

EVALUATION OF FRONT LINE DEMONSTRATION ON MUSTARD

A. J. Patel¹ and S. H. Patel²

ABSTRACT

Technologies generated by the scientist are of no use unless adopted by the farmers with a view to know the extent of adoption of mustard production technologies before and after FLD, this study was under taken. Majority of the mustard growers adopted the improved varieties, seed rate, spacing, Time of sowing, use of FYM, use of basal fertilizers, use of sulphur, time of top dress fertilizers, method of fertilizers application, Weed control, irrigation and plant protection measures,

INTRODUCTION

India has been self sufficient in food grains, but production of oil seed crops remain static during last 30 to 40 years. There is urgent need to increase the production of oil seeds. To accelerate the production of oil seeds, ICAR has started FLD programme through KVK. FLD on Mustard has been started by KVK, GAU, Deesa since 1992. Latest recommended package of practices of Mustard crop was demonstrated on the farmers field. To evaluate the FLD on mustard, research study was under taken with the following specific objectives.

1. To evaluate the FLD Mustard in terms of adoption of recommended Castor production technology.
2. To study the yield of mustard on farmers field before FLD and after FLD.
3. To study the profitability of mustard crop before FLD and after FLD Programme

METHODOLOGY

The present study was conducted in Deesa and Palanpur taluka of Banaskantha district. The villages namely Khadosan, Sodiya, Lorwada, Vasana and Dharpada were purposively selected from Deesa taluka while Pirojpur villages was purposively selected

from Palanpur taluka. List of farmers to whom FLDs mustard was allotted were prepared and ten farmers from the each villages were randomly selected. Thus total sixty farmers / respondents were selected for the present study. Before conducting the FLDs, 14 production technologies of mustard crop had been identified and responses were recorded to know the prevailing production technologies of mustard crop in these villages and yield of mustard per hectare was also recorded from each villages.

In both the cases before FLD and after FLD the respondents were remained same for the present study.

RESULT AND DISCUSSION

In order to find out the extent of adoption of improved agricultural practices of mustard crop before conducting FLD mustard a survey of production technologies of mustard had been done and on the basis of the survey 14 production technologies had been identified and data were recorded.

In order to find out the extent of adoption of improved agricultural practices of mustard crop after FLDs the same 14 improved practices were identified for the study. The respondents were asked to give their responses to these practices.

1. Training Organizer, KVK, GAU, Deesa
2. Training Associate, KVK, GAU, Deesa

Table 1 : Extent of adoption of recommended package of practices of mustard crop before FLD and after FLD.

Sr. No.	Practices	Adoption of recommended practices (Before FLD)		Adoption of recommended practices (After FLD)	
		No.	Percent	No.	Percent
1	Improved varieties	15	25.00	53	88.33
2	Seed rate	8	13.34	37	61.67
3	Spacing	25	41.67	52	86.67
4	Time of Sowing	22	36.67	55	91.67
5	Use of FYM	11	18.33	38	63.33
6	Use of basal ferti.	14	23.33	50	83.33
7	Use of sulphur	9	15.00	36	60.00
8	Use of Top dress ferti.	12	20.00	33	55.00
9	Time of Top dress ferti	21	35.00	45	75.00
10	Method of fertilizer application	28	46.67	52	86.67
11	Weed control (Cultural method)	39	65.00	49	81.67
12	irrigation	24	40.00	51	85.00
13	Diseases control	20	33.33	47	78.33
14	Pest control	21	35.33	49	81.67

In both the cases before FLD and after FLD, the respondents were remained same for the present study. There after, the response was calculated and converted into mean percent as mentioned in Table 1.

The data in the table 1 indicated that majority (88.33 percent) of the respondents had adopted the improved variety of Mustard. Seed rate (61.67 %) spacing (86.67 %); sowing time (91.67 %) use of FYM (63.33%); Use of basal fertilizer (83.33 %), Use of Sulphur (60.00 %) Time of top dress fertilizers (75.00 %) Method of fertilizers application (86.67 %) Weed control (Cultural method) (81.67 %), Irrigation (85.00 %) Diseases control (78.33 %) and Pest control (81.33 %) after the FLD programme

Very less number of respondents (25.00 %) adopted the improved variety ; Seed rate

(13.34 %) use of FYM (18.33%); Use of basal fertilizer (23.33 %), Use of Sulphur (15.00 %) use of top dress fertilizers (20.00 %) before

Yield of Mustard

Table 2 The yield of mustard obtained by the respondents before FLD and after FLD were compared.

The data in the Table 2 revealed that the yield of Mustard per hectare was increased 26.39 percent after FLD. t test was also indicated the significant difference between two groups.

Profitability of FLD Mustard

The cost of inputs was calculated for before and after FLD mustard . The yield data of mustard was also recorded before conducting FLD and after conducting FLD.

Table 7 : Yield of castor before and after FLD.

Sr. No.	Yield of mustard kg / ha.		Percent increase
	Before FLD	After FLD	
1.	1455.00	1839.00	26.39

t=11.57(Calculated t)

t=1.96 (Table t at 0.005 percent)

**(H.S.)

Table 8 :

Sr. No.	Items	Before FLD	After FLD
1	Cost of inputs	4406	5050
2	Yield of mustard per ha.	14.30	18.40
3	Market price (Rs. /Qt)	1750	1750
4	Gross income (Rs. / ha.)	25025	32200
5	Net profit (Rs. / ha.)	20619	27150

Impact of FLD mustard on the near by village:

Table 9 : The mustard variety GM-2 was covered the area in diff. villages after conducting the FLD programme.

Year	Sodiya	Sotamala	Khardosan	Vasana	Vadaval	Malgadh
1998	430	420	525	182	870	---
1999	430	425	525	182	140	561
2000	400	110	840	297	870	530

Year	Sherpura	Lorwada	Dharpada	Manekpura
1998	750	1380	200	451
1999	525	1290	170	389
2000	425	800	190	300

As per the market price the income was calculated for before and after FLD and profitability per hectare was calculated.

The data in the table revealed that before FLD the yield of mustard was 14.30 while after FLD the yield of mustard was 18.40 Q/ha.. The prevailing market price was rupees 1750 / - per Qt. and on that base the profitability was calculated which showed that net profit from mustard crop before FLD was 20619 /- Rs./ ha. while the net profit from mustard crop after FLD was 27150 /- Rs./ ha.

It means the net profit from FLD mustard was 6531 /- Rs./ ha. more as compared to before FLD mustard crop.

CONCLUSION

In light of the finding following conclusion may be drawn :

1. Putting together the finding it can be concluded that majority of the respondents were from middle to old age group.
2. Majority (65 percent) of the respondents were educated up to primary level of education
3. Majority (98.34 percent) of the respondents belongs to other backward classes
4. 38.33 percent of the respondents possess more than one hectare of land while 43.33 percent of them possess more than 2.0 hectares of land.

5. 100 percent of the respondents having irrigation facility.
6. on the set of technologies of mustard crop, before FLD the adoption was very low level but After conducting the FLD programme on the farmers field, most of the respondents became aware

about the production technologies of mustard. Majority of the respondents were adopted most of the production technologies of mustard after FLD. The yield of mustard was increase 26.39 percent after FLD as compared to before FLD. It shows position impact of FLD on the adoption.