

On Farm Trial

1. Assessment of planting method in redgram

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Redgram	Irrigated	Very poor plant population and intercropping	Assessment of planting method in redgram	5	Seedlings raised in polybags and transplanted Soil test based fertilizer application	Germination percentage	93%	10.12 q / ha	1. Transplanting technology is new to our area 2. It enhanced the plant population and yield of the crop 3. It enhanced more no of branches and pods / branch	Instead of polybags, paper cup may be used	High cost and labouries
						Plant population	7407 plants / ha				
						No. of pods / plant	179				
						No. of branches / plant	7				
						Yield kg / ha	1012				

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 Conventional method of redgram cultivation	694	kg / ha	13,156.00	2.26
Technology option 2 Seeds dibbling with recommended dose of fertilizer application	820	kg / ha	18,080.00	2.84
Technology option 3 Seeds raised in polybags and transplanted with soil rest based fertilizer application	1012	kg / ha	23,127.00	3.05

2. Assessing the performance of brinjal hybrids

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinemer done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Brinjal	Irrigated	Detachment of fruits from calyx during rainy season	Assessing the performance of brinjal hybrids	5	Cultivating CoBH2	• No.. of palnts / ha	18020	390.8 q/ha	CoBH2 and Arka Anand performed better. CoBH2 gave higher yield than other hybrids. The market preference is good for CoBH2 in Perambalur and it is not suitable to Thalaivasal market.	-	-
						• No. of fruits / plant	26.46				
						• % of fruit drop	1.84				
						• Yield / plant (kg)	2.17				

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 Cultivating private hybrids	30,740	kg / ha	62,222.00	2.03
Technology option 2 Cultivating CoBH2	39,080	kg / ha	95,900.00	2.59
Technology option 3 Cultivating Arka Anand	34,460	kg / ha	77,314.00	2.28

3. Water stress management in bittergourd

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinements done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Bittergourd	Irrigated	Insufficient water lead to water stress	Water stress management in bittergourd	10	Spraying of antitranspirant (green miracle 1 ml (lit) 4 times at fortnight interval from 15 days after sowing	<ul style="list-style-type: none"> No. of plants / ha No. of female flowers / plant No. of fruits / plant % of fruit setting Yield / plant (kg) 	10580 22.59 16.67 73.79 2.80	296 q / ha	So far the mulching practice was not carried out for bittergourd by the farmers. Though it is laborious it helped very much in water saving. Since paddy straws used as cattle feed and the demand for it is more farmers hesitate to use paddy straw as mulch material. The antitranspirant applied plants exhibited poor growth when compared to the mulched plants.	-	-

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 Irrigating the field when water is available (once in 15 day)	23,300.00	Kg / ha	86,770.00	2.26
Technology option 2 Mulching with paddy straw	27,200.00	Kg / ha	1,06,612.00	2.84
Technology option 3 Mulching with coirpith	29,600.00	Kg / ha	1,22,072.00	3.05
Technology option 4 Spraying of antitranspirant (green miracle 1 ml (lit) 4 times at fortnight interval from 15 days after sowing	28,700.00	Kg / ha	1,17,732.00	2.87

4. Assessment of suitable technology for management of false smut in paddy

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Paddy	Irrigated condition	Incidence of false smut due to non seed treatment	Assessment of suitable technology for management of false smut in paddy	10	<ul style="list-style-type: none"> Use of disease free seeds for sowing Seed treatment with Carbendazim @ 2 g / kg Foliar spraying of copper hydroxide @ 2.5 g / lit of water one at boot leaf stage and another at milking stage. Regular monitoring of disease incidence Avoided the excess dose of nitrogeneous fertilizer 	<ul style="list-style-type: none"> No. of hills / m² No. of healthy tillers / hill before spray No. of healthy tillers / hill after spray Infested grains /tillers after spray % infestation Yield (q/ha) B:C ratio 	33.8 64.13 67.82 0.40 2.20 45.90 2.46	45.90q/ha	Due to adopting this technology false smut incidence is drastically decreased and increased yield upto 68.75%	-	-

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology Option -1 No seed treatment against the diseases After observing the incidence, the farmers removing of the infected panicles	2720.00	Kg / ha	8,625.00	1.71
Technology option – 2 : Foliar spraying of copper oxychloride @ 2.5 g/lit of water and it is reduced the incidence of the diseases.	3525.00	Kg / ha	11,097.00	1.74
Technology option – 3: Use of disease free seeds for sowing Seed treatment with Carbendazim @ 2 g / kg Foliar spraying of copper hydroxide @ 2.5 g / lit of water one at boot leaf stage and another at milking stage. Regular monitoring of disease incidence Avoided the excess dose of nitrogeneous fertilizer	4590.00	Kg / ha	19,535.00	2.46
Technology option 4: Use of disease free seeds for sowing Seed treatment with Carbendazim @ 2 g / kg Foliar spraying of Propiconazole @ 2ml / lit of water at boot leaf stage followed by flowering stage Regular monitoring of disease incidence Avoided the excess dose of nitrogeneous fertilizer	4254.00	Kg / ha	16,851.00	2.22

5. Assessment of suitable variety for value addition in tomato

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Vegetables (Tomato)	Irrigated	Lack of knowledge in tomato value addition	Assessment of suitable variety for value addition in tomato	5	Arka Shreshta Suitable for processing tomato products like tomato paste, sauce and pickle	<ul style="list-style-type: none"> Fruit yield / plant Yield q/ha Consumer acceptability Paste Sauce Pickle Keeping quality paste Sauce Pickle 	3.16 Kg 70.7 84% 86% 88% 68 Days 74 Days 89 Days	72.7 q/ha	By adopting the value addition technics, market price has been increased to their produce. Besides that using this technology to minimize the post harvest loss and increase the income	-	-

