

On Farm Testing 2013-14

On Farm Trials (Agronomy)

Discipline (Minimum 2 OFT per SMS)	Crop / Enterprise	Number of technology/ Social Concept		No. of trials		% of achievement	Reasons for shortfall, if any
		Assessed	Refined	Target	Achievement		
Agronomy	Rice	CAUR-3(Mangalphou)		5	5	100	
	Ground-nut var. ICGS-76	Application of FYM @ 5t/ha+75% of recommended dose fertilizer (20:40:30) N:P:K kg/ha+Lime@500 kg/ha in furrows.		5	5	100	
	Rice	CAUR-4(Eenotphou)		5	5	100	
	Rice-rapeseed	Application of 100% Recommended dose of fertilizer (RDF:NPK 60:60:40) to rice var. CAUR-3 followed by 50 % RDF to rapeseed var. M-27		5	5	100	
	Blackgram	Uttara		5	5	100	
	Rapeseed var. Ragini	Seed treatment with liquid biofertilizer @ 1ml/ 5 kg seed and top dressing with liquid biofertilizer after 30 days of sowing.		5	5	100	
	Field pea var. Rachna	After harvest of rice, high yielding fieldpea Rachna grown at higher seed rate 100 kg/ha with optimum stubble height 60 cm		5	5	100	

On Farm Trials (Discipline-Wise Summary)

Discipline (Minimum 2 OFT per SMS)	Crop / Enterprise	Number of technology/ Social Concept		No. of trials		% of achieveme nt	Reasons for shortfall, if any
		Assessed	Refined	Target	Achievement		
Horticulture	1. Broccoli	Varieties- Princess, Fiesta & Everest.		5	5	100	NA
	2. Coriander	Seed/Grain production		5	3	60	Shortage of inputs
	3. Cabbage	Straw mulching		5	5	100	NA
	4. Onion	INM		5	5	100	NA

On Farm Trials (Discipline-Wise Summary)

Discipline (Minimum 2 OFT per SMS)	Crop / Enterprise	Number of technology/ Social Concept		No. of trials		% of achieveme nt	Reasons for shortfall, if any
		Assessed	Refined	Target	Achievement		
Fishery	1. IMC & Exotic Carp	A	-	5	5	100	NA
	2. (<i>Labeo rohita</i>)	A	-	5	5	100	NA
Home Sc.	Energy saving tools	A	-	5	-	-	Not yet started
	Value addition	A	-	5	5	100	NA
Plant protection	Tomato	A		5	5	100	NA
	Brinjal	A		5	5	100	NA
Total	17						

On Farm Trials (Discipline: Agronomy)

1. Varietal trial of recently released Rice variety CAUR-3

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/ enterprise	Net return (Rs/Ha)	B:C Ratio
Rice	Untimely sowing of <i>rabi</i> crops due to growing of medium and long duration variety in HYV area of Bishnupur district	CAUR-3 (Mangalphou)	Varietal trial of recently released Rice variety CAUR-3	5	1. Plant height (95.7 cm) 2. 2.Effective tillers/sqm (348) 3. 3.Effective tillers/sqm (149) 4. Test wt.(26.8g) 5. Grain yield (4080 kg/ha)	4080 kg/ha	48946	1.09:1
					Farmer Practice	Farmer Practice		
		Pari phou			Grain yield	3950 kg/ha	42650	0.88:1

On Farm Trials (Discipline: Agronomy)

2. Integrated Nutrient Management in rainy season Groundnut (*Arachis Hypogea*)

Cro p / Ente rpris e	Problem diagnose d	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refi nement and its data in bracket	Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
Gro und nut var. ICG S-76	Low yield due to improper and inadequa te use of fertilizers .	Application of FYM @ 5t/ha+75% of recommend ed dose fertilizer (20:40:30) N:P:K kg/ha+Lime @500 kg/ha in furrows.	Integrated Nutrient Managem ent in rainy season Groundnut (<i>Arachis Hypogea</i>)	5	1. Plant Height (50.8 cm) 2. No. of pods/plant (23) 3. No. of seeds/pod (3) 4. 100 kernel weight (57.2g) 5. Seed yield (10.34q/ha)	10.34 q/ha	44861	1.18:1
					Farmer Practice	Farmer Practice		
		Improper and imbalance use of fertilizers			Seed yield	8.22q/ha	35196	1.12:1

