Research Article

RELATIONSHIP BETWEEN PROFILES OF THE GROUNDNUT GROWERS AND THEIR PERCEPTION ABOUT DAMAGE CAUSED BY PESTS

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Abstract: Groundnut (*Arachis hypogaea*.), is the most important crop among the oilseed crops grown in the country. Gujarat is leading state in groundnut production. The predominant position held by groundnut in the region is falling day by day on account of the major problems like low crop productivity, post-harvest losses, crop damage by pests of groundnut farming and decline in groundnut acreage. A study was undertaken in Junagadh district of Gujarat state, to identify the perception of groundnut growers about damage caused by pests. Three talukas were selected based on criterion maximum area under groundnut cultivation in Junagadh district. Total twelve villages from three talukas were selected randomly. 120 groundnut growers from twelve villages were considered for the study. The findings revealed that the selected independent variables viz. education, annual income, extension participation, training received, farm mechanization index, yield index, cropping intensity index, attitude towards modern agriculture were positively significant at 0.01 level of significant with the perception of groundnut growers about damage caused by pest.

Keywords: *Perception, Groundnut, Pest*

Introduction

Groundnut (*Arachis hypogaea*), is the most important crop among the oilseed crops grown in the country. It is important not only from the point of view of its contribution of the national agricultural production, but also because of its industrial use. Gujarat is leading state in groundnut production. Junagadh district of Gujarat has 0.26 million hectares under groundnut and produces 0.45 million MT of groundnuts with an average yield of 1727 kg/ha [1]. The predominant position held by groundnut in the region is falling day by day due to major problems like low crop productivity, post-harvest losses, price instability, relative unremunrativeness, crop damage by pests of groundnut farming and decline in groundnut acreage. Today more crop damage by Pests in more numbers of wild animals like bluebull, pig *etc.*, insects like white grub, *Spodoptera litura*, *Heliothis armigera*, jassid, thrips *etc.* and diseases like, stem rot, bud necrosis, root rot *etc.* can cause more damage in groundnut. Crop damage by deer, blue bull, blackbuck, wild boar, and porcupine has been extensively reported from almost all corners of India [2].

Objective

To ascertain the relationship between profiles of the groundnut growers and their perception about damage caused by pests

Methodology

The study was conducted under ex-post facto research design and multistage simple random sampling technique. The study in Junagadh district of Gujarat state. Junagadh consisted total nine talukas. Out of nine talukas three talukas were selected maximum area under groundnut cultivation. From each selected taluka four villages were selected randomly. Total twelve villages from three talukas were selected randomly and ten groundnut growers from each village were selected as respondents. Thus, a sample of total 120 groundnut growers

from twelve villages was considered for the study. To find out the relationship between dependent and independent variables, the Pearson's product moment method of computing correlation coefficient (r), which provides generally accepted means for measuring the relationship, was used [3].

Results and discussion

Table-1 Correlation between perception about damage caused by pests of groundnut and their independent variables, (n = 120)

SN	Name of the independent variables	'r' value
1	Age	-0.2049*
2	Education	0.1803*
3	Size of land holding	0.1023^{NS}
4	Annual income	0.2040*
5	Social participation	0.4016**
6	Extension participation	0.1820*
7	Training received	0.1915*
8	Farm mechanization index	0.1903*
9	Yield index	0.1750*
10	Cropping intensity index	0.1842*
11	Attitude towards modern agriculture	0.1977*
12	Innovativeness	0.4827**
13	Risk orientation	0.5301**

*= Significant at 0.05 level, **= Significant at 0.01 level, NS= Non- significant

The characteristics of the respondents *viz.* education, annual income, extension participation, training received, farm mechanization index, yield index, cropping intensity index and attitude towards modern agriculture had positive and significant relationship at 0.05 level of significant with the perception of the respondents about damage caused by pests in groundnut.

The characteristics of the respondents like social participation, innovativeness and risk orientation were positively and highly significant at 0.01 level of significant with the perception of the respondents about damage caused by pests in groundnut. It clearly indicates that with increase in education, annual income, extension participation, training received, farm mechanization index, yield index, cropping intensity index, attitude towards modern agriculture, social participation, innovativeness, risk orientation and perception level of groundnut growers also increased and *vice-versa*. The characteristics of the respondents age was negative significant at 0.05 level of significant with the perception of the respondents about damage caused by pests in groundnut. It means that perception of respondents increased significantly with decrease in age and vice-versa. There was non-significant relationship with the perception of the respondents about damage caused by pests in groundnut with their size of land holding. It clearly indicates that size of land holding did not influence the perception level of groundnut growers.

Conclusion

The study concluded that education, annual income, extension participation, training received, farm mechanization index, yield index, cropping intensity index, attitude towards modern agriculture, social participation, innovativeness, risk orientation was positively significant associated with the perception of groundnut growers about damage caused by pest. It clearly indicates that increase in highly significant profile of groundnut growers and their perception about damage caused by pest also increased and vice-versa.

Application of research: Groundnut growers' profile characteristic effect on perception about groundnut damage caused by pest.

Research Category: Agricultural Extension

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Study area / Sample Collection: Junagadh district of Gujarat state

Cultivar / Variety name: Groundnut (*Arachis hypogaea*)

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.
Ethical Committee Approval Number: Nil

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