

## Impact of front line demonstration on production technology of okra cv. PHULE UTKARSHA in Dhule district of Maharashtra

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### ABSTRACT

The front line demonstration on Production Technology of Okra var. Phule Utkarsha was conducted for five years (2004-05 to 2008-09) on farmers field in four different villages in all the four talukas of Dhule district in *Kharif* season. It was observed that the average yield performance of 60 demonstrated okra crops in an area of 12 hectares ranged from 146 to 163 q / ha. The average yield of 60 demonstrations of bhendi crop for five years was found to be 154.2 q / ha whereas for local crop, it was found to be 125.8 q / ha. There was 22.64 per cent increase in demonstration yield over local during all the five years. The farmers have incurred average higher returns of Rs. 60580/ha through these demonstrations. The comparative results of the demonstration highlight the cost benefit ratio of 6.83 as against the local crop which recorded 5.09, respectively. Results of the demonstration had shown that the use of improved variety, improved cultivation practices, proper post harvest management and plant protection measures resulted in higher productivity of bhendi crop.

**Key words :** Impact, Bhendi, Demonstration, Production technology

### INTRODUCTION

Okra (*Abelmoschus esculentus* L. Moench) is an annual vegetable crop propagated from seed in tropical and subtropical regions of the world. Its pods are cooked as a vegetable in curries, stewed with meat, cooked into soups and canned and dried. Mature pods and the stem containing crude fibre and used in the paper industry. Okra is a good source of vitamin A and B and contains vitamin C also. It is rich in protein and mineral elements. It is an excellent source of iodine, so useful for the control of goiter. It is good for people suffering from weakness of heart. Okra requires a long and warm growing season. As such when the crop is grown during April to July, it produces good yield of the fruits, okra thrives in all kinds of soils, but it grows best in a friable well manured soil (Yawalkar and Ram, 2004).

Major importing countries of Indian vegetables are UAE, Pakistan, Srilanka, Nepal and Bangladesh. Okra is the major vegetable grown in India. The efforts are underway to increase the productivity of okra by imparting training and conducting demonstrations. The present study, therefore, was undertaken to ascertain the role of demonstrations in exhibiting the production technology of okra and thus increasing the yield.

### MATERIALS AND METHODS

Krishi Vigyan Kendra, Dhule conducted front line demonstrations on okra cv. PHULE UTKARSHA during the year 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 in

*Kharif* season. Totally 60 demonstrations in an area of 12 hectares were conducted on okra crop on farmers field in all the four talukas viz., Sakri, Dhule, Shindkheda and Shirpur talukas of Dhule district. The demonstrations were conducted in irrigated conditions and the soils of demonstrations plot ranged from medium to black cotton soils. The demonstrations included important technologies like improved variety, planting, use of manures and fertilizers, irrigations, chemical sprays and post harvest management. The yield data was recorded from demonstrations as well as from local plots.

### RESULTS AND DISCUSSION

The data of front line demonstrations presented in Table 1 showed that the yield performance of 60 demonstrated okra crop in an area of 12 hectares ranged from 146 to 163 q / ha. The average yield of five years for okra crop was found to be 154.2 q / ha, whereas for local crop, it was found to be 125.80 q / ha. There was 22.64 per cent average increase in demonstration yield over local during all the five years. The increase in yield in demonstrations over local check was the impact of improved production technology of okra crop adopted in front line demonstrations. Similar results were also reported by Kalalbandi *et al.* (2006) in chilli crop.

Results of the demonstrations had shown that the use seed of improved variety, improved cultivation practices, proper post-harvest management and plant protection measures resulted in higher productivity of okra. The farmers have incurred average higher gross returns

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**Table 1: Yield performance of front line demonstration on bhendi *Phule Utkarsha* in Kharif season**

Sr. No.	Year	Name of the Taluka (Village)	Name of the variety/ component	No. of Demonstrations	Area (ha)	Avg.yield (qt/ha)			Per cent increase in yield
						Demonstration		Control /check	
						Max	Avg.	Avg	
1.	2004-05	Dhule (Shirud) Sakri (Dighave) Shindkheda (Chaugaon) Shirpur (Pimpri)	<i>Phule Utkarsha</i> +INM + PHT	15	3	164	160	126	26.98
2.	2005-06	Dhule (Shirud) Sakri (Dighave) Shindkheda (Chaugaon) Shirpur (Pimpri)	<i>Phule Utkarsha</i> +INM + PHT	15	3	169	163	124	31.45
3.	2006-07	Dhule (Shirud) Sakri (Dighave) Shindkheda (Chaugaon) Shirpur (Pimpri)	<i>Phule Utkarsha</i> +INM + PHT	10	2	159	154	129	19.38
4.	2007-08	Dhule (Shirud) Sakri (Dighave) Shindkheda (Chaugaon) Shirpur (Pimpri)	<i>Phule Utkarsha</i> +INM + PHT	10	2	154	148	122	21.31
5.	2008-09	Dhule (Shirud) Sakri (Dighave) Shindkheda (Chaugaon) Shirpur (Pimpri)	<i>Phule Utkarsha</i> +INM + PHT	10	2	151	146	128	14.07
Total / Average				60	12	159.40	154.20	125.80	22.64

INM: Integrated nutrient management, PHT: Post harvest Technology

**Table :2 : Economics of front line demonstration of bhendi *Phule Utkarsha* in Kharif season**

Sr. No.	Year	Demo		Control		B:C Ratio	
		Total cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Total cost of cultivation (Rs./ha)	Gross return (Rs/ha)	Demo.	Check
1.	2004-05	9875	60000	8300	44600	6.07	5.37
2.	2005-06	9900	64000	8800	42300	6.46	4.80
3.	2006-07	8600	61600	8900	45000	7.16	5.06
4.	2007-08	8200	59200	8500	43000	7.21	5.05
5.	2008-09	8000	58100	8700	44800	7.26	5.15
Average		8915	60580	8640	43940	6.83	5.09

of Rs. 60580/ha (Table 2) through these demonstrations. The comparative results of the demonstration highlighted the cost benefit ratio of 6.83 as against the local crop which recorded 5.09, respectively. Hence, there is a wide scope to increase the areas and production of okra crop by providing need based training and demonstrations on

improved production technology to the farmers.

## REFERENCES

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