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**On-Farm Trials
(2019-20)**

OFT Summary 2019-2020

Discipline	Crop / Enterprise	Number of technology/ Social Concept		No. of trials		% of achievement	Reasons for shortfall, if any
		A	R	T	A		
Agronomy	Maize	1	-	5	3	60	-
	Lentil	1	-	5	5	100	
	Mustard	1	-	5	5	100	
Plant Breeding & Genetics	Rice	1	-	5	5	100	-
	Rice	1	-	5	5	100	-
Plant Protection	Rice	1	-	3	5	166	-
	Cowpea	1		3	5	166	-
Home Sc.	Amla	1		5	5	100	-
	Squash Bori	1		5	5	100	-
	Total	9		41	43		

On Farm Trial Details

DISCIPLINE - AGRONOMY

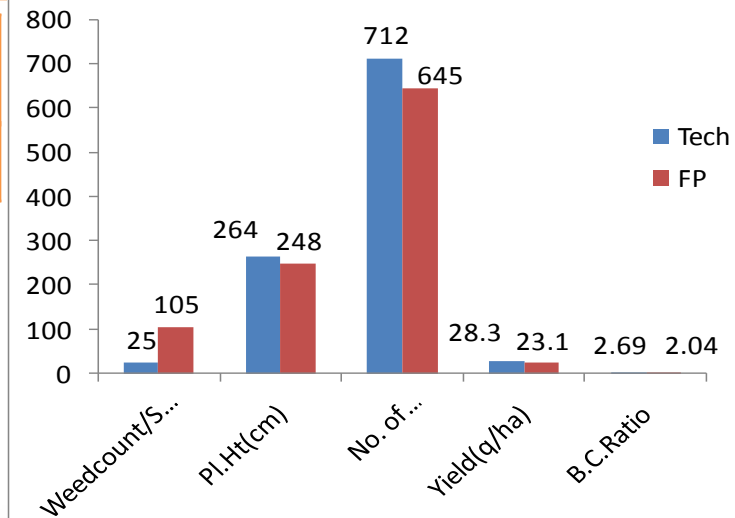
Title of OFT- 1. IWM in Spring Maize

Crop	Major Problem diagnosed	Severity of the problem (%)	Details of technology	Source of technology
Maize Var.Vijay Composi te	Heavy weed infestation and high cost of hand weeding	60%	Oxyfluorfen @ 850 ml/ha + slight HW at 25-30 DAS	TNAU, 2014

Area (ha)	No. of trials	Location
0.36	3	Wangmataba,Charangpat,Khangabok

Parameters of Assessment

Parameters	Treatment	Farmers practice
Weed count/sq.m	25	102
Plant ht.(cm)	264	248
Nos. of grain/cob	712	645
Yield(q)	2.83	2.31
B.C ratio	2.69	2.04



Discipline -AGRONOMY

Title of OFT-2 –Performance Evaluation of Spraying of urea 1% at flowering and pod formation stage of lentil

Crop	Major Problem Diagnosed	Severity of Problem %	Details of technology	Source of technology
Lentil Var. HUL-57	Fertilizer application as basal and top dressing in soil could not increase additional yield of lentil	50	Var. HUL-57 Fertilizer dose- 15:35:15 kg NPK/ha Application of 2% urea as spray soln. at flowering & pod formation stage	RARS, Shillongani, AAU,2015

Area	No. of trials	Location
1.25	5	Tentha,Wangjing,Serou,Tayang, Hijam Khunou

Parameters	Technology	Farmer Practice
Plant Height (cm)		
Plant stand		
No. of pods/plant		
Seed/pod	Crops are in the field	
Yield		
B.C ratio		
Farmers reaction		



Discipline -AGRONOMY

Title of OFT-3. Performance Evaluation of Spraying of urea 1% at flowering and pod formation stage of mustard

Crop	Major Problem Diagnosed	Severity of Problem %	Details of technology	Source of technology
Mustard Var. NRCHB-101	Fertilizer application in soil only could not increase additional yield of mustard	60	Var. NRCHB -101 Fertilizer dose- 60:30:30 kg NPK/ha As basal application Two foliar applications of 1% urea at flowering & pod filling stage	AAU,2015

Area	No. of trials	Location
1.25 ha	5	Sabaltongba,Bengi,Wangjing,Kakching,Ukhongshang

