Research Journal of Agricultural Sciences
An International Journal

Res. Jr. of Agril. Sci. **12**(1): 274–275

P- ISSN: 0976-1675 | **E**- ISSN: 2249-4538

www.rjas.org

Research Paper

Adoption of Recommended Practices in Pulse Cultivation – An Analysis

K. S. Thillaivijay[1], K. Kanagasabapathi*[2] and V. Sakthivel[3]

Received: 07 Dec 2020 | Revised accepted: 21 Jan 2021 | Published online: 06 Feb 2021

A B S T R A C T

This study entitled 'Adoption of recommended practices in pulse cultivation' was aimed to study adoption level of pulses in Cuddalore District. This study was conducted in Cuddalore district of Tamil Nadu. A sample size of 120 growers were selected from twelve identified villages. Data were collected by interviewing the respondents personally. Percentage analysis and mean were used for analyzing and interpreting the data. This study revealed that medium level of adoption was noticed in black gram and green gram. In black gram cultivation, most of the respondents adopted the recommended practice of harvesting procedure and 'recommended varieties'. More than two -fifth of the respondents adopted 'recommended method of sowing' and 'recommended seed rate'. Less than forty percentage of the respondents adopted 'pre-sowing treatment', 'recommended 'manuring', 'disease management', 'pest management' and 'foliar spray'. Regarding green gram, more than two-fifth of the respondents adopted the recommended practices in harvesting procedure, 'recommended 'varieties' and 'recommended method of sowing'. More than one-third of the farmers adopted 'recommended seed rate' and less than one-third adopted 'pre-sowing treatment', 'recommended manuring', 'disease management' and 'pest management.' It is time to motivate the pulse growing farmers to adopt the recommended practices to increase the yield in pulse crops.

***Key words*:** Adoption, Recommended practices, Pulse cultivation, Black gram, Green gram

Agriculture is not mere crop production as the popular belief holds - It's the production of food and fibre from the world's land and waters. Rice based cropping system is a common and very popular system in India particularly in the states of south India [1]. It includes cultivation of rice followed by cultivation of crops like pulses, sugarcane, cotton, and gingelly. Rice is the principal crop extensively cultivated in all the districts of the State. Rice is the major crop of the Cuddalore District covering an area of around 1,14,291 ha. The cultivation of rice is followed pulse crops like black gram and green gram. The popular black gram varieties are ADT 5, ADT 3. The green gram varieties are CO 6, CO 7, VBN 2, VBN 3. Modern technologies are available in plenty for the cultivation of pulse crops. An analysis of the extent of adoption of recommend cultivation practices of pulse crops will help us to devise policies and programmes to enhance the production and productivity of the pulse crops like black gram and green gram. Adoption of the recommended modern practices can enable the farmers to increase their income from agriculture [2]. In this paper an attempt is made to analyze the extent of adoption of recommended practices in the cultivation of Black gram and Green gram by the farmers of Cuddalore district of Tamil Nadu state in South India.

MATERIALS AND METHODS

***K. Kanagasabapathi**
kksabapathi@rediffmail.com

[1-3]Department of Agricultural Extension, Faculty of Agriculture, Annamalai University, Annamalai Nagar - 608 002, Tamil Nadu

The present study was conducted in twelve selected villages of Keerapalayalam, Bhuvanagiri and Parangipettai blocks of Cuddalore district of Tamil Nadu State. A sample size of 120 respondents who had the experience in cultivation of pulse crops like black gram and green gram were selected from the twelve villages by proportionate random sampling method. The data were collected from the respondents with the help of a well-structured and pre-tested interview schedule. Percentage analysis and mean were used for analyzing and interpreting the data and results are tabulated.

RESULTS AND DISCUSSION

In general, knowledge leads to adoption. Knowledge of innovations could create motivation for adoption. To know whether such a trend is exhibited in the case of rice-based cropping system, the present analysis was taken up. Adoption as a decision to make full use of new ideas as the best course of action available defined by [3]. The information collected to study the adoption behaviour of the respondents in the adoption of improved practices in the cultivation of pulse crops like black gram and green gram are presented in this section.

