

Technology Module and success story under CFLDs On Oilseed 2023-24

Crop: Soybean

Technology Module:

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| Improved Varieties | : | Phule Sangamn |
| Seed Rate/ha | : | 30 kg/ha |
| Seed Treatment | : | Seed treatment of biofertilizers, Rhizobium & PSB @25gm/kg of seed and Trichoderma @5gm/kg |
| Sowing Time | : | Last week of June 2023 |
| Spacing | : | 30*10 cm |
| Irrigation with stages | : | 1 st irrigation at the time of Branching stage(30-35 DAS),2 nd irrigation flowering stage.(40-45DAS) |
| Moisture Conservation Practices Followed | : | Hoeing |
| Fertilizer Application | : | 50:75:45 NPK kg/ha |
| Insect/pest Management Practices | : | Grey weevil , Spodoptera IPM Packge- Spraying of Neemark @2ml/lit Installation of Pheromone traps (no 5/ha) Spraying of HaNPV Spraying of Quinolphos 20 EC |
| Weed Control | : | Hoeing -1 st at 15-20 DAS ,post emergence of weedisides of Emajethiper 0.1-0.15kg 500 lit of water |
| Harvesting | : | Maturing period- 90-100 days after Harvesting done by cutting the plant, with the help of sickle and sun drying 4-5 days. |
| Existing Cropping Systems | : | Summer green gram –Soybean Summer groungnut- Soybean |

Good quality action photographs

- **Short title of the technological intervention :** Integrated Crop Management in Soybean
- **Farming situation :** Irrigated
- **Climatic vulnerability :** Navapur Taluka: Rainfall 670mm, rainy days 38, 2 dry spells.
- **Problems identified :** Non availability of improved seed
Lack of knowledge regarding Integrated Nutrient Management.
Lack of knowledge regarding use of micronutrients
Unawareness about IPM package
- **Unawareness about IPM practices.**
- Technological intervention in brief : **Integrated Crop Management**
Seed of Soybean Phule Sangam (30kg/acr)
Biofertilizer of seed treatment (Rhizobium,PSB,Tricoderma)
Pheromone Trap+lure (2no)
- **Efforts made by KVK / methodology followed :** Farmer meeting, Training programmes, Demonstration, Field visits and field day
- **Output, outcome and impact of the intervention –**

Yield : Demonstration 21.86 qt/ha, 35.61 percent increase in yield.

Economics: Net return of demonstration plot is Rs 99209 /ha and check plot is Rs 68328/ha, additional income of Rs 1550/ha outcome of intervention net returns Rs 30881/ha.

Important observations :

1. Liquid Biofertilizers seed treatment found effective for good germination.
2. Heavy flowering & numbers of pods (118pods/plant) is more was observed variety Phule Sangam than the check variety.
3. Shattering of pods was not observed in Var. Phule Sangam
4. ICM Package found effective for increase in yield.
5. Spraying of *Beauveria Bassiana* found effective for the control of spodoptera.
6. ICM Package found effective for increasing yield (35 %)

- **Area covered (ha) : 10**
- **No. of farmers benefited : 25**
- **Convergence :** State agriculture department, NGO

Success story on Oilseeds Kharif- 2023-24

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| Name of KVK | KVK Nandurbar |
| Crop and Variety | Soybean and Variety : Phule Sangam |
| Name of farmer & Address | Mr., Krishna Ashok Kokanil , village : Nimboni ,Taluka : Navapur Dist.- Nandurbar |
| Details of technology demonstrated | Integrated Crop Management :- ► Demonstration of Improved variety (Phule Sangam) of Soybean seed was given @ 30kg/acr. ► Biofertilizers and Trichoderma as a seed treatment Trichoderma @5 gm/kg seed Rhizobium @25gm/kg of seed and PSB @25gm/kg of seed ► Use of IPM package:- ► Pheromone Trap+lure (2no) |
| Institutional Involvement | ► Identify the Soybean growers village : Nimboni ,Taluka : Navapur Dist.- Nandurbar ► Two times farmers meeting were conducted and discuss the NFSM on Oilseed crop of Soybean. ► The cluster approach block sowing of Soybean crop. ► To analyze the technology gap and to get information on farmers practice regarding Soybean cultivation as well as also discuss soil testing and other conditions. ► 03 Farmers training were conducting the demonstration. ► 02 Farmers meeting were conducted demonstration. ► 01 Demonstration and 01 field was conducted in ICM of Soybean. |
| Success Point | ► Maintain plant population ► Timely pest disease management and harvesting ► Timely intercultural operations |
| Farmer Feedback | 1. Liquid Biofertilizers seed treatment found effective for good germination. 2. Heavy flowering & numbers of pods (118pods/plant) is more was observed variety Phule Sangam than the check variety. 3. Shattering of pods was not observed in Var. Phule Sangam 4. ICM Package found effective for increase in yield. 5. Spraying of <i>Beaveria Bassiana</i> found effective for the control of spodoptera. 6. ICM Package found effective for increasing yield (36 %) 7. Additional income of Rs 1600/ha outcome of intervention net returns Rs 33487/ha. |
| Yield (q/ha) | |
| Demonstration | 24.33 |
| Potential yield of variety/technology | 30 |

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| District average | 14.71 |
| State average | 14.23 |

Performance of technology vis-à-vis Local check

| Practice used | Yield (q/ha) | Gross cost (Rs/ha) | Gross income (Rs/ha) | Net income (Rs/ha) | B:C ratio |
|------------------|--------------|--------------------|----------------------|--------------------|-----------|
| Farmer practices | 18.12 | 22700 | 102378 | 79678 | 4.51 |
| Demonstration | 24.33 | 24300 | 137465 | 113165 | 5.66 |
| % Increase | 34.27 | | | | |

Photographs of CFLD on Soybean

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|  | | Training program on Improve cultivation practices and ICM technology in Soybean |
|  | | Demonstration for seed treatment of Bio-fertilizers in Soybean |
|  | | ICM package provide to participatory Farmers technology ICM in Soybean demonstration |

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|  | | <p>Guidance to farmers regarding Pest management in Soybean demo plot</p> |
|  | | <p>Beneficiary Farmers – ICM in Soybean demonstration Variety Phule Sangam</p> |
|  | | <p>Beneficiary Farmers – ICM in Soybean demonstration Variety Phule Sangam</p> |
|  | | <p>Mr A.S. Sabale sir CFLD plot monitoring visit to participate farmers regarding demonstration (Phule Sangam) in Soybean</p> |
|  | | <p>Field day : ICM in Soybean demonstration Variety Phule Sangam</p> |



Farmer showing Excess moth in Soybean Demonstration plot



MPKV Scientist Visit to demonstrated Soybean seed at the time of threshing



Beneficiary farmer showing No of pods(118/plant) in Soybean Demonstration plot Variety Phule Sangam