TAMIL NADU-DEPARTMENT OF AGRICULTURE KRISHNAGIRI DISTRICT RKVY/NADP-PULSES-2020-21

SPECIAL INITIATIVE FOR INTENSIFICATION OF REDGRAM
TRANSPLANTATION





Farmer Details

S1.No	Particulars		
1	Name of the Farmer	:	Venkatesh S/o Kuvappa, Contact No.9788285936
2	Village	:	Thattikanapalli
3	Block	:	Hosur
4	District	:	Krishnagiri
5	Cultivated area / Ha	:	1.00 Ha
6	Survey No		102/1
7	Irrigated	:	Rainfed
8	Scheme		NADP – Pulses – 2020-21 - Special Initiative for Intensification of Red gram Transplantation

NURSERY MANAGEMENT:

The concept of community nursery under shade net was adopted for raising red gram seedlings for farmers cultivating red gram in a cluster of villages in each block.

- ❖ Long Duration and High yielding variety of BRG 5 was used for raising nursery.
- ❖ Seeds are treated with Trichoderma viridi @ 4 grams /Kg of Seeds, then Rhyzobium and Phosphobacteria.
- ❖ Coco pith was treated with Bio fertilizers of Rhyzobium and Phospho bacteria and Bio control agent Trichoderma viridi and filled in the Protrays.
- ❖ Seeds were sown in Protrays and kept in shade net nursery and Watering was done by using Rose cane.
- **❖** The Seedlings will be ready for transplantation within 15 days.
- ❖ If the seedlings are not transplanted before 16 days from sowing, it will affect the yield of the crop.

MAIN FIELD:

❖ Summer ploughing was taken up and field was ploughed to fine tilth conditions before planting.

❖ In Rainfed condition, Farm Yard Manure @ 12.5 MT basal application and NPK @ 25 : 50 : 25 , Zinc Sulphate 20 Kg and Pulses Micro Nutrient Mixture 5 Kg applied on 25 days after planting.

NIPPING OF TERMINAL BUDS:

❖ Nipping of Terminal Buds done at 45 days after transplanting to induce profuse growth of lateral branches.

DAP SPRAYING:

❖ Spraying of 2% DAP solution was taken up once at flowering stage and another at 15 days thereafter, to induce more flowering.

WEED MANAGEMENT:

❖ Two hand Weeding done on 20 days and 60days after planting.

PLANT PROTECTION:

❖ To control pod borer-Emamectin Benzoate 5% SG@ 220 g/Ha was sprayed.

YIELD AND INCOME:

Particulars	:	Yield under Conventional Method	After adoption of Transplantation
Cost of Cultivation	:	22,450	26,550
Yield (Kg/Ha)		1,560	2,350
Gross income @ Rs.50/Kg		Rs.78,000 /-	Rs.1,17,500 /-
Net profit per Ha		Rs.55,550 /-	Rs.90,950 /-

IMPACT:

- Maintaining optimum population in the main field is the key factor deciding the yield of crop.
- In direct sowing method maintaining optimum population is difficult due to poor germination of seeds.

- ❖ By raising seedlings in nursery and transplanting in the main field assures optimum population which in turn gives higher yield.
- **❖** The Higher yield obtained in the demonstration of Transplanted red gram and higher income has influenced nearby farmers to adopt this technologies.

PRECAUTIONS TO BE TAKEN:

- ❖ If the seedlings are not transplanted in the main field within 16 days in case of portray method, the yield will be drastically reduced.
- ❖ The seedlings should be transported from nursery to main field very carefully to avoid damage to seedlings.
- ❖ While transplanting of seedlings, sufficient moisture should be present in the main field. Otherwise, mortality rate will be higher which in turn will affect the plant population and result in lower yield.
- ❖ If Nipping of Terminal Buds is not done in time, the plants will grow vertically without producing productive lateral branches which will affect the yield of the crop.

REASON FOR HIGHER YIELD IN TRANSPLANTED REDGRAM

- ❖ Seedlings raised in protray method are healthy and vigorous.
- **❖** Transplanting method ensures optimum population in main field and higher vield.
- ❖ Even under Rain fed condition, if the seedlings are raised in protrays and transplanted in the main field, yield will be higher than the conventional method.