

Knowledge Level of Recommended Brinjal Production Technologies among the Tribal Farmers

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Abstract: This study was carried out in Kandhamal district of Odisha during 2015-16 in the randomly selected villages. The study aimed to assess the knowledge level of brinjal growers in brinjal production. Information was obtained with help of interview schedule by personal interview. Collected data were analyzed by using suitable statistical tools. The finding of the study revealed that the overall level of knowledge of brinjal production technology was medium. Maximum knowledge was noticed in the practice of seed rate and seed treatment.

Keywords: Awareness, Brinjal production technology, Knowledge, Tribal

I. Introduction

Brinjal or eggplant (*Solanum melongena* L.) is an important solanaceous crop of sub-tropics and tropics. The name brinjal is popular in Indian subcontinent and is derived from Arabic and Sanskrit whereas the name eggplant has been derived from the shape of the fruit of some varieties, which are white and resemble in shape to chicken eggs. It is also called aubergine (French word) in Europe. Several studies have been conducted on vegetable crops to know the knowledge and adoption of recommended cultivation practices but very few research studies have been conducted on brinjal crop in Odisha state. Hence, present study was designed to know the reaction, reason for adopting brinjal production with the specific objective to find out the level of knowledge of the brinjal growers regarding recommended brinjal production technology.

II. Research Methodology

The present investigation was carried out during the year of 2015-16 in 12 selected villages in G Udayagiri, Tikabali and Rakia blocks of Kandhamal district of Odisha state. Ten farmers were selected from one village randomly, thus total 120 farmers were selected purposively for the present study. The data were collected through personal interview and analyzed by using appropriate statistical methods for the interpretation of the data.

English and English (1961) defined knowledge, as a body of understandable information possessed by an individual or by culture.

III. Results And Discussion

Scientific-orientation

The results in table 1 showed that majority of the respondents (84.17%) had medium level of Scientific-orientation, followed by 10.00 per cent, who had low level of scientific-orientation while, 05.83 per cent of respondents had high level of scientific orientation regarding brinjal production technology.

Table 1: Distribution of respondents according to their scientific orientation. (n=120)

| S. No. | Scientific-orientation | Frequency | Per cent |
|--------|-----------------------------|-----------|----------|
| 1 | Low level (up to 16 score) | 12 | 10.00 |
| 2 | Medium level (17– 22 score) | 101 | 84.17 |
| 3 | High level (above 22 score) | 07 | 05.83 |
| | Total | 120 | 100.00 |

It can be concluded that majority of the respondents came under the medium level of scientific orientation category regarding brinjal production technology.

The level of knowledge of the respondents regarding recommended brinjal production technology

The data presented in table 2 indicate that out of total respondents most (40.00%) of them had medium level of knowledge regarding recommended brinjal production technology. Whereas 30.84 per cent and 29.16 per cent of the respondents were having low and high level of knowledge, respectively.

Table 2: Distribution of respondents according to overall level of knowledge regarding recommended brinjal production technology. (n=120)

| S. No. | Level of knowledge | Frequency | Per cent |
|--------|-----------------------|-----------|----------|
| 1 | Low (upto 40 score) | 37 | 30.84 |
| 2 | Medium (41-46 score) | 48 | 40.00 |
| 3 | High (above 46 score) | 35 | 29.16 |
| | Total | 120 | 100.00 |

It can be concluded that most of the respondents had medium to high level of knowledge and about twenty nine per cent of the respondents had low level of knowledge regarding recommended brinjal production technology.

Practice wise level of knowledge of the respondents regarding recommended brinjal production technology

