

Organic Package of practices "Comparing with Natural Farming and Conventional Farming"

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Module III

Objectives:

- 1. To adopt the organic package of practices in vegetables to be a model for other farmers those who are willing for organic conversion .
- 2. To promote the production of quality vegetables through Organic method in Nilgiris District.
- 3. To preserve the Eco system and Biosphere of Nilgiris district in sustainable manner since Nilgiris district is being the Lungs of South India.
- 4. Preventing the water contamination from the inorganic inputs which is being the main drinking source for the places of Coimbatore, Erode and Tirupur districts.

Methodology:

Conducted trial with Organic package of practices in Carrot, Beetroot and Potato with Natural farming and Conventional Farming at State Horticulture Farm Nanjanad.



Demonstration in the state Horticulture Farm, Nanjanad



Organic trial



Soiwng taken up on 05.09.2023



Sowing taken up on 05.09.2023



Inter cropping with beans and double beans



Bet root crop in organic farming



Organic potato field



Organic carrot field



Double beans as a intercrop



Beetroot Natural farming



Natural farming in carrot



Conventional farming in beetroot



Conventional farming Carrot



Conventional farming in potato



Sowing and Other Cultural Practices

- Seeds Treated with *Trichoderma viridae*
- Wheat and oats seeds broadcasted for weed control
- Maize and Local Hatty avarai seeds sown in edges and borders of the beds



Harvesting



Harvesting



Yield Analysis



NAME OF THE CROP - Carrot

(Variety – Panther)

SLNo	Name of the Input used	Organic Farming	Natural Farming	50% Conventional Farming	
1.	Application of FYM	50kg		25kg	
2.	Vermicompost	5kg		5kg	
3.	Assospirillum	10gm		5gm	
4.	Phospobacteria	10gm		5gm	
5.	Phacilomyces	10gm		5gm	
6.	Baveria	10gm		5gm	
7.	DAP			400gm	
8.	MOP			250gm	
9.	Jeevamirtham	2Liters	2 Liters		
10.	Inter Cropping	Local Beans & Double Beens	Local Beans & Double Beens	Local Beans & Double Beens	
11.	Weeding(Manual)	3 Weeding	3 Weeding	3 Weeding	
12.	Application of Panchakavya	2 Sprays	2 Sprays	-	
13.	Top dressing with Vermicompost	10Kgs	-	55Kgs	
14.	Plant Protection	Dasakavya and neem oil		Neem oil and copper fungicide	
15.					
16.					

NAME OF THE CROP - Carrot

Observation

Sl.No	Observation	Organic Farming	Natural Farming	50% Conventional Farming	
I.	Growth Parameters				
(a)	Plant Height	25cm	20 cm	35 cm	
(b)	No of Leaves	8	6	9	
(c)	Leaf Sizes	2 inches	2 inches	3 inches	
II.	Yield Parameter				
(a)	Size of the Tuber	Normal	small	Normal	
(b)	Weight of the Tuber	110 gms	75 gms	120gms	
(c)	No of Plants/ Plot				
(d)	Plot Yield – 1Sq.mt	5.355kg	3.765kg	5.39kg	
	1 cent	214.2kg	150.60kg	215.6kg	
	1 Acre Yield	21.42mt	15.060mt	21.56mt	
III.	ECONOMICS				
(a)	Cost of Cultivation	124000	95000	156000	
(b)	Gross Income	157800	120000	172800	
(c)	Net Income	33800	25000	16800	
IV	RESULT FINDINGS				
		Comparatively higher income	Low expenditure for inputs	Higher yield and higher cost of cultivation	

NAME OF THE CROP - BEETROOT

(Variety – Beejo Boro)

Sl.No		Name of the Input used	Organic Farming	Natural Farming	50% Conventional Farming	
1.		Application of FYM	50Kg		25Kg	
2.		Vermicompost	10Kg		5Kg	
3.		Asssopirillum	25Gm		12.5 Gm	
4.		Phospobacteria	25Gm		12.5 Gm	
5.		Phacilomyces	25Gm		12.5 Gm	
6.		Baveria	25Gm		12.5 Gm	
7.		DAP	-		750gms	
8.		MOP	-		350gms	
9.		Jeevamirtham	2Liters (Once in a Month)	2Liters (Once in a Month)		
10.		Inter Cropping	Local Beans & Double Bens	Local Beans & Double Bens	Local Beans & Double Bens	
11.		Weeding	2Hand Weeding	2Hand Weeding	2Hand Weeding	
12.		Application of Panchakavya	2 Sprays		2 Sprays	
13.		Top dressing with vermicompost	10Kg		5Kg	
14.		Plant Protection				

