

SUCCESS STORY OF GRAFTED TOMATO CULTIVATION

Grafted Tomato Seedlings for Higher Yield, Disease Resistance & Income

Name & Details of Farmer

Name: Shri Arun Oraon

Village: Komar

Block: Balumath

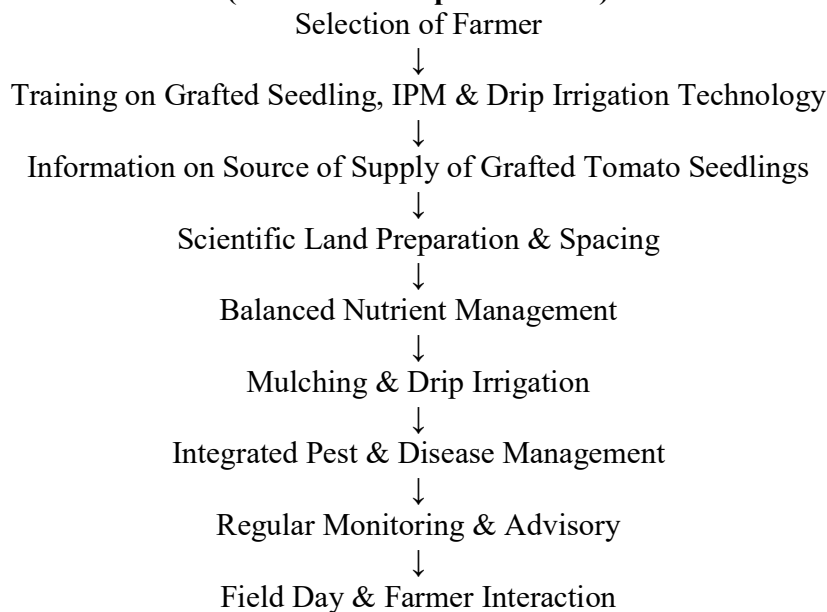
District: Latehar

Situation Analysis

- Upland & Sandy loam soil
- Continuous tomato cultivation leading to soil-borne diseases
- High incidence of wilt and nematode problems
- Declining yield and crop failure in local varieties
- Limited awareness about grafted seedling technology
- Limited irrigation source

Important Steps Taken by KVK

(Flow Chart Representation)



Details of Technology Demonstrated

- Grafted Tomato Seedlings
(High yielding scion Var. Saaho (TO-3251) grafted on disease-resistant brinjal rootstock)
- Resistance to soil-borne diseases and nematodes
- Improved root system for better nutrient uptake
- Recommended spacing and plant population (120 cm X 60 cm)
- Balanced application of N:P:K (100 : 150 : 150) & micronutrients
- IPM practices for sustainable production
- Drip irrigation system with poly mulch technology

Major Success Points

- Effective control of wilt and nematodes
- Healthy and vigorous plant growth
- Higher fruit set and uniform fruit size
- Longer harvesting period
- Reduced crop mortality
- Consistent optimum moisture availability to the plant

Result / Output

Performance of Grafted Technology vs Local Practice		
Particulars	Local Practice (without Mulch)	Grafted Tomato (with Plastic Mulch & Drip Irrigation System)
Yield (q/ha)	250	955
Crop Duration (Days)	120	240
Cost of cultivation (Rs./ha)	240000	580000
Gross Return (Rs./ha)	550000	2101000
Net Return (Rs./ha)	310000	1521000
B:C Ratio	2.29	3.62

Outcome

- Increased tomato productivity and profitability
- Successful cultivation in disease-infested soils
- Adoption of grafted tomato technology
- Expansion of area under grafted seedlings
- Improved farmer resilience and income security

Farmer Feedback

Tomato cultivation by using grafted seedlings with drip irrigation and poly mulch performed very well even in wilt-affected soil. Yield and income were much higher than local tomato cultivation.

Photographs



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