

## Knowledge level of groundnut growers (Phule Pragati) from Hatkangale Tahsil of Kolhapur, India

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### ABSTRACT

The study revealed that majority of the farmer's' were 31 years and above age. Most of them were educated up to secondary standard, having more than 11 years of experience of cultivating Phule Prgati. All the farmers had agriculture as the main occupation. Majority of the farmers' having 1.01 to 2.00 ha farm size, 0.01ha to0.40 ha irrigated land, and 0.40 ha land under Phule Pragati. It was also found that majority of the farmers' were aware about selection of soil, preparatory tillage and water management practices.

**Key words :** Knowledge, Groundnut growers, Phule Pragati.

### INTRODUCTION

Groundnut is the major source of edible oil in India. Research workers, JL-24 have evolved different varieties with increased oil content which was later renamed as "Phule Pragati" is one of them. This variety is sown in Kharif and Rabi season. It has fifty percent oil content. It matures in 90 to 100 days and yields 18 to 20 quintals/hectare. However the recorded demonstrated yield at farmers field was found to be 43 quintals per hectare after 12 days of harvest. This variety was evolved at Agricultural Research Station, Jalgaon of Mahatma Phule Krishi Vidyapeeth, and Rahuri and released for cultivation in 1979. Ever since its release its spread has been phenomenal in Maharashtra.

The extension agencies of the department of Agriculture, Zilhaparishad, and State Agricultural Universities, are playing an important role in the spread and adoption of high yielding variety of groundnut. However, the adoption of recommended package of practices with regards to cultivation of Phule Pragati has been partial resulting in differences in yield obtained by cultivators. Therefore, in order to understand the extent of adoption of recommended package of practices of cultivation of Phule Pragati present study was undertaken. The specific objectives of the study were

1. To study the Personal and Socio-economic characteristic of groundnut growers
2. To study the Knowledge level of groundnut growers with special reference to recommended package of practices of groundnut.

### MATERIALS AND METHODSD

The present study was conducted in the Hatkanagale

tahsil of Kolhapur, India. As the Hatkangale tahsil having maximum area under groundnut. From the list of 102 villages of this tahsil, in all 13 villages were randomly selected for the purpose of data collection. From these selected villages a list of farmers cultivating Phule Pragati was prepared.

From the list one thirty farmers(i.e.130) were randomly selected as respondent who framed sample of the study. Data were collected by personally interviewing the respondents with the help of the interview schedule.

### RESULTS AND DISCUSSION

#### *1. Personal and Socio-economic Profile :*

##### *Age:*

Personal and socio-economic profile is presented in Table 1. Half of the respondent farmers were in the age group of 31 to 50 years , while 39 percent were in the age group of 51 years and more. Only 10.00 percent are below 30 years. It means that majority i.e. 89.00 percent farmers were 31 years and above.

##### *Education:*

Distribution of farmers by their education indicates that nearly 87.00 percent farmers were literate while 13.00 percent were Illiterate . Among the literate, 43.00 percent of respondents were in the category of education that varied from 5<sup>th</sup> to 10<sup>th</sup> standard. In contrast, 19.00 percent had attended junior college, whereas 8.00 percent had attended the senior college.

##### *Experience of cultivating Phule Pragati :*

More than 60.00 percent farmers had been cultivating Phule Pragati more than 11 years. About 27.00 percent of the respondents had experience ranged between 6 to

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Table 1 : Distribution of the respondents by their socio economic and socio- personal characteristics

| S. No | Particulars of characteristics                    | No of respondents | Percentages to the total |
|-------|---|-------------------|--------------------------|
| 1     | Age:  |                   |                          |
|       | i)Up to 30 years                                  | 14                | 10.77                    |
|       | ii)31-50 years                                    | 65                | 50.00                    |
|       | iii)51 and above                                  | 51                | 39.23                    |
| 2     | Level of Education :                              |                   |                          |
|       | i)Illiterate                                      | 17                | 13.08                    |
|       | ii) up to 4 <sup>th</sup> standard                | 23                | 17.69                    |
|       | iii) 5 <sup>th</sup> to 10 <sup>th</sup> standard | 56                | 43.08                    |
|       | iv)11 <sup>th</sup> to 12 <sup>th</sup> standard  | 24                | 18.46                    |
|       | v)Senior college and above                        | 10                | 7.69                     |
| 3     | Experience of Phule Pragti : (years)              |                   |                          |
|       | i)Up to 5 years                                   | 14                | 10.77                    |
|       | ii)6 to 10 years                                  | 36                | 27.69                    |
|       | iii)11 years and above                            | 80                | 61.54                    |
| 4     | Occupation:                                       |                   |                          |
|       | i)Main (Agriculture)                              | 130               | 100.00                   |
|       | ii)Secondary- a. Dairying                         | 116               | 89.20                    |
|       | b. Others   | 14                | 10.80                    |
| 5     | Farm Size   |                   |                          |
|       | i)Up to 1.00 ha.                                  | 28                | 21.54                    |
|       | ii)1.01 to 2.00 ha                                | 59                | 45.38                    |
|       | iii)2.01 to 4.00ha                                | 30                | 23.08                    |
|       | iv)4.01 and above                                 | 13                | 10.00                    |
| 6     | Irrigated land holding                            |                   |                          |
|       | i)No irrigated land                               | 31                | 23.88                    |
|       | ii)0.01 to 0.40 ha                                | 59                | 45.35                    |
|       | iii)0.41 ha to 1.20 ha                            | 27                | 20.77                    |
|       | iv)1.21 ha to 4.00 ha                             | 12                | 9.23                     |
|       | v)4.01 and above                                  | 1                 | 0.77                     |
| 7     | Land under Phule Pragati                          |                   |                          |
|       | i)Up to 0.40 ha.                                  | 83                | 63.85                    |
|       | ii)0.41 to 0.80 ha                                | 32                | 24.61                    |
|       | iii)0.81 ha and above                             | 15                | 11.54                    |

10 years. Only 10 respondents out of 130 had the experience up to 5 years.