NAME OF THE CROP - BEETROOT

Observation

Sl.No	observation	Organic Farming	Natural Farming	50% Conventional Farming	
I.	Growth Parameters				
(a)	Plant Height	25cm	20 cm	35 cm	
(b)	No of Leaves	5	4	7	
(c)	Leaf Sizes	3 inches	2 inches	4 inches	
II.	Yield Parameter				
(a)	Size of the Tuber	Normal	small	Normal	
(b)	Weight of the Tuber	190 gms	150 gms	210 gms	
(c)	No of Plants/ Plot				
(d)	Plot Yield – 1Sq.mt	1.645kg	1.00kg	1.98kg	
	1 cent	65.8kg	40.00kg	79.2kg	
	1 Acre Yield	6580kg	4000kg	7920kg	
III.	ECONOMICS				
(a)	Cost of Cultivation	105000	65000	126000	
(b)	Gross Income	164500	100000	198000	
(c)	Net Income	60500	35000	68000	
IV	RESULT FINDINGS				
		Yield almost equal to conventional farming	Yield reduction and cost of inputs reduced	Better performance	
V.	PROBLEMS FACED				

NAME OF THE CROP - Potato

(Variety – Kufri karan)

1.	Application of FYM	50Kg		25Kg	
2.	Vermicompost	10Kg		5Kg	
3.	Assopirillum	25Gm		12.5 Gm	
4.	Phospobacteria	25Gm		12.5 Gm	
5.	Phacilomyces	25Gm		12.5 Gm	
6.	Baveria	25Gm		12.5 Gm	
7	MOP	-		750 gms	
8.	Jeevamirtham	2Liters (Once in a Month)	2Liters (Once in a Month)	25 gms	
9	Inter Cropping	Local Beans& Double Bens	Local Beans& Double Bens	25 gms	
10	Weeding	2Hand Weeding	2Hand Weeding	25 gms	
11	Application of Panchakavya	2 Sprays		25 gms	
12	Top dressing with vermicompost	10Kg		750 ggms	
13.	Plant Protection				

NAME OF THE CROP - Potato

Sl.No	observation	Organic Farming	Natural Farming	50% Conventional Farming	
I.	Growth Parameters				
(a)	Plant Height	35 cm	25 cm	40 cm	
(b)	No of Leaves	7	5	6	
(c)	Leaf Sizes	5 inches	4 inches	6 inches	
II.	Yield Parameter				
(a)	Size of the Tuber	normal	small	big	
(b)	Weight of the Tuber	105 gms	90 gms	125 gms	
(c)	Plot Yield – 1Sq.mt	1.645kg	1.15kg	1.905kg	
	1 cent	65.80kg	46.00 kg	76.20kg	
	1 Acre Yield	6580kg	4600kg	7620kg	
III.	ECONOMICS				
(a)	Cost of Cultivation	120000	95000	140000	
(b)	Gross Income	164500	115000	190500	
(c)	Net Income	44500	20000	50500	
IV	RESULT FINDINGS				
		Autumn season is not ideal			
V.	PROBLEMS FACED				
		Difficult in control late blight			



Problems Faced

- Leafminer in all crops
- Early blight potato
- Late blight in potato
- Cercospora leaf spot in beetroot



Appointment of Organic Nodal officer

- Tamil nadu government has announced a special scheme of Organic Nilgiris with 50 crores budget for 5 years.
- In this juncture I have been appointed as a Organic Nodal Officer for Nilgiris District for next Five years

Organic terrace garden training to women farmers



Organic seminar-Gudalur



Organic seminar-Gudalur



Chemical free weekly Market



Organic Training-Udhagamandalam



Organic Training-Coonoor



Organic Training- Kotagiri



Organic seminar-Udhagamandalam



Buck wheat cultivation in SHF,Nanjanad



Lupin cultivation in SHF, Colgrain



Organic weekly sandy



Genetic diversity fair



Genetic diversity fair



Genetic diversity fair



Genetic diversity fair



Master trainer in Natural farming



Best Participant



THANK YOU