



## Scientific cultivation of green gram

V.K. Poshiya<sup>1</sup>, M.V. Tiwari<sup>2</sup> and H. R. Jadav<sup>2</sup>

<sup>1</sup>Tribal Women Training Center, Navsari Agricultural University, Dediapada, Narmada (Gujarat) India

<sup>2</sup>Krishi Vigyan Kendra, Dediapada, Narmada (Gujarat) India  
(Email : [twtcnarmada@gmail.com](mailto:twtcnarmada@gmail.com); [vkposhiya@nau.in](mailto:vkposhiya@nau.in))

**Name of KVK :** Narmada (Gujarat)

**Crop and Variety :** Green gram (Meha)

**Name of farmer and Address:** Ramajibhaibabaliyabhai Vasava, At and Po: Babada, Ta; Dediapada, Narmada (Gujarat)

### Details of technology demonstrated:

– Demonstration of improved variety (Meha) of green gram was given. This improved variety having resistance against yellow vein mosaic disease.

– Bio fertilizers like Rhizobium@10ml per kg seed, PSB@10ml per kg seed, KMB@10ml per kg seed at sowing time in soil.

– Drenching @50-150 ml per 10 lit water at vegetative phase and foliar application of NAUROJI NOVEL (Banana pseudo stem based liquid nutrients during flowering stage.

– Monitoring and control of sucking pest by the use of yellow sticky trap carried out.

– *Neem* oil 1500 ppm @ 40ml/pump for sucking pests management.

### Institutional involvement:

– To analyze the technology gap, farmers group meeting of adopted villages of were conducted and to get information on soil, water and other conditions and take

samples for our STL.

– Farmers training were conducted before conducting demonstration. Field day was conducted on farmer’s field just before harvesting of moong and got feedback from farmers about variety Meha. Atma Narmada and SHGs leaders and other Missionary workers were remained present during field day.

### Success point:

– The new variety Meha has been developed by experts from the Indian Institute of Pulses Research (IIPR), Kanpur, for Gujarat. Meha var. of greengram is an early maturing variety recommended by Scientist because its have resistance against yellow vein mosaic disease.

– Use of Pendimithaline as pre-emergence @1.00 kg ai/ha reduce monocot weed infestation upto 40 days after sowing. It saved Rs. 2360/ha weeding cost as compare to local check plot.

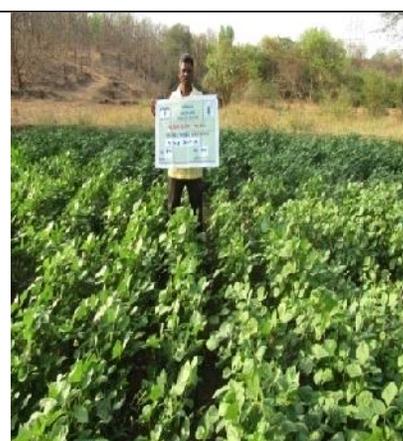
– Installation of yellow sticky trap at the time of

Yield (q/ha)	
Demonstration	15.9
Potential yield of variety/technology	18.5
District average	10.2
State average	12.4
National average	4.68

Performance of technology vis-à-vis local check (Increase in productivity and returns)					
Practice used	Yield (q/ha)	Gross cost (Rs./ha)	Gross income (Rs./ha)	Net income (Rs./ha)	B:C ratio
Farmer practices	14.4	26500	51995	25495	1.96
Demonstration	15.9	26000	56711	30711	2.18
% Increase	9.2 %	--	--	20.5 %	--

**Package of practices followed for red gram cultivation**

Improved varieties	: Meha
Seed rate/ha	: 12-15 kg per ha
Seed treatment	: Bio fertilizers like Rhizobium@ 10ml per kg seed, PSB@ 10ml per kg seed, KMB @ 10ml per kg seed.
Sowing time	: Last week of January to second week of February
Spacing	: Row spacing of 50-75cm and plant to plant spacing of 15-20cm
Irrigation with stages	: Flower initiation, pod filling mostly required.
Moisture conservation practices followed	: Use of Broad bed furrow planter for sowing (removal of excess water through furrow during heavy rain and also irrigation in furrow during less rainfall)
Fertilizer application	: 20:40:00 NPK kg/ha, zink sulphate 25 kg/ha
Insect/pest management practices	: <i>Nem</i> oil 1500 ppm @ 40ml/pump and use of Pheromone traps @5/ha for pod borer
Weed control	: Pendimithaline or fluchorarine @900 a.i. per ha (Pre-emergence)
Harvesting	: 95-110 DAS
Existing cropping systems	: Sole crop and as intercropped with groundnut/maize/sorghum



flowering helps to monitor and to check the population of sucking pests effectively.

**Farmer feedback for scientific cultivation of green gram:** High yield of demonstration was due to high yielding variety *i.e.* Meha and higher use of bio fertilizers like Rhizobium@ 10ml per kg seed, PSB@ 10ml per kg seed,

KMB @ 10ml per kg seed at sowing time in soil. As well as drenching @50-150 ml per 10 lit water at vegetative phase and foliar application of NAUROJI NOVEL (Banana pseudo stem based liquid nutrients) @50-150 ml per 10 lit water during flowering stage.

Received : 01.07.2019

Revised : 10.10.2019

Accepted : 12.11.2019

**SUBSCRIPTION FEE**

**HIND MEDICAL RESEARCH INSTITUTE  
418/4, SOUTH CIVIL LINES (NUMAISH CAMP),  
MUZAFFARNAGAR-251001 (U.P.)**

**JOURNAL**

	Annual Subscription Fee		Life Subscription Fee	
	Individual	Institution	Individual	Institution
International Journal of Medical Science	1500/-	2000/-	10000/-	20000/-
Annals of Pharmacy and Pharmaceutical Sciences	1500/-	2000/-	10000/-	20000/-

Draft should be made in the name of the **Hind Medical Research Institute** from any NATIONALIZED BANK PAYABLE AT MUZAFFARNAGAR -251001 (U.P.), INDIA.