Parameters	Technology	Farmer Practice
No. of branches/pl.		
No. of Siliqua/pl.		
No. of seeds/siliqua		
Seed/pod	Crops are in the field	
Yield		
B.C ratio		
Farmers reaction		

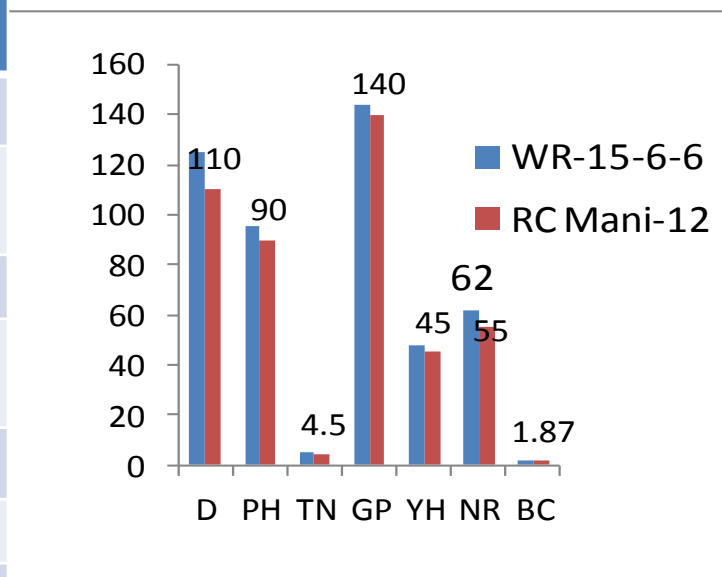


A View of good crop of Mustard var. NRCHB-101

Crop	Major Problem Diagnosed	Severity of Problem %	Details of technology	Source of technology
Rice Var. Wr-15-6-1	Timely sowing of winter crops not possible due to long duration rice varieties	43	i. Transplanted cultivation for earlier harvesting ii. Seed rate- 45 kg/ha iii. N:P:K-60:40:30 iv. Spacing - 20 x 15cm	Dept. of Agriculture, Manipur, in pipeline

Area	No. of trials	Location
1.25 ha	5	Khongjom, Wangjing, Thoubal, Wangmataba, Thongjao

Parameters	Technology	Farmer Practice
Duration(days)	125	110
Plant Height (cm)	95	90
Tiller no.	5	4.5
No. of grains/panicle	144	140
Grain Size	Slender	bold
Yield(q/ha)	47.5	45.0
Net Return(Rs./ha)	62000	55000
B.C ratio	1.87	1.77



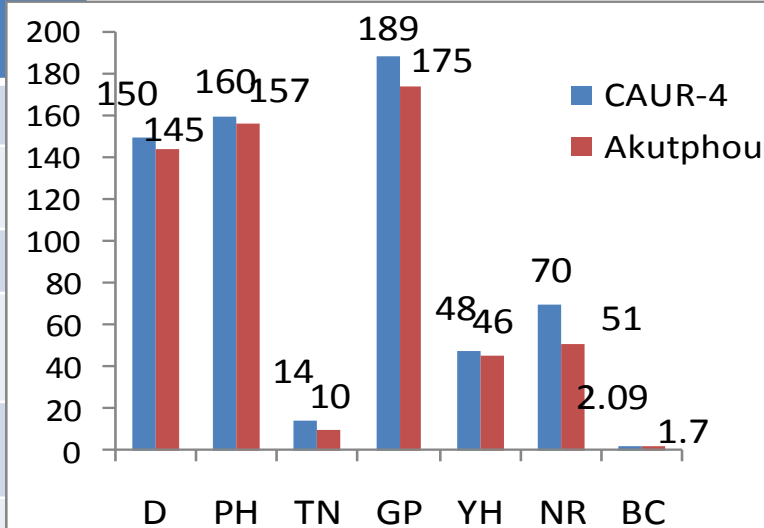
Note: D-Duration; PH-Plant height; TN-Tiller no; GP-Grain/ panicle; YH-Yield/ha; NR-Net return(Rs. in hundred); BC-Benefit cost ratio



Crop	Major Problem Diagnosed	Severity of Problem %	Details of technology	Source of technology
Rice	Lodging and yield reduction(assessed in 2018-19 without any fertilizer)	30	i.Direct seeded wet sown ii.Refinement in fertilizer dose@ of N:P:K:: 0:40:40 iii. Seed rate-60 kg/ha iv. Date of sowing-May	CoA/CAU, Imphal,2016