On Farm Trials (Discipline: Agronomy)

3. Varietal trial of recently released Rice variety CAUR-4

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/ enterprise	Net return (Rs/Ha)	B:C Ratio
Rice	Low lying semi-deep water condition in normal kharif planting where water depth generally goes upto 50 to 100 cm in Bishnupur district.	CAUR-4 (Eenotphou)	Varietal trial of recently released Rice variety CAUR-4	5	<ol style="list-style-type: none"> 1. Plant height (145 cm) 2. Effective Tillers/sqm (228) 3. Spikelets/panicle (192) 4. Test wt.(26.8g) 5. Grain yield (5400 kg/ha) 	5400 kg/ha	74306	1.49:1
					Farmer Practice	Farmer Practice		
		Akutphou			Grain yield (4250 kg/ha)	4250 kg/ha	49250	1.02:1

On Farm Trials (Discipline: Agronomy)

4. Rice-rapeseed cropping system in Bishnupur district:

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
Rice-rapeseed	Monocropping of rice do not have much profit to the farmers	Application of 100% Recommended dose of fertilizer (RDF:NPK 60:60:40) to rice var. CAUR-3 followed by 50 % RDF to rapeseed var. M-27	Rice-rapeseed cropping system in Bishnupur district	5	1. Rice grain yield (48 q/ha) 2. Rapeseed yield (9 q/ha) 3. Rapeseed yield (9 q/ha)	65.60 q/ha	102657	2.13:1
		Monocropping of rice var. RC-Maniphou-7. Application of 100% Recommended dose of fertilizer (RDF:NPK 60:60:40) to rice			Rice yield	45 q/ha	68077	1.92:1

On Farm Trials (Discipline: Agronomy)

5. Varietal trial of Blackgram var. Uttara

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
Black gram	Lack of improved high yielding variety	Uttara	Varietal trial of Blackgram var. Uttara	5	1. Plant Height (51.2cm) 2. No. of pods/plant (16.8) 3. 1000 seed weight (50 g) 4. Seed yield (9.84 q/ha)	9.84 q/ha	33491	1.31:1
					Farmer Practice	Farmer Practice		
		T-9			Seed yield	7.26q/ha	22360	1.05:1

On Farm Trials (Discipline: Agronomy)

6. Zero tillage of rapeseed by using liquid biofertilizer

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/ enterprise	Net return (Rs/Ha)	B:C Ratio
Rape seed	Low yield due to improper and inadequate use of fertilizers.	Seed treatment with liquid biofertilizer @ 1ml/ 5 kg seed and top dressing with liquid biofertilizer after 30 days of sowing.	Zero tillage of rapeseed by using liquid biofertilizer	5	1. Plant Height (44.78 cm) 2. No. of siliquea/plant (19.1) 3. No. of seeds/siliqueae (9.7) 4. 1000 seed weight (24.2g) 5. Seed yield (6.50q/ha)	6.50 q/ha	17050	1.40: 1
					Farmer Practice	Farmer Practice		
		No seed treatment with liquid biofertilizer and only urea is topdressed during growing period			Seed yield	4.22q/ha	8790	0.86: 1

On Farm Trials (Discipline: Agronomy)

7. Paira cropping of field pea in Bishnupur District

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials	Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
Field pea var. Rachna	Land remain fallow during <i>rabi</i> season	After harvest of rice, high yielding fieldpea Rachna grown at higher seed rate 100 kg/ha with optimum stubble height 60 cm	Paira cropping of field pea in Bishnupur District	5	1. Plant Height (50.8 cm) 2. No. of pods/plant (23) 3. No. of seeds/pod (4.8) 4. 100 seed weight (57.2g) 5. Seed yield (9.35 q/ha)	9.35 q/ha	23891	1.05:1
					Farmer Practice	Farmer Practice		
		Broadcasting of field pea after harvesting of rice			Seed yield	6.12q/ha	16920	0.85:1

