ISSN: 2320-2882

IJCRT.ORG



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

ADOPTION OF RECOMMENDED SOYBEAN PRODUCTION TECHNOLOGY

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Abstract

With a view to determine the extent of adoption of recommended soybean production technology, the present study was conducted in Shajapur district of Madhya Pradesh with a sample of 120 farmers. The finding reflected that more than one-half (57.5 per cent) of the soybean growers had high adoption level about soybean production technology.

Keyword: Adoption, Respondents, Soybean, Technology and Farmers

I. INTRODUCTION

Soybean (Glycine max L. Merril) is the world's most important seed legume, which contributes to 25 % of the global edible oil, about two-thirds of the world's protein concentrate for livestock feeding. Soybean is the main crop of kharif season produced in **DISTRICT**. Soybean production has dominated world oilseed production. The share of soybean in world oilseed production has increased from 32% in 1965 to over 50% in nineties. It contributes 57% edible oil of total vegetable oil produced in the world. It ranks first in vegetable oil production in the world with 220.81million metric tons. The production of soybean was increased from 88.67 million metric ton to 220.81 million metric tons in 2006-07. Soybean will play a dominant role in future (Anonymous, 2008). Among the states, **Madhya Pradesh** stood first with 55.84 lakh ha followed by Maharashtra (46.01 lakh ha), Rajasthan (10.62 lakh ha), Karnataka (3.82 lakh ha), Gujarat (2.24 lakh ha) and Telangana (1.51 lakh ha). Soybean acreage in Madhya Pradesh on 15 July dipped to 41.86 lakh hectare in 2021-22 from 51.17 lakh hectare in the year-ago period. Our State ranks **1st in country** in the production of Soybean, Gram, Urad, Tur, Masoor, Linseed; 2nd in the production of Maize, Sesame, Ramtil, Moong and 3rd in the production of Wheat, Sorghum, Barley.

II. Methodology

The study was undertaken in conducted in Kalapipal & Shajapur block of district Shajapur of M.P. from these two block 4 villages were purposively selected. Thus, 120 soybean growers constituted the sample respondents for this study. The adoption index was developed & used to measure the adoption level of recommended soybean production technology. The interview schedule was prepared. The data were collected by personal interview of the growers. They were analyzed & interpreted in view of the objectives.

III. RESULTS AND DISCUSSION

Extent of Adoption

Practices wise adoption of recommended soybean production technology was ascertained in the respect of important recommended practices and the data thus obtained have been reported in Table 1 a critical perusal of the data in table 1 shows that 73.3 per cent respondents have complete adoption, 15 per cent partial adoption and 11.7 per cent no adoption of land preparation, with Mean Score 2.6 and Rank V. 50 percent complete adoption followed by 30 percent partial a and 20 per cent having no adoption of selection of variety with mean score 2.3 and Rank IX. 61.7 percent complete adoption followed by 25 percent no adoption and 13.3 per cent having partial adoption of seed treatment with mean score 2.36 and Rank VIII. 50 percent complete adoption followed by 28.3 percent partial adoption and 21.7 per cent having no adoption of quantity of seed with mean score 2.28 and Rank X. 83.3 percent complete adoption followed by 11.7 percent partial adoption and 5 per cent having no adoption method of sowing with mean score 2.78 and Rank III. 82.5 percent partial adoption followed by 10 percent partial adoption and 7.5 per cent having no adoption manure & fertilizer with mean score 2.75 and Rank IV. 90 percent complete adoption followed by 7.5 percent partial adoption and 2.5 per cent having no adoption time of sowing with mean score 2.87 and Rank II. 43.33 percent complete adoption followed by 36.7 percent no adoption and 20 per cent having partial adoption for irrigation mgt, with mean score 1.06 and Rank XIV. 72 percent complete adoption followed by 14.7 percent no adoption and 13.33 per cent having partial adoption insect & pest mgt. mean score 3.44 and Rank I. 66.7 percent complete adoption followed by 25 percent partial adoption and 8.3 per cent having no adoption disease mgt. with mean score 2.58 and Rank VI. 70 percent complete adoption followed by 16.7 percent partial adoption and 13.3 per cent having no adoption crop harvesting with mean score 2.56 and Rank VII. 61.7 percent no adoption followed by 25 percent complete adoption and 13.3 per cent having partial adoption spray of insecticides in storage with mean score 1.63 and Rank XII. 36.7 percent complete adoption followed by 33.3 percent no adoption and 30 per cent having partial adoption storage of seed with mean score 2.03 and Rank XI. 85 percent no adoption followed by 8.3 percent partial adoption and 6.7 per cent having complete adoption of marketing of seed with mean score 1.21 and Rank XIII

