

Original Research Article

Lively hood Promotion through the Extent of Adoption of Lentil Production Technology

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ABSTRACT

“Masur” or lentil is bushy annual shrub plant that popular for is lens shaped seeds, which are consumed as food in stew or other forms all over the world. These seeds have a vast range of colors from yellow to red-orange to green, brown and black and also have second highest levels of protein and fibers after soybean. The thin lentil plant, which in named ‘Lens cultivars’ botanically comes from the legume family and grain a highest of 12 to 14 inches at maturity. Scientific study of its role and impact is not available till date; hence a scientific study of the KVK is necessary to determine its good in technology dissemination. Keeping in view in the above facts the presents study has been undertaking with the following of specific objectives: 1. To assess the of lentil production technology. Majority of respondents (70%) had high extent of adoption followed by low extent of adoption (13.34%) and 10.66% had high adoption level. Level of adoption of farmers in different component of lentil production technology was highest in area of treatment of seed with fungicide (68.33 %) followed by use of high yielding variety of lentil seed (45.00 %) use of plant protection measures, casing practices adopted, water management, use of adequate timely fertilization, method of sowing paira method, sowing of after land preparation, recommended seed rate preventive measure against weed species and treatment of seed with fungicides.

Keywords

Extent of adoption,
Lentil production
technology

Introduction

Lentil crop can be grown on a variety of soil such as light loams and alluvial soil of Punjab and Uttar-Pradesh and black cotton soil of Madhya Pradesh. An increasing positive growth role in terms of area and production of lentil has been witnessed over last two decades in India. During 2009-10 lentil was grown in 1.717 million hectare area with a production of 1.478 million tones and yield 861 kg/ha (Source : Department of statistics evaluation, 2009-10).

In Bihar, it grown in 163.77 thousand hectare area with a production of 128.60 thousand tones and yield of 703 kg/ha in 2009-10 (Source: Department of Agriculture GOB, 2009-10). “Masur” or lentil is bushy annual shrub plant that popular for is lens shaped seeds, which are consumed as food in stew or other forms all over the world. These seeds have a vast range of colors from yellow to red-orange to green, brown and black and also have second highest levels of protein and fibers after soybean. The thin plant, which in named ‘Lens cultivars’

botanically comes from the legume family and grain a highest of 12 to 14 inches at maturity. The tap root system of the plant usually grown to a depth of around 15 inches that makes it moderately drought resistant shrub and also possessing white to pale blue flower, lentil are often considered a cousin of bean. Lentils are also important they indulge in the nitrogen fixation process that helps the soil revive in nitrogen content. Keeping in view of the all above facts, the present study is undertaken with the following specific objectives: -

To assess the extent of adoption of lentil production technology.

Materials and Methods

Locale of study

The study will be conducted in Arwal district of Bihar. There are 38th district in Bihar. The KVK are running in all district of Bihar. Out of which Arwal district is purposively selected for study purpose with the following reasons. The researcher being a resident of Arwal district is easily approachable and well acquainted with the culture, social customs situation, prevailed and language.

Selection of block

Arwal district of Bihar state has been identified as locale of present research enterprises in view of its important in term of area production of lentil crop. There are five blocks in Arwal district. Out of which, one block was selected on the basis of lentil area and productivity. Karpi, block was selected for the study purpose.

Selection of villages

There are total number of villages were 11.

Out of which four villages were selected as Keyal, Puran, Sahar Telpa, Kudrasi, having larger area under lentil local records obtained from block level document.

Selection of respondents

15 lentil growers were taken from each of the selected villages. Thus, a total number of 60 lentil growers were constituted as the sample for the present study. The number of lentil growing farmers in each village and sample taken from each category is presented in table village wise number of lentil growing farmers and respondent:-

Extent of adoption about lentil production Technology

Rogers (1969) defined adoption as a decision to continue full use of an innovation. This definition implies the adopters is satisfied with innovation & find adoption. An adoption scale was developed to measure the extent of adoption of improved lentil production technology. The composite adoption index was computed in terms of percentage with the help of following formula.

$$\text{Adoption} = \frac{\text{OptainedScore}}{\text{Total obtainable score}} \times 100$$

Results and Discussion

This distribution of respondents in different categories was made by working out mean and S.D. This table revealed that majority of respondent (70 %) had high extent of adoption followed by low extent of adoption (13.34 %) and 10.66 % had high adoption level.

Table-3, indicates that level of adoption of farmers in different component of lentil production technology was highest in area

of treatment of seed with fungicide (68.33 %) followed by use of high yielding variety of lentil seed (45.00 %) use of plant protection measures, water management (3.33 %), use of adequate timely

fertilization, method of sowing paira method, sowing of after land preparation, recommended seed rate preventive measure against weed species and treatment of seed with fungicides.

Table.1 Distribution of respondents

Sl.No.	Name of the village	Total number of lentil growers	Number of respondents selected
1	Keyal	41	15
2	Puran	57	15
3	Sahar telpa	29	15
4	Kudrasi	37	15
Total		164	60

Table.2 Frequency distribution of respondents with respect to their extent of adoption about lentil production technology

Sl. No.	Category	Frequency	Percentage
1.	Low ($\bar{X} - S.D.$) (up to 1)	8	13.34
2.	Medium ($\bar{X} - S.D.$) to ($\bar{X} + S.D.$) (2 to 3)	42	70.00
3.	High ($\bar{X} + S.D.$) (4 and above)	10	10.66
Total =		60	100.00

Mean = 1.98, S.D. = 0.82, N= 60

Table.3 Level of adoption of farmers in different components of lentil production technology (N=60)

Sl. No.	Components	Frequency	Percentage	Rank
1.	Use of high yielding variety of lentil seed	21	35.00	IV
2.	Treatment of seed with fungicides	41	68.33	I
3.	Use of recommended seed rate	16	26.66	VII
4.	Methods of sowing			
A	Paira	18	30.00	VI
B	Sowing after land preparation	11	18.33	VIII
5.	Use of adequate/timely fertilization	38	63.33	II
6.	Use of plant protection measure	20	33.33	V
7.	Water management	02	3.33	IX
8.	Preventive measure against weed species	33	55.00	III

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*Level of adoption of farmers in different component of lentil production technology was highest in area of treatment of seed with fungicide (68.33 %) followed by use of high yielding variety of lentil seed (45.00 %) use of plant protection measures, casing practices adopted, water management, use of adequate timely fertilization, method of sowing paira method, sowing of after land preparation, recommended seed rate preventive measure against weed species and treatment of seed with fungicides.

Suggestions for the future work:

- The study should be conducted with a large sample and large area in different agro-climatic zone of the state.

- Emphasis should be done on practical based training
- Investigation should be done to find out the reason why they do not grow lentil a large tract.

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