On Farm Trials (Discipline-wise achievements)

Discipline: Horticulture 1. Varietal evaluation of Broccoli

Crop/enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Broccoli	Fluctuation in yield due to lack of practical knowledge for selection of varieties	Evaluation of broccoli varieties- Fiesta, Everest & Princess	Varietal evaluation of Broccoli	5

Parameters of assessment/refinement and its data in bracket		Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
6		7	8	9
Fiesta 1. Days to 1 st head initiation-73 DAT	Everest1. Days to 1 st head initiation-60 DAT	Fiesta-75.75q/ha	Fiesta-149750	Fiesta-1.93
2. Days to 1 st Harvesting-88 DAT	2.Days to 1 st harvesting- 80 DAT	Everest- 181.8 q/ha	Everest-299600	Everest-4.68
Farmer Practice		Farmer Practice		
1.70 DAT	2 84 DAT	1. Princess-55.75q/ha	Princess-223000	Princess-1.62

On Farm Trials (Discipline-wise achievements)

Discipline: Horticulture 2.Straw Mulching in cabbage cultivation

Crop/enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials
Cabbage	Severe weed infestation & lack of irrigation facilities	Application of Rice Straw @ 2 inches thickness after transplanting & hand weeding in cabbage cultivation	Straw mulching in cabbage cultivation	5

Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
Yield was only recoeded	28000kg/ha	196000	2.13
Farmer Practice	Farmer Practice		
---	12345.7 kg/ha	86419.9	1.83

On Farm Trials (Discipline-wise achievements)

Discipline: Horticulture 3.Integrated nutrient management in Onion cultivation

Crop/ enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Onion Var - Prema	Imbalance use of chemical fertilizer	Application of FYM @ 10 t/ha NPK (19:19:19)@0.5% as foliar spray at 30, 45 & 60 days after planting in addition to recommended dose of NPK(75:60:50kg/ha)	Integrated nutrient management in Onion cultivation	5

Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
6	7	8	9
Yield was only recorded	26190kg/ha	429292	4.1
Farmer Practice	Farmer Practice		
---	6562.96kg/ha	131259	1.7

On Farm Trials (Discipline-wise achievements)

Discipline: Horticulture 4. Grain production of coriander for higher returns

Crop/enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Coriander	Economic returns only from leaves	Application of FYM @ 15 t/ha, Seed rate 20 kg/ha, line showing at raw spacing of 20 cm	Grain production of Coriander for higher returns	3
Parameters of assessment/refinement and its data in bracket		Prdn. per unit crop/enterprise	Net return (Rs/Ha)	B:C Ratio
6		7	8	9
Yield was only recorded		Leaves -10,000 bundles/ha Grain – 452kg/ha	59,400	2.11
Farmer Practice		Farmer Practice Leaves-30,000 bundles/ha	31,800	1.12

Discipline: Fishery (OFT) 1. Study on Survival rate of Carps.

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Fishery	Under Traditional fish , culture lower production of yield is generally observed .	Stocking fingerlings of Six carps in the combination of Catla (15%), rohu (10%), Mrigala (20%), Common carp (20%) , silver carp (30%) and grass carp (5%) under extensive composite culture at a stocking density of 1500/ha. by following standard culture practices.	Study on Survival rate of Carps.	5

Parameters of assessment/refinement and its data in bracket		Prdn. Cost /unit (Rs/ha/yr)	Net return (Rs/Ha/Yr)	B:C Ratio
6		7	8	9
Rate of Survival (SR) = No. of Carps obtained/Total no of Carps Stocked x 100				2.41:1
Carps	Survival rate %	1.24 lac	3.00 lac	
Rohu	80			
Catla	78			
Mrigala	40			
Common Carp	38			
Silver carps	80			
Grass carp	45			