Table 3: Distribution of respondents according to their practice wise level of knowledge regarding recommended brinjal production technology. (n=120)

| S.No. | Recommended practices of brinjal production technology | Level of knowledge | | |
|-------|-----------------------------------------------------------------------|--------------------|----------------|---------------|
| | | Low | Medium | High |
| | | f (%) | f (%) | f (%) |
| 1 | Preparation of nursery bed | 20 (16.66) | 88 (73.34) | 12 (10.00) |
| 2 | Selection of varieties | 08 (06.66) | 93 (77.51) | 19 (15.83) |
| 3 | Seed rate and seed treatment | 10 (08.33) | 69 (57.50) | 41 (34.17) |
| 4 | Manures and fertilizers in nursery bed | 19 (19.83) | 82 (68.34) | 19 (15.83) |
| 5 | Sowing method and seedling preparation | 28 (23.34) | 77 (64.16) | 15 (12.50) |
| 6 | Mulching | 15 (12.50) | 99 (82.50) | 06 (05.0) |
| 7 | Insect, pest and disease identification and management in nursery bed | 14 (11.67) | 104 (86.67) | 02 (01.67) |
| 8 | Stage of seedlings for transplanting | 05 (04.17) | 85 (70.83) | 30 (25.00) |
| 9 | Hardening off | 20 (16.67) | 84 (70.00) | 16 (13.34) |
| 10 | Selection and preparation of land for transplanting | 20 (16.67) | 68 (56.66) | 32 (26.67) |
| 11 | Transplanting time and method | 08 (06.67) | 102 (85.00) | 10 (08.33) |
| 12 | Manures and fertilizers in main field | 15 (12.50) | 99 (82.50) | 06 (05.00) |
| 13 | Irrigation | 05 (04.17) | 85 (70.83) | 30 (25.00) |
| 14 | Intercropping | 28 (23.34) | 77 (64.16) | 15 (12.50) |
| 15 | Weed identification and management | 08 (06.67) | 89 (74.17) | 23 (19.17) |
| 16 | Insect, pest and disease identification and management | 18 (15.00) | 66 (55.00) | 36 (30.00) |
| 17 | Harvesting | 00 (0.00) | 105 (87.50) | 15 (12.50) |
| 18 | Ratooning | 05 (04.17) | 85 (70.83) | 30 (25.00) |

The data presented in table 3 reveals that the respondents had low level of knowledge regarding recommended brinjal production technology i.e. sowing method and seedling preparation and intercropping (23.34%), hardening off and selection and preparation of land for transplanting (16.67%), preparation of nursery bed (16.66%), manures and fertilizers in nursery bed (15.83%), mulching and manures and fertilizers in main field (12.50%), insect, pest and disease identification and management in nursery bed (11.67%), seed rate and seed treatment (8.33%), selection of varieties, transplanting time and method and weed identification and management (6.66%), stage of seedlings for transplanting, irrigation and ratooning (04.17%) and none of the respondents had low level of knowledge regarding harvesting of brinjal crop.

While in case of medium level of knowledge regarding recommended brinjal production technology (87.50%) respondents had medium level of knowledge regarding harvesting followed by insect, pest and disease identification and management in nursery bed (86.67%), transplanting time and method (85.00%), mulching (82.50%), manures and fertilizers in main field (82.50%), selection of varieties (77.51%), weed identification

and management (74.17%), preparation of nursery bed (73.34%), stage of seedlings for transplanting (70.83%), irrigation (70.83%), ratooning (70.83%), hardening off (70.00%), manures and fertilizers in nursery bed (68.34%), sowing method and seedling preparation (64.16%). intercropping (64.16%), seed rate and seed treatment (57.50%), selection and preparation of land for transplanting (56.66%) and insect, pest and disease identification and management (55.00%), respectively.

While in case of high level of knowledge regarding selected practices of recommended brinjal production technology the practices were seed rate and seed treatment (34.17%) followed by insect, pest and disease identification and management (30.00%), selection and preparation of land for transplanting (26.67%), stage of seedlings for transplanting, irrigation and ratooning (25.00%), weed identification and management (19.17%), manure and fertilizer in nursery bed and Selection of varieties (15.83%), hardening off (13.34%), sowing method and seedling preparation, intercropping and harvesting (12.50%), preparation of nursery bed (10.00%), transplanting time and method (08.33%), mulching and manure and fertilizer in main field (05.00%) and insect, pest and disease identification and management in nursery bed (01.67%).

IV. Conclusion

The overall level of knowledge of brinjal production technology was medium. Maximum knowledge was noticed in the practice of seed rate and seed treatment. Knowledge level of farmers should be increased in various aspects of brinjal production technology *i.e.* use of proper dose of fungicide, insecticide, fertilizers and manures through systematic training programme, which could be more effective in future brinjal production.

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