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology Option 1 Local variety Immediate market	60.2	q/ha	12910	2.1
Technology Option 2 Roma Suitable for processing tomato products like paste, sauce and pickle	68.95	q/ha	27880	2.4
Technology Option 3 Arka Shreshta Suitable for processing tomato products like tomato paste, sauce and pickle	72.7	q/ha	30880	2.8

6. Weed management in yam through intercropping

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Yam	Irrigated	Heavy weed menace in yam led to reduction in crop growth and ultimately the corm yield	Weed management in yam through intercropping	5	Intercropping with semi spreading groundnut (VRI (Gn) 7) Seed treatment of groundnut with <i>T. viride</i> 4.0 g and <i>Pseudomonas</i> 10g / kg of seed and <i>Rhizobium</i> 600 g / ha	<ul style="list-style-type: none"> No. of weedings reduced Weed biomass reduced (g/m²) Yield (kg / plant) 	2 78.98 1.14	331.15 Q/ ha	By adopting this technology No. of weeding practices has been reduced from 5 to 2, besides this, we get additional income increased corm yield and return	No	-

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 Cultivating yam as sole crop	303.00	q / ha	2,73,750.00	2.25
Technology option 2 Intercropping with vegetable cowpea (VBN 2 & Co2) Seed treatment of vegetable cowpea with <i>Rhizobium</i> @ 600 g/ha	324.20	q / ha	3,46,750.00	2.82
Technology option 3 Intercropping with semi spreading groundnut (VRI (Gn) 7) Seed treatment of groundnut with <i>T. viride</i> 4.0 g and <i>Pseudomonas</i> 10g / kg of seed and <i>Rhizobium</i> 600 g / ha	331.40	q / ha	3,62,090.00	2.89

7. Management of Anestrus in cross breed cows

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Dairy cattle	Semi – intensive	Majority of the animal does not exhibit estrus signs / low conception rate leading to long intercalving period	Management of Anestrus in cross breed cows	25 Animals	Deworming supplementation of vitamins and minerals for Anestrus management	<ul style="list-style-type: none"> % of onset of estrus signs Number of AI required to conception 	95 1.5	95%	By using Fenbendazole for deworming it will increase the overall production of animal by effectively eliminating internal worms and helps to attain faster weight gains and supplementation of vitamins and mineral mixture helps us to proper development of reproductive organs and again shows periodical estrus signs and conceived with one (or) two AI. This helps to decrease the production cost and increase the milk yield	-	-

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 Rearing of dairy cows with locally available feed materials like green roughages, paddy straw & rice bran	Milk yield – 8	lit/cow/day	1800	1.60
Technology option 2 Sus.Fenbendazole 2.5 w/v (1ml/3kg body weight + Vitamins & minerals supplementation 50 gm/day for a period of 3 months)	Milk yield – 10.5	lit/cow/day	3300	2.10
Technology option 3 Sus.Fenbendazole 2.5 w/v (1ml/3kg body weight + Supplementation of vitamins and mineral mixture @50g/day for a period of 3 months + Prajana 3 capsules / day for 2 days repeat on 11 th and 12 th day	Milk yield -13.5	lit/cow/day	5100	2.70

8. Assessing the performance of chilli varieties

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refine- ment done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Chilli	Irrigated	Poor performance due to repeated use of same cultivar	Assessing the performance of chilli varieties	5	Cultivation of G4 (Bhagya lakshmi) chilli variety along with component technologies	<ul style="list-style-type: none"> Fruit set % Green fruit yield (kg / plant) 	76.3 0.871	24.7 q/ha	Both G4 and KKM1 varieties performed better KKM1 is suitable for green chillies G4 is suitable for dry chillies	-	-

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Technology Assessed	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17
Technology option 1 Cultivating local cultivar	1,860.00	Kg / ha	39,975.00	2.16
Technology option 2 Cultivating KKM-1	2,260.00	Kg / ha	54,611.00	2.53
Technology option 3 Cultivating G4 (Bhagya lakshmi)	2,420.00	Kg / ha	60,861.00	2.69

1. Management of Ranikhet disease in desibirds

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done / needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Poultry	Free range	The outbreak of Ranikhet disease leads in higher mortality (upto 100%) in desibirds. It also severely affects the egg production rate / size of the egg.	Management of Ranikhet disease in desibirds		Lasota (or) F1 vaccine R 2 B Vaccine - 6 th Week R DVK Vaccine – 16 th week	<ul style="list-style-type: none"> Body weight gain / bird (kg / bird) Mortality percentage 	2.18 5%	2.18 5%	Low incidence of Ranikhet disease. No Mortality among birds Faster weight gain Better return / high profit.	Yes	The vaccination of desibird by parental route is very tedious one and also the farmers are solely depend on paraveterinary staff for their birds getting vaccination. Moreover the handling of transport of this vaccines are difficult. So if we get alternate vaccinations other than parental administration the farmers themselves can administer their vaccines. (if it is in the form of pellet or Tablet.

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13	14	15	16	17
Technology option 1 Spray of Water mixed with turmeric powder	1.14	Kg / bird	128	2.28
Technology option 2 Lasota (or) F1 vaccine - 7 th day R 2 B Vaccine - 6 th Week R DVK Vaccine – 16 th week	2.18	Kg / bird	310	3.63

