



Scientific cultivation of red gram

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Name of KVK : Narmada (Gujarat)

Crop and Variety : Red gram (Vaishali)

Name of farmer and Address: Mr. Vasava Sampatbhai Sonajibhai, At and Po: Kherpada, Ta; Sagbara, Narmada (Gujarat)

Details of technology demonstrated:

– Demonstration of Improved variety (Vaishali) of red gram was given which was resistance against Sterility mosaic and root rot 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 L 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.

Nem oil 1500 ppm @ 40ml/pump for sucking pests management.

Institutional involvement:

– To analyze the technology gap, farmer's 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 pigeonpea and got feedback from farmers about variety vaishali. Atma Narmada and SHGs leaders and other Missionary workers were remained present during field day.

Success point:

– Variety Vaishali has been developed by experts from Directorate Pulses Research, BSMR since 20 years back for India. It is an early maturing variety recommended by Scientist because its have resistance against sterility mosaic and root rot disease.

– Use of pendimethalin as pre-emergence @ 1.00 kg ai/ha reduce monocot weed infestation upto 40 days after sowing. It saved Rs. 2210/ha weeding cost as compare to local check plot.

– Installation of yellow sticky trap at the time of flowering helps to monitor and to check the population of sucking pests effectively.

Farmer feedback of scientific cultivation of red gram

Yield (q/ha)	
Demonstration	17.9
Potential yield of variety/technology	18.5
District average	10.6
State average	12.4

Performance of technology camper to 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	14.83	24000	62302	38302	2.59
Demonstration	17.92	26000	75225	49225	2.89
% Increase	20.83 %	--	--	28.5 %	--

Package of practices followed for red gram cultivation	
Improved varieties	: Red gram (Vaishali)
Seed rate/ha	: 8-10 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 June to first week of July
Spacing	: R x P: 60 x 20-120 cm
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	: 20:60:20 NPK kg/ha, zink sulphate 20 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 @ 1.0-1.5 a.i./ha in 500-600 litre of water
Harvesting	: 95-110 DAS
Existing cropping systems	: Sole crop as well as intercropped with cotton



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