#### **Occupation:**

The entire sample of 130 farmers had agriculture as their main occupation. Among the secondary occupations, dairying stands first with as many as 116 (i.e 89.20

percent) farmers claiming that they were engaged in dairying. Only 10.80 percent had secondary occupation other than dairying .

#### **Farm Size:**

Majority of the farmers (45.38 percent ) had a farm size of 1.01 to 2.00 ha. Followed by farmers holding 2.01

Table 2 : Knowledge Level of Phule Pragati growing farmers regarding recommended package of practices.

| S. No. | Recommended Practice                       | No. of farmers (N=130) | Knowledge Level (N=130) |
|--------|--|------------------------|-------------------------|
| 1.     | Selection of soil:                         |                        |                         |
|        | i) Light or medium black well drained soil | 127                    | 98.12                   |
| 2.     | Preparatory tillage:                       |                        |                         |
|        | i) Required one ploughing                  | 130                    | 100                     |
|        | ii) 2-3 harrowing                          | 130                    | 100                     |
|        | iii) 10 tones of F.Y.M.                    | 130                    | 100                     |
| 3      | Sowing distance                            |                        |                         |
|        | i) 30x10 cm                                | 69                     | 53.84                   |
| 4      | Seed treatment                             |                        |                         |
|        | i) Thirum                                  | 35                     | 27.68                   |
|        | ii) Rhizobium                              | 49                     | 38.45                   |
| 5      | Interculturing                             |                        |                         |
|        | i) 2 to 3                                  | 130                    | 100                     |
| 6      | Application of fertilizer                  |                        |                         |
|        | i) Recommended dose                        | 30                     | 23.07                   |
| 7      | Water Management                           |                        |                         |
|        | i) At least one irrigation                 | 94                     | 73.00                   |
| 8      | Pest and Diseases                          |                        |                         |
|        | i) Aphids                                  | 83                     | 64.57                   |
|        | ii) Leafspot                               | 45                     | 35.37                   |
|        | iii) White grub                            | 39                     | 30.76                   |
|        | iv) wilt                                   | 22                     | 17.68                   |
|        | v) Rust                                    | 13                     | 10.00                   |
|        | vi) Leaf roller caterpillar                | 10                     | 8.45                    |

ha to 4.00 ha land. (23.08 Percent), up to 1.00 ha (21.54 percent) and 4.01 ha and above (10.00 Percent).

#### ***Irrigated land holding :***

It indicates that 45.38 percent possessed 0.01 ha to 0.40 ha irrigated land while 20.77 percent had 0.41 to 1.20 ha irrigated land, However, 23.88 percent farmers had no irrigated land.

#### ***Cultivation under Phule Pragati :***

Distribution of farmers by their land under Phule Pragati shows that 63.85 percent had land up to 0.40 ha under this variety, while 24.61 percent had land from 0.41 to 0.80 ha under this variety.

#### ***Knowledge Level of Phule Pragati growing farmers on recommended package of practices of groundnut:***

Knowledge level in the Table 2 reveals that 98.12

percent farmers knew that Phule Pragati requires either light or medium black well drained soil. With the respect to preparatory tillage all the farmers had knowledge that this variety requires at least one ploughing, 2-3 harrowing and 10 tones of F.Y.M. per hectare. Knowledge of sowing distance varied with farmers. Nearly 53.84 percent farmers know that 30x10 cm is the correct planting distance for this variety.

As regards the seed treatment, 27.68 percent and 38.45 percent of the respondents know about Thirum and Rhizobium respectively. In matter pertaining to the interculturing all the farmers aware about crop requires 3 or more hoeing. As far as the fertilizer application to the variety concerned 23.07 percent farmers claimed that they are having knowledge of recommended dose of fertilizer to be applied to crop. All the farmers aware that water management is necessary but 73.00 percent farmers know that at least one irrigation should be given.

In case of Pests and Diseases, Majority of the farmers

(64.59percent ) having knowledge of aphids. while 35.57 percent farmers having knowledge of leaf spot followed by 30.76 percent farmers having knowledge of white grub , 17.68 percent ,10.00 percent , and 8.45 percent farmers having knowledge of wilt,rust, leaf roller caterpillar respectively. Most of the findings are in line with Bajaj et.al(1993), Ingale et.al.(1995) and Shinde(2002).

## CONCLUSION

The findings of the study revealed that all the farmers had knowledge of selection of soil and preparatory tillage for groundnut and majority of them were aware about sowing distance and having medium level of knowledge regarding recommended package of practices of this variety

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