



Research Article

EFFICACY OF NOVEL INSECTICIDES AGAINST *Spodoptera litura* Fabricius ON CABBAGE

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Abstract- Sesame is very good profitable promising crop under summer cultivation in Saurashtra region. It is short duration and water requirement is also less as compare to summer groundnut. Frontline demonstration is one of the best tool for transfer of new technology from lab to land. Attempts are made to Increase area and productivity of sesame in this area 20 frontline demonstration organised under the domain of KVK Amreli. All FLD were selected for study and then find out how much production of summer sesame increased after organising FLDs. Average 22.5 per cent adoption increased due to frontline demonstration. Yield of FLD per hectare was increased by 9.88 per cent as compared to Local Check. Sesame production is also increased 9.88 per cent due to increase in awareness, contact with scientist, diagnostic service of KVK.

Keywords- Sesame, Impact, Frontline demonstration

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Introduction

Sesame is one of the important oilseed crop and has great importance in Ayurveda. Sesame is very good profitable promising crop under summer cultivation in Saurashtra region. Last five year its area increased in summer cultivation. Sesame crop taken as a rainfed and irrigated also. It is short duration crop and water requirement is also less as compare to summer groundnut. Frontline demonstration is one of the best tool for transfer of new technology from lab to land. Frontline demonstration playing a significant and crucial role in agricultural development and allied fields including crop production, livestock production, horticulture, post-harvest operation, agro/ social forestry, fisheries etc. Attempts are made to Increase area and productivity of sesame in this area. There are 20 frontline demonstration organised under the domain of KVK Amreli are selected for study to find out the following objectives.

Objectives

1. To study the adoption of recommended summer sesame crop production technology.
2. To find out the Yield of summer sesame in FLD and Local Check.
3. To study the profitability of summer sesame in FLD and Local Check.

Materials and Methods

The present study was conducted in Amreli District. The frontline Demonstration organised by KVK, Amreli were selected purposively. Total 20 frontline demonstration where organised during summer-2015 in adopted villages of KVK. The data were collected through personal interview method using structural schedule. The *ex-post facto* research design was employed in the present investigation. To collect the data, the respondents were individually interviewed by the investigator himself after making good rapport with them. Respondent and field were same for FLD and Local Check. The data were analysed with

appropriate statistical procedures.

Result and Discussion

Table-1 Extent of adoption of recommended package of practices of summer sesame cultivation in FLD and Local Check
(N= 20)

Sr. No.	Package of practice	Adoption (in Local Check)		Adoption (in FLD)		Increase in adoption (%)
		No.	%	No.	%	
1	Timely sowing	13	65	20	100	35
2	Seed rate	15	75	19	95	20
3	Seed treatment	16	80	20	100	20
4	Line sowing	20	100	20	100	0
5	Recommended dose of ferti.	7	35	12	60	25
6	Irrigation	8	40	17	85	45
7	Weed management	10	50	12	60	10
8	Disease and Pest management	10	50	15	75	25
					Average	22.5

The data in [Table-1] revealed that adoption level increase in irrigation (45 per cent) as compare to LC. In case of timely sowing of sesame adoption is increase 35 per cent. While 25 per cent adoption increases in Disease and Pest management and use of recommended dose of fertiliser. Less per cent i.e. 20 per cent adoption level increases in case of Seed treatment and Seed rate. While only 10 per cent increase in weed management was found. No difference found in case

of line sowing. Average 22.5 per cent adoption increased due to frontline demonstration. The findings are in line with the findings of Deshmukh *et. al.* (2014) and Mistry *et. al.* (2015)[1,2]

Table-2 Yield of Summer Sesame in FLD and Local Check
(n=20)

Sr. No.	Yield of Summer Sesame (Kg/ha)		Increase in production (%)
	FLD	Local Check(LC)	
1	375.00	350.00	07.14
2	343.75	312.50	10.00
3	656.25	593.75	10.53
4	625.00	575.00	08.70
5	781.25	725.00	07.76
6	437.50	412.50	06.06
7	718.75	656.25	09.52
8	862.50	793.75	08.66
9	656.25	606.25	08.25
10	531.25	493.75	07.59
11	775.00	662.50	16.98
12	787.50	706.25	11.50
13	787.50	712.50	10.53
14	781.25	687.50	13.64
15	812.50	743.75	09.24
16	787.50	718.75	09.57
17	825.00	750.00	10.00
18	843.75	787.50	07.14
19	956.25	843.75	13.33
20	906.25	812.50	11.54
Average	712.50	647.18	09.88

$H_0 : \mu_1 = \mu_2$ and $H_1 : \mu_1 \neq \mu_2$ Cal t = 5.69 ** (HS)

Test of significant at 5 % and 1% level of significance at n – 1 d.f. (N = 20)

Table t at 5 % 19 d.f. = 2.093 Table t at 1 % 19 d.f. = 2.861

From above table it is concluded that Yield FLD per hectare was increased by 9.88 per cent as compared to Local Check. The t test also indicates the highly significant differences in FLD and LC. The findings are in line with the findings of Deshmukh *et. al.* (2014) and Patel *et. al.* (2014)[1,3].

Conclusion

The present study concludes that the frontline demonstration play a significant and crucial role in adoption of new agricultural technology. Average 22.5 per cent adoption increased due to FLD. Sesame production is also increased 9.88 per cent due to increase in awareness, contact with scientist, diagnostic service of KVK. It is found that FLD is best tool for spread of new agricultural technology.

Conflict of Interest: None declared

References

- [1] Deshmukh G., Patel H.B. and Patel M. R. (2014) *Guj. J. Extn. Edu.*, 25(1), 27-30.
- [2] Mistry J.J., Vihol K.J. and Patel G.J. (2015) *Guj. J. Extn. Edu.*, 26(2), 231-233.
- [3] Patel R.N. and Patel J.R. (2014) *Guj. J. Extn. Edu.*, 25(1), 91-92.