| S. | Activities | Level of Adoption of | | | Mean | Rank |
|-------|---------------------------------------|----------------------|-----------------------|---------|-------|------|
| No. | | CA | P A | No A | Score | |
| 1. | Land preparation | 88 | 18 | 14 | 2.6 | V |
| | | (73.33) | (15) | (11.67) | | |
| 2. | Selection of | 60 | 36 | 24 | 2.3 | IX |
| | variety | (50) | (30) | (20) | | |
| 3. | Seed Treatment | 74 | 16 | 30 | 2.36 | VIII |
| | | (61.67) | (13.33) | (25) | | |
| 4. | Quantity of seeds | 60 | 34 | 26 | 2.28 | Х |
| | | (50) | (28.33) | (21.67) | | |
| 5. | Method of sowing | 100 | 14 | 6 | 2.78 | III |
| | | (83.33) | (11.67) | (5) | | |
| 6. | Manure & Fertilizer | 99 | 12 | 9 | 2.75 | IV |
| | | (82.5) | (10) | (7.5) | | |
| 7. | Time of sow <mark>ing</mark> | 108 | 9 | 3 | 2.87 | II |
| | | (90) | (7.5) | (2.5) | | |
| 8. | Irrigation | 52 | 24 | 44 | 1.06 | XIV |
| | management | (43.33) | (20) | (36.67) | | |
| 9. | . Insect and pest | 87 | 16 | 17 | 3.44 | Ι |
| 2 A S | mgt. | (72) | (13 <mark>.33)</mark> | (14.67) | 1 | |
| 10 | Disease | 80 | 30 | 10 | 2.58 | VI |
| | | (66.67) | (25) | (8.33) | | |
| 11 | Crop harvesting | 84 | 20 | 16 | 2.56 | VII |
| | | (70) | (16.67) | (13.33) | | |
| 12 | Spray of insecticide in storage | 30 | 16 | 74 | 1.63 | XII |
| | | (25) | (13.33) | (61.67) | | |
| 13 | Storage of seed | 44 | 36 | 40 | 2.03 | XI |
| | | (36.67) | (30) | (33.33) | | |
| 14 | Marketing of seed | 8 | 10 | 102 | 1.21 | XIII |
| | | (6.67) | (8.33) | (85) | | |

Table 1 Practices wise adoption of recommended soybean production technology

CA= Complete adoption PA=Partial Adoption NA= No Adoption

Table 2 level of adoption of soybean growers

| S.No. | Categories | F | % |
|-------|------------|-----|------|
| 1 | High | 69 | 57.5 |
| 2 | Medium | 21 | 17.5 |
| 3 | Low | 30 | 25 |
| Total | | 120 | 100 |

Based on overall adoption, respondents were categorized in to three groups and data have been reported in Table 2. It could be observed that more than half (57.5 %) of the respondents had high adoption, followed by 25 per cent of them low adoption, whereas only 17.5 per cent of them had medium adoption of recommended soybean production technology.

IV. Conclusion

It can be concluded from the above findings, that more than one-half (57.5 per cent) of the soybean growers had high adoption level about soybean production technology.

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