

## SCIENTIFIC ORIENTATION AND ITS RELATIONSHIP WITH LEVEL OF KNOWLEDGE ABOUT DRIP IRRIGATION SYSTEM OF DRIP IRRIGATED BANANA GROWERS

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### ABSTRACT

*Scientific orientation plays an important role in shaping level of knowledge of an individual. Keeping this in view, an attempt has been made to study Scientific orientation and its relationship with level of knowledge about drip irrigation system of drip irrigated banana growers. The result of study revealed that slightly more than four-fifth (82.00 per cent) of the drip irrigated banana growers were found with high to very high level of economic motivation. The result of study also revealed that the Scientific orientation had positive and highly significant correlation with their level of knowledge about drip irrigation system of drip irrigated banana growers.*

**Keywords:** *scientific orientation, knowledge, banana growers*

### INTRODUCTION

Scientific orientation is characterized by a belief in science and scientific approaches to solve the problems in farming. It is true that scientifically oriented farmers are always inclined to use scientific methods in farming and have a favourable attitude towards profession. This may help in moulding their level of knowledge about scientific technology. Keeping the above facts in view, an attempt has been made to study Scientific orientation and its relationship with level of knowledge about drip irrigation system of drip irrigated banana growers.

### OBJECTIVE

To know the scientific orientation and its relationship with level of knowledge about drip irrigation system of drip irrigated banana growers

### METHODOLOGY

The present study was carried out in the Anand district of the Gujarat state. Anand district is comprised of eight talukas. Anand and Umreth talukas were selected purposively for the study because this two taluka having maximum number of drip irrigated banana growers.

To select villages from each selected taluka, a list of villages along with their total number of drip sets installed in banana crop was prepared. Thereafter, names of the villages were arranged in descending order according to total number of adopters of drip irrigated banana cultivations. Afterwards, five villages having maximum number of drip irrigated banana growers from each taluka were selected purposively. Thus, the total number of selected villages was ten.

A simple random sampling procedure was used for the selection of drip irrigated banana growers. The drip irrigated banana growers who had installed and used drip irrigation system in their banana crop successively, were included in the list.

Thereafter, ten drip irrigated banana growers from each of the identified villages were selected by simple random sampling method. Thus, 100 drip irrigated banana growers were selected to serve as the respondents for the study.

Scientific orientation is characterized by a belief in science and scientific approach to solve the problems in drip irrigated banana cultivation. It was measured with the help of scale developed by Patel (2009) with due modifications.

The responses from the respondents were obtained against

each item in terms of their agreement or disagreement with statement. There were fourteen statements in the scale. Maximum score one could obtain was 70 and minimum could be 14. On the basis of arbitrary method, the respondents were grouped into the following five categories:

No.	Category	Score
1	Very low	Up to 25.20
2	Low	25.21 to 36.40
3	Medium	36.41 to 47.60
4	High	47.61 to 58.80
5	Very high	58.81 to 70.00

Karl person coefficient of correlation(r) was calculated to find out the relationship between extension contact and level of knowledge.

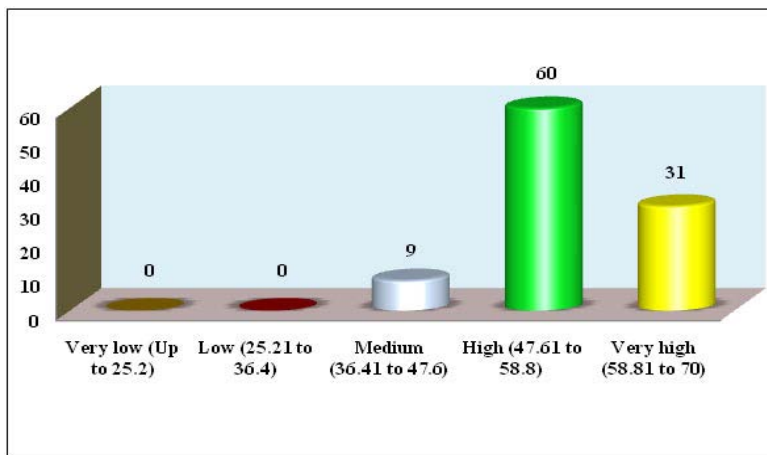
## RESULTS AND DISCUSSION

### Scientific orientation

This is characterized by a belief in science and scientific approaches to solve the problems in farming. It is true that scientifically oriented farmers are always inclined to use scientific methods in farming and have a favourable attitude towards profession. The data regarding scientific orientation of the respondents are presented in Table 1 and graphically depicted in Figure 1.

**Table 1: Distribution of the respondents according to their scientific orientation** n=100

No.	Scientific orientation	Frequency	Per cent
1	Very low (Up to 25.20)	00	00.00
2	Low (25.21 to 36.40)	00	00.00
3	Medium (36.41 to 47.60)	09	09.00
4	High (47.61 to 58.80)	60	60.00
5	Very high (58.81 to 70.00)	31	31.00



**Figure 1: Distribution of respondents according to their scientific orientation**

The data in Table 1 reported that majority (60.00 per cent) of the drip irrigated banana growers had high level of scientific orientation, followed by 31.00 per cent were with very high level of scientific orientation and 09.00 per cent were with medium level of scientific orientation. No one was with low and very low level of scientific orientation. Thus, it can be concluded that great majority (91.00 per cent) of the drip irrigated banana growers had high to very high level of scientific orientation.

The probable reason might be that drip irrigated banana growers had high level of literacy, good social participation and high mass media exposure and the efforts made by GGRC to provide timely scientific information and technical support about drip irrigation system in banana cultivation.

This finding is in contrast with the findings of Kale (2000), Parmar (2008), Sonawane (2010), Khot (2011) and Dalvi and Pandya(20160).

### Scientific orientation and knowledge

The calculated value of  $r = 0.388^{**}$  indicate that scientific orientation of drip irrigated banana growers was positive and highly significantly correlated with their knowledge about drip irrigation system. Hence, the null hypothesis that ‘there is no relationship between scientific orientation of the drip irrigated banana growers and their knowledge about drip irrigation system’ was rejected. Thus, it can be concluded that scientific orientation had significant influence on knowledge of drip irrigated banana growers about drip irrigation system.

This result might be due to that the drip irrigated banana growers with more scientific orientation were

motivated to seek more information about improved agricultural technology and due to this information their level of knowledge about drip irrigation system might have increased positively.

This finding has been similar to findings reported by Patel *et al.* (2008), Manjunath *et al.* (2012), Vinaya *et al.* (2013) and Bhoi *et al.* (2014).

## CONCLUSION

From above study it is revealed that great majority (91.00 per cent) of the drip irrigated banana growers had high to very high level of scientific orientation.

It is also revealed that the scientific orientation had positive and highly significant correlation with their level of knowledge about drip irrigation system of drip irrigated banana growers.

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