

Awareness about cotton production technology of farmer in western Rajasthan

AISHWARYA DUDI* AND M.L. MEENA

CAZRI, Krishi Vigyan Kendra, Pali-Marwar - 306 401

*Email: aishwaryadudi@rediffmail.com

ABSTRACT : The findings regarding the level of awareness of the farmers about recommended cotton production technology, the majority of the respondent who were found in high awareness category, like field preparation (63.20%), time of sowing practices (49.60%) and method of sowing (64%), whereas medium awareness were found in practices like irrigation management (55.20%) and method of weed control (41.60%) while awareness were found in practices like improved varieties (58.40%), seed rate (54.40), seed treatment (69.40), recommended dose of the chemical fertilizer (55.20%) , and plant production (46.40%). Regarding the adoption of the farmers about recommended cotton production technology, the majority of the respondent who were found in high adoption category, like field preparation (55.20%), time of sowing practices (48.80%) and method of sowing (58.40%), whereas medium adoption were found in practices like irrigation management (53.60%) and method of weed control (40%) while adoption were found in practices like improved varieties (52%), seed rate (48.80%), seed treatment(64.80%), recommended dose of the chemical fertilizer (55.20%) and plant production (46.40%).

Key words : Adoption, awareness, cotton production technology

Cotton (*Gossypium hirsutum* L.) is one of the most important fiber and commercial crop playing a key role in economic, political and social affairs in our country as well as world. Cotton is an important cash crop of Rajasthan. To achieve the higher level of production and productivity the inadequate level of knowledge of the recommended technology as well as its non adoption may be a big hindrance which also hampers the production potential of the cotton crops. The gap always appears between the recommended technologies and their use in farmer's field. Besides these agro economic, socio psychological characteristics of the farmers play a major role in their knowledge and adoption for increasing production in are further it is necessary to priorities strategy to increase the knowledge and adoption level of the tribes. Keeping this in view the present investigation has been planned to explore the awareness and also determine the extent of adoption of cotton production technology with the following :

- To study the level of awareness of farmers about improved cotton production technology.
- To study the extent adoption of improved cotton technology by the farmers.

The study was conducted purposively in Pali districts due to maximum area and production of long staple cotton. The district comprises 10 blocks, out of which Raipur block of Pali district was selected purposively due to maximum farmer population (more than 90%) lives and highest production of long staple cotton amongst the other blocks. A list of cotton growing village of Raipur block was prepared and 5 villages will be selected randomly. After the selection of the village, a village wise list of the cotton growing farmers of the selected 5 villages was prepared and 250 farmers from each village will be randomly selected. Thus, the total sampling consisted of 125 farmers spread over five selected villages. The primary data were collected with the help of interview schedule, which was prepared on the basis of objectives of

the study. The secondary data were obtained from department of agriculture, Pali.

Awareness of farmers about improved cotton production technology :

Data in the Table 1 revealed that out of the total of 250 cotton growers, 13.60 per cent had low awareness about the field preparation, while 23.20 per cent had medium awareness about field preparation practices and 63.20 per cent had high awareness. About the time of sowing, 16.80 per cent low awareness, while 33.60 respondents had medium awareness about the sowing time and 49.60 per cent had high awareness. Regarding improved varieties, 58.40 per cent low awareness, while 32 respondents had medium awareness about the improved varieties and 09.60 per cent had high awareness. About the seed rate, 54.40 per cent had low awareness, while 35.20 respondents had medium awareness about the seed rate and 10.40 per cent had awareness. In case of seed treatment 69.60 per cent respondents had low awareness, while 23.20 respondents had medium awareness and 07.20 per cent had high awareness. Regarding method of sowing, 12.80 had low adoption, while 23.20 per cent respondent had medium awareness and 64 per cent had high awareness. About the recommended dose chemical fertilizer, 62.40 per cent low awareness, while 24.80 respondents had medium awareness about the recommended

dose chemical fertilizer and 12.80 per cent had high awareness. In case of irrigation management 28 per cent respondents had low awareness, while 55.20 respondents had medium awareness and 16.80 per cent had high awareness. Regarding method of weed control, 24 per cent low awareness, while 41.60 respondents had medium awareness about the method of weed control and 34.40 per cent had high awareness. In case of plant production 52 per cent respondents had low awareness, while 34.40 respondents had medium awareness and 13.60 per cent had high awareness. The findings confirm with the findings of Hagar *et al.*, (2009) and Singh *et al.*, (2014).

