



## GREEN GRAM GROWERS' KNOWLEDGE ABOUT GREEN GRAM PRODUCTION TECHNOLOGY

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**Abstract-** Among the pulses, green gram (*Vignaradiata* L.) is one of the most important and extensively cultivated pulse crop. Apart from India, it is also cultivated in China, Thailand, Indonesia, Burma, Bangladesh, and also in hot and dry regions of Southern Europe and the Southern United States. Suitable climate for cultivation of Green Gram should be warm humid and within temperature range of 25°C to 35°C, with moderate rains of 80-100 cm. In our country where people are predominantly vegetarian, pulses form the main source of protein and are thus of vital importance in our daily diet. It provides very good quality green gram fodder to animals. The principal objective of the study is to measure the level of knowledge of green gram growers' about green gram production technology and to identify relationship between knowledge and their selected characteristics of the green gram growers. A majority (58.00 per cent) of the respondents had medium knowledge level about the recommended green gram production technology, followed by 22.00 per cent high and 20.00 per cent low level of knowledge about recommended green gram production technology. The results of this study indicated that an average level of knowledge of improved green gram production technology was 24.36 percent. There was no significant association of the knowledge of green gram growers about recommended green gram production technology with their size of land holding. An Education, innovativeness, social participation, extension contact, cropping intensity irrigation potentiality, economic motivation and risk orientation were significant with level of knowledge. While, age was negative and significantly associated with the knowledge of the green gram growers.

**Keywords-** Green gram, Proportionate random sampling method, Statistical analysis

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### Introduction

Among the pulses, green gram (*Vignaradiata* L.) is one of the most important and extensively cultivated pulse crop. It belongs to family leguminous. It is also known as moong, mungbean and golden gram. Green gram contains about 25% protein of high digestibility and quality. It is used for various purposes either as a whole or in a variety of ways. Sprouted seeds of green gram synthesize ascorbic acid (vitamin-c) in them. It provides very good quality green fodder to animals. Being a leguminous crop green gram fixes 30-40 kg nitrogen per hectare. In our country where people are predominantly vegetarian, pulses form the main source of protein and are thus of vital importance in our daily diet. However, due to population explosion and low productivity, per capita availability of pulses is continuously decreasing, which is only 40 gram per day as against the minimum requirement of 80 gram, recommended by WHO/FAO's nutritional experts [4]. It may be due to fact that available production technologies have not reached to the green gram growers or otherwise, accounting of lack of knowledge and low-level adoption of recommended green gram production technology at Farmer's field.

### Objectives

The following are the objectives of the study

1. To study the level of knowledge of green gram growers about green gram production technology.
2. To study the relationship between dependent variable (knowledge of green gram growers) and independent variable (characteristics of the green gram growers).

### Materials and Methods

The study was carried out in the Junagadh district of Gujarat State. Out of 14 taluka of Junagadh district, Visavadar and Mangrol talukas were purposively selected for the study. The 2 villages from each taluka having more area under green gram crop were selected purposively. Separate list of green gram growers of all 4 selected villages who possess at least 3-years green gram cultivation experience was prepared from the record of village panchayat. The 100 respondents were selected by using the proportionate random sampling method. The data were collected through personal interview schedule for the purpose. For measuring the knowledge of respondents about green gram production technology, the teacher made knowledge test was used. Statistical analysis was done to test the association between selected personal and socio-economic characteristics with their knowledge of recommended green gram production technology.

### Results and Discussion

The extents of green gram growers' knowledge of recommended green gram production technology are presented in [Table-1].

From [Table-1], it is clear that majority of the respondents (58.00 per cent) fall in medium knowledge group followed by high (22.00 per cent) and low (20.00 per cent) knowledge group respectively.

The relationship between dependent variable (knowledge of green gram growers) and independent variable (characteristics of the green gram growers).

The correlation co-efficient was computed to ascertain the association between green gram growers' knowledge about recommended green gram production technology and their selected characteristics on the basis of the operational

measures developed for each variable. Empirical hypotheses stated for testing the relationship pertaining to association are given in [Table-2].

**Table-1** Green Gram grower's extent of knowledge with respect to recommended green gram production technology N=100

Extent of knowledge	No. of respondents	Percentage of respondents
Low level of knowledge (below 21.93 score)	20	20.00
Medium level of knowledge (21.93 to 26.78 score)	58	58.00
High level of knowledge (above 26.78 score)	22	22.00
X	24.36	
S.D	2.42	

**Table-2** Correlation co-efficient between green gram grower's extent of knowledge of recommended green gram production technology and their selected characteristics.

N=100

Sr. No.	Name of variables	'r' value
1	Age	-0.2840*
2	Education	0.3740**
3	Innovativeness	0.3621**
4	Social participation	0.3876**
5	Extension contact	0.3659**
6	Cropping intensity	0.3764**
7	Size of land holding	0.0242NS
8	Irrigation potentiality	0.3657**
9	Economic motivation	0.3846**
10	Risk orientation	0.2800*

NS = non-significant

\* Significant at 0.05 level ( $r = + 0.2792$ )

\*\* Significant at 0.01 level ( $r = + 0.3613$ )

The [Table-2] reveals that there was negative and significant association between green gram growers' knowledge of recommended green gram production technology and their age. While education, innovativeness, social participation, extension contact, cropping intensity, irrigation potentiality, risk orientation and economic motivation had positive and significant relationship with their knowledge of recommended green gram production technology. The size of land holding had non-significant relationship with their knowledge of recommended green gram production technology.

## Conclusion

From the above finding it could be concluded that majority of respondents had medium level of knowledge about green gram production technology. This might be due to fact that the green gram growers had medium extension contact and medium social participation. This factor had favourably helped the green gram growers in getting more knowledge about recommended green gram production technology.

The independent variable, age showed negative and significant relation with their knowledge of recommended green gram production technology, while education, innovativeness, social participation, extension contact, cropping intensity, irrigation potentiality, risk orientation and economic motivation had positive and significant relationship with their knowledge of recommended green gram production technology. While size of land holding have no relationship with their knowledge of recommended green gram production technology.

**Conflict of Interest:** None declared

## References

- [1] Jadeja M.K. (2008) Indigenous and scientific knowledge of farmers about uses of neem in junagadh district of gujarat. M.Sc. (Agri.) Thesis (Unpublished). J.A.U., Junagadh.
- [2] Kumbhani S.R. (2009) Knowledge and adoption of coriander production

technology. M.Sc. (Agri.) Thesis (Unpublished), Junagadh Agricultural University, Junagadh.

- [3] Manoj A. and Vijayaragavan K. (2014) Impact of farmers' field school on farmers' knowledge of Integrated Crop Management practices in paddy, *Indian Res.J.Ext.Edu.*, 14(1)
- [4] Paroda R.S. (1996) Sustaining the green gram revaluation: new paradigms. 2<sup>nd</sup> international crop science congress, New Delhi, pp-18