaged in other occupation like animal husbandry and horticulture can't really interested to know about management practice of white grub or it also might be due to other occupation cant' t given enough time in farming.

However, Age (0.0858), land holding (0.0333), annual income (0.0677) positively and non-significantly correlated with the knowledge of respondents about management practices of white grub in groundnut. Thus, it accepts the null hypothesis. So it can be concluded that age, land holding and annual income were not influence the knowledge of respondents about management practices of white grub.

Whereas, Size of family (-0.1360 NS) and social participation (-0.0212 NS) were negatively and non-significantly correlated with the knowledge of respondents about management practices of white grub in groundnut. Thus, it accepts the null hypothesis. So it can be concluded that size of family and social participation were not influence the knowledge of respondents about management practices of white grub.

CONCLUSION

From above study, it can be concluded that majority of the farmers came under middle to old age group and all of them, obtained primary to secondary education level and lived in small family. Majority of the farmers had no social participation and low annual income level with medium to small land holding. Moreover, majority of the farmers are doing only farming had medium utilization of source of information and high innovativeness. Further, Education and Innovativeness, Information source influences the knowledge of respondents about management practices of white grub.

IMPLIMICATION

Based on the finding of the study it can be recommended that to improve management practice of white grub increase sources of information among the farmers, educate farming community to understand that information.

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CONFLICT OF INTEREST

This is to declare that there is "No conflict of interest" among researcher.

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