Practice-wise adoption of recommended technologies in black gram cultivation

The results obtained on adoption of recommended technologies in black gram cultivation are presented in (Table 1). It could be understood from (Table 1) that most of the respondents adopted the recommended practices in 'recommended harvesting procedure' (58.33 per cent)

followed by cultivation of 'recommended varieties' (55.00 per cent), 'recommended method of sowing' (45.83 per cent), 'recommended seed rate' (44.16 per cent), 'pre-sowing treatment' (33.33 per cent), 'recommended manuring' (25.00 per cent), 'disease management' (25.00 per cent), 'pest management' (23.33 per cent), and 'foliar spray' (20.83 per cent). The overall mean percentage is 36.75. Since black gram is cultivated as rice fallow in this region the farmers seem to give lesser importance for adopting the recommended practices in the cultivation of black gram [4].

Table 1 Practice-wise adoption of recommended technologies in black gram cultivation by the farmers

(n=120)

S. No	Technologies	Number of respondents	Per cent
I	Recommended Varieties	66	55.00
II	Recommended Seed rate	53	44.16
III	Pre-sowing treatment	40	33.33
IV	Recommended Method of sowing	55	45.83
V	Recommended Manuring	30	25.00
VI	Foliar spray	25	20.83
VII	Pest management	28	23.33
VIII	Disease management	30	25.00
IX	Recommended Harvesting procedure	70	58.33
	Overall mean percentage		36.75

Practice-wise adoption of recommended technologies in green gram cultivation

The results obtained on adoption of recommended technologies in green gram cultivation are presented in (Table 2).

It could be understood from (Table 2) that most of the respondents adopted the recommended practices in 'recommended harvesting procedure' (41.66 per cent), followed by 'recommended varieties' (41.66 per cent), 'recommended method of sowing' (41.66 per cent) 'recommended seed rate' (37.50 per cent), 'pre-sowing treatment' (31.66 per cent), 'recommended manuring' (23.33 per cent), 'disease management' (21.66 per cent), 'pest management' (20.83 per cent), and 'foliar spray' (18.33 per cent). The overall mean percentage is 30.92 [5]. Like black gram, green gram is also cultivated as a rice fallow crop and hence farmers seem to attach lesser importance in the adoption of recommended practices in green gram.

Table 2 Practice-wise adoption of recommended technologies in green gram cultivation by the farmers

(n=120)

S. No	Technologies	Number of respondents	Per cent
I	Recommended Varieties	50	41.66
II	Recommended Seed rate	45	37.50
III	Pre-sowing treatment	38	31.66
IV	Recommended Method of sowing	50	41.66
V	Recommended Manuring	28	23.33
VI	Foliar spray	22	18.33
VII	Pest management	25	20.83
VIII	Disease management	26	21.66
IX	Recommended Harvesting procedure	50	41.66
	Overall mean percentage		30.92

CONCLUSIONS

From the aforementioned investigation a lot of improved agricultural practices are recommended for the cultivation pulse crops like black gram and green gram. However, the farmers are not keen to adopt many of the practices recommended for the cultivation. The level of adoption of those practices are not very high. It is high time that we need to motivate the farmers to adopt the recommended cultivation practices to enhance the production and productivity of pulses. The increased production can aid for the socio-economic status of the pulse cultivating farmers.

LITERATURE CITED

1. Deep M, Kumar M, Saha RS, Singh A. 2018. Rice-based cropping systems for enhancing productivity of food grains in India: decadal experience of AICRP. *Indian Farming* **68**(1): 27-30.
2. Archana AS, Kanagasabapathi K, Sakthivel V. 2020. Adoption of sustainable farming practices in paddy cultivation in Kanyakumari district of Tamil Nadu, India. *Plant Archives* 20(2): 6995-6998.
3. Rogers EM, Floyd SF. 1971. *Communication of Innovation - A Cross Cultural Approach*. The Free Press, New York.
4. Prithiviraj M. 2009. A study on adoption of biofertilizers in sugarcane. *Unpublished M. Sc. (Agriculture) Thesis*, Annamalai University, Annamalai Nagar, Tamil Nadu.
5. Prabakarran E. 2010. Agricultural training needs of pulse growers. *Unpublished M. Sc. (Agriculture) Thesis*, Department of Agricultural Extension, Annamalai University, Annamalai Nagar, Tamil Nadu.