Discipline: Fishery(OFT)

2. Performance of stunted Indian major carp(*Labeo rohita*) fingerlings & its somatic yield estimation

Crop / Enterprise	Problem diagnosed	Techno logy/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Fishery	Early Maturation is a major problem in fish farming due to the negative impact on growth performance, flesh composition, external appearance, behavior and health.	Stocking of Indian major carp (<i>Labeo rohita</i>) for stunted fingerling production by stocking fry @ 50,000 and adding 10% while fertilized with cow dung @ 2 tonnes /ha in a month and following stunted fingerlings stocked @ 5000 nos/ha for further grow out production provided with Ilme- 100kg/ha:SSP-50kg/ha& feeding @4% B.W.	Performance of stunted Indian major carp (<i>Labeo rohita</i>) fingerlings and <u>its somatic yield estimation</u>	5

Parameters of assessment/ refinement and its data in bracket	Prdn. Cost per unit crop/enterprise (Rs/ha)	Net return (Rs/Ha)	B:C Ratio
6	7	8	9
1. Yield (no/ha) : 41,250	2,85,900	4,97,850	2.74:1
2. Farmer Practice (no/ha) :27,500			
<u>somatic yield estimation</u> : The trial is being continued for its somatic yield estimation part in the year 2014-15			

On Farm Trials

Discipline: Home Science.

Preparation of (soya tofu) soya paneer

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Soyabean	High cost of milk paneer due to limited supplied of milk.	In 1 litre of soymilk, coagulation using citric acid is added at the rate of 1.2-1.5g/litre, filtration and pressing ,washing and storage	Preparation of soya tofu .	5

Parameters of assessment/refinement and its data in bracket	Observations
6	7
1.Shelf life	One month
2. Taste	Accepted
3. Odour	Odourless
4. Economic	33%

On Farm Trials

Discipline: Plant Protection

1. Management of bacterial wilt of tomato by the application of *biofor* PF

Crop / Enterprise	Problem diagnosed	Technology/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Tomato	Yield declined due to wilted tomato plants caused by <i>R. solanasearum</i> incidence	1)Seed treatment with <i>biofor</i> @ 1gm/10gm seed of tomato. 2)Root treatment in 1kg /2L water. 3) 10g <i>biofor</i> mixed in 100kg dry wt. of compost	Bacterial wilt management by using <i>biofor</i> PF in tomato.	5

Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/ enterprise (kg/ha)	Net return (Rs/Ha)	B:C Ratio
6	7	8	9
No incidence was found in <i>biofor</i> treated plots. No. of fruits/plant is 40.0	12,400	1,86,000	4.65
Farmers Practice: Wilt incidence was observed upto 40%. No. Of fruits/plant is 20	6,700	1,00,500	2.51

On Farm Trials

Discipline: Plant Protection

2. Management of bacterial wilt of brinjal by the application of biofor PF.

Crop / Enterprise	Problem diagnosed	Techno logy/ Social Concept	Title of OFT	No. of trials
1	2	3	4	5
Brinjal	Bacterial wilt	1)Seed treatment with <i>biofor</i> @ 1gm/10gm seed of tomato. 2)Root treatment in 1kg /2L water. 3) 10g <i>biofor</i> mixed in 100kg dry wt. of compost	Bacterial wilt management by using <i>biofor</i> PF in brinjal.	5

Parameters of assessment/refinement and its data in bracket	Prdn. per unit crop/ enterprise (kg/ha)	Net return (Rs/ha)	B:C Ratio
6	7	8	9
i)Fruit size is 17 to 20cm long ii)No incidence of Wilt incidence	11,400	1,36,800	3.4
<u>Farmers Practice:</u>	5,500	66,000	1.65
i)Fruit size 10-20cm in average. ii)20-30%of wilt inciidence.			