

Performance of Front Line Demonstration of Drumsticks Variety, PKM-1 in Baramati Tahasil of Pune District (M.S.)

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1. Introduction

Drumstick (*Moringa oleifera* Lam.) is one of the important vegetable crops commercially grown in Maharashtra also in Pune District. India is the second largest producer of vegetables in the world, next only to China. Baramati is drought prone area, where the average rainfall received is about 400- 450 mm, *Moringa oleifera* Lam., also known as the Drumstick Tree, is recognized as a vibrant and affordable source of phyto chemicals, having potential applications in medicines, functional food preparations, water purification and Biodiesel production. The present study was conducted under Krishi Vigyan Kendra, Baramati on farmer's field of the adopted villages of the Baramati Tahasil. The data on production cost and monetary returns were collected from frontline demonstrations plots for working out the economic feasibility of improved variety.

2. Material & Methods

The demonstration was conducted during 2015-16 & 2016-17 with local variety grown by farmers as a Amar – 32 against improved variety – PKM-1. In total, 30 demonstrations in 15 hectares area in different villages were conducted in Baramati & Daund Tahasils. The Trial was conducted in summer on irrigated medium black soil. The annual rainfall is 461 mm with 31 rainy days. Farmer facing the problem of poor yield and low quality of pods, so avoiding these problems of farmer KVK was decided to conduct demonstration on drumstick variety – PKM-1, in Baramati & Daund Tahasil of Pune district (M.S.)



Drumstick demonstration Plot
at Village- Malad Tal- Baramati Dist- Pune



Drumstick Demonstration Plot
at Village- Boribel Tal- Daund Dist- Pune

Drumstick Variety- PKM-1
on Polythene mulchingPlanting of Drumstick Variety- PKM-1
on Polythene mulching**Table 1:** Details of Observations recorded in the farm trial

Title of Trial (OFT): PERFORMANCE OF FRONT LINE DEMONSTRATION OF DRUMSTICKS VARIETY, PKM-1 IN BARAMATI TAHASIL OF PUNE DISTRICT, (M.S.)

Treatment Details	Data on the parameters
T1- a) Farmers Practice Planting of local variety of Drumstick- AMAR – 32	a)1.Number of pods per Tree – 288.4 pods /Tree 2. Pod yield per Tree - 36.96 kg 3. B:C Ratio - 1:2:7
T1- b) Farmers Practice Planting of local variety of Drumstick- AMAR – 32	b)1. Number of pods per Tree – 284.4 pods /Tree 2. Pod yield per Tree - 34.92 kg 3. B:C Ratio - 1:2:6
T1- c) Farmers Practice Planting of local variety of Drumstick- AMAR – 32	c) 1.Number of pods per Tree – 285.4 pods /Tree 2. Pod yield per Tree - 35.91 kg 3. B:C Ratio - 1:2.4
T2 – a) Demonstration Treatment – Demonstration of Improved variety of Drumstick variety – PKM-1	a) 1.Number of pods per Tree – 378.6 pods /Tree 2. Pod yield per Tree - 42.96 kg 3. B:C Ratio - 1:3.5
T2 – b) Demonstration Treatment – Demonstration of Improved variety of Drumstick variety – PKM-1	b)1.Number of pods per Tree – 376.2 pods /Tree 2. Pod yield per Tree - 41.91 kg 3. B:C Ratio - 1:3.4
T2 – c) Demonstration Treatment – Demonstration of Improved variety of Drumstick variety – PKM-1	c) 1.Number of pods per Tree – 378.1 pods /Tree 2. Pod yield per Tree - 42.90 kg 3. B:C Ratio - 1:3.3

3. Result & Discussion

These demonstrations focused on increased productivity of Drumstick per unit area and get the feedback from farmers on the performances of Drumstick variety – PKM-1. From the study; it revealed that over the years PKM-1 variety performed superior over local check. Demonstrated variety PKM-1 of Drumstick for cultivation and proper Pruning of primary & secondary branches increases number of pods per tree in demonstrated plot (378.6 pods / tree) as compare to control plot (288.4 pods / tree). Pod yield per tree is more in demonstration plot (42.16 kg) whereas in control plot (36.96 kg) Also benefit cost ratio of demonstration plot was (1:3.5) whereas the local check plot was (1:2.7), Drumstick variety – PKM-1 gives more yield as compare to local check.

4. Conclusion

The Drumstick variety – PKM-1 with proper pruning and Training techniques after planting is responsible for increasing number of pods per tree and also received

maximum not returns per unit area as compare to control plot planted variety.

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