Adoption of improved cotton production technology the farmers :

The data in Table 2 Showed that out of the total of 250 cotton growers, 18.40 per cent had low adoption, while 26.40 per cent had medium awareness about field preparation practices and 55.20 per cent had high adoption. About the time of sowing, 17.60 per cent low adoption, while 33.60 respondents had medium adoption about the sowing time and 48.80 per cent had high adoption. Regarding improved varieties, 52 per cent low adoption, while 36 respondents had medium adoption about the improved varieties and 12 per cent had high adoption. About the seed rate, 48.80 per cent had low adoption, while 40 respondents had medium

Table 1. Level of awareness of the respondents about cotton production technology (N=250)

S. Practices No.	Level of awareness					
	Low		Medium		High	
	F	(%)	F	(%)	F	(%)
1 Field preparation	34	13.60	58	23.20	158	63.20
2 Time of sowing	42	16.80	84	33.60	124	62.60
3 Improved varieties	146	58.40	80	32.00	24	09.60
4 Seed rate	138	54.40	88	35.20	26	10.40
5 Seed treatment	174	69.60	58	23.20	18	07.20
6 Method of sowing	32	12.80	58	23.20	160	64.00
7 Recommended dose of chemical fertilizers	156	62.40	62	24.80	32	12.80
8 Irrigation management	70	28.00	138	55.20	42	16.80
9 Method of weed control	60	24.00	104	41.60	86	34.40
10 Plant protection measures	130	52.00	86	34.40	34	13.60

Table 2. Extent of adoption of the respondents about cotton production technology (N=250)

S. No.	Practices	Level of awareness					
		Low		Medium		High	
		F	(%)	F	(%)	F	(%)
1	Field preparation	46	18.40	66	26.40	138	55.20
2	Time of sowing	44	17.60	84	33.60	122	48.80
3	Improved varieties	130	52.00	90	36.00	30	12.00
4	Seed rate	122	48.80	100	40.00	28	11.20
5	Seed treatment	162	64.80	66	26.40	22	08.80
6	Method of sowing	36	14.40	68	27.20	146	58.40
7	Recommended dose of chemical fertilizers	138	55.20	76	30.40	36	14.40
8	Irrigation management	76	30.40	134	53.60	40	16.00
9	Method of weed control	66	26.40	100	40.00	84	33.60
10	Plant protection measures	116	46.40	98	39.20	36	14.40

adoption about the seed rate and 11.20 per cent had adoption. In case of seed treatment 64.80 per cent respondents had low adoption, while 26.40 respondents had medium adoption and 08.80 per cent had high adoption. Regarding method of sowing, 14.40 had low adoption, while 27.20 per cent respondent had medium adoption and 58.40 per cent had high adoption. About the recommended dose chemical fertilizer, 55.20 per cent low adoption, while 30.40 respondents had medium adoption about the recommended dose chemical fertilizer and 14.40 per cent had high adoption. In case of irrigation management 30.40 per cent respondents had low adoption, while 53.60 respondents had medium adoption and 16 per cent had high adoption. Regarding method of weed control, 26.40 per cent low adoption, while 41.60 respondents had medium adoption about the method of weed control and 32 per cent had high adoption. In case of plant production 46.40 per cent respondents had low adoption, while 39.20 respondents had medium adoption and 18.40 per cent had high adoption. The findings confirm with the findings of Rai and Singh (2010), Godase *et al.*, (2011) and Yadav *et al.*, (2011).

REFERENCES

- Godase, S.S., Gaikwad and V.S. Shirke 2011.** Knowledge and adoption of bio-control measures for cotton by the farmers. *Asian Jour. Ext. Edu.* **29** : 128-30.
- Hagar, L.B., Patil, B.V. and Amratha, C.P. 2009.** Techno economic impact of *Bt.* Cotton technology in Karnataka state. Empirical evidence. *J. Cotton Res. Dev.* **23** : 166-70.
- Rai, D.P. and Singh, B. 2010.** Extent of knowledge and constraints in cotton production technology in Madhya Pradesh. *Ind. Res. Jour. Ext. Edu.* **10** : 78-80.
- Singh, J., Abraham, S. and Shakhnarnarayanan, K. 2014.** Impact analysis of *Bt.* Cotton production technologies on yield and profit Vidarbha farmers. *J. Cotton Res. Dev.* **28** : 62-65.
- Yadav, R.K., Tomar, I.S., Garg, S.K., Jadon, M.S. and Sukla, A. 2011.** Awareness about cotton production technology of tribal farmers. *Ind. Jour. Ext. Edu.* **47** : 175-77.

Received for publication : November 19, 2014
Accepted for publication : May 21, 2015