Area	No. of trials	Location
1.25 ha	5	Wangoo, Kakching, Khekman

Parameters	Technology	Farmer Practice
Duration(days)	150	145
Plant Height(cm)	160	157
Tiller no.	14	10
No. of grains/panicle	189	175
Grain Size	Long bold	Slender
Yield(q)	48	46
Net Return(Rs./ha)	70000	51000
B.C ratio	2.09	1.7



Note: D-Duration; PH=Pl. Height; TN-Tiller no; GP-Grain/panicle; YH-Yield/ha; NR-Net return; BC-Benefit cost ratio



Crop	Major Problem Diagnosed	Severity of Problem %	Details of technology	Source of technology
Rice	Higher rate of incidence of Stem borer and plant Hopper in rice field	Stem borer 12% Plant Hopper 20%	Mgmt. of Stemborer & plant hoppers with Voliam flexi(Chlorantraniliprole 8.8% w/w + Thiamethoxam 17.5% w/w) @ 400 ml/ha	TNAU,2015

Area	No. of trials	Location
1.25 ha	5	Sikhong,Tentha,Heirok,Sugunu,Elangkhangpokpi
% of infested plants before spray		Stemborer-8 Hopper- 7

Parameters	Technology	Farmer Practice (Glamore)
30 DA treatment	Stemborer- 10 Hopper- 8	Stemborer- 12 Hopper- 7(cumulative)
60 DAT	Stemborer-11 Hopper- 10.4	Stemborer- 13 Hopper- 8(cumulative)
Prodn.(q/ha)	57	55
Net Return(Rs./ha)	70,500	67,500
B.C ratio	1.98	1.96



Crop	Major Problem diagnosed	Severity of the problem(%)	Details of technology	Source
Cow pea	Leaf curl	Fruit borer-15% Aphid infested shoot-20% Semiloopers	Fruit Borer & Aphid mgmt. with Emamectin benzoate 5SG(0.0002%)	Mahatama Phule Krishi Vidyapeeth, Rahuri,2015

No. of trials	Area	Location
5	1.25	Heirok Pt II,Laiham lotnung,Elangkhangpokpi, Tentha, Lourembam

%infestation level before spraying	Pod borer-14 , Aphid infested shoot -23 Semilooper -9	
Parameters of Assesment	Technology	Farmers Practice (coragen)
% of infestation level 10 DAT	Pod borer -3 Aphid infested shoot-7 Semilooper-4	Pod borer -2.1 Aphid infested shoot-11 Semilooper-5
% infestation level 40 days after 1 st spary or 10 days after 2 nd spray	Pod borer -1.1 Aphid infested shoot- 2.3 Semilooper-0	Pod borer -1.0 Aphid infested shoot-7 Semilooper-2.3
Yield(q/ha)	26	24.2
Net return(Rs./ha)	2,08,000	1,93,600
BC ratio	3.7	3.53



Crop/Enterprises	Major Problem diagnosed	Severity of the problem (%)	Details of technology	Source	No. of Trials
Chow-Chow Bori	High Cost of production for Blackgram bori	60%	Development of bori from squash (40 % squash mixed with KMS @ 1.5 g/kg with blackgram paste 60%)	College of Home Science, Tura, Meghalaya, 2014	5

Parameters	Product recovery/kg	Cost/Unit(10 kg)	Net return/Unit	B.C Ratio	Location
Technology	370 nos	Rs.845	Rs.1005	2.1	Khongjom, Athokpam, Khangabok, Leiphrakpam, Sapam
Farmers Practice	350 nos	Rs.1225	Rs. 875	1.7	



Enterprises	Major Problem diagnosed	Severity of the problem (%)	Details of technology	Source	No. of Trials
Amla	Due to perishable nature, Amla is difficult to store	70	Washing, Blanching, segment making, deeping in sugar syrup-60° brix, drying	IIHR, Bangalore, 2012	5

Parameters	Gross return(from 15kg)	Net return	B.C Ratio	Location
Technology	Product recovery 700g/kg Rs. 3150@350/kg (for 10.5 kg)	2,080	2.9	Landing, Kakching Khunou , Umathel, Kakching, Thoubal
Farmers Practice	600g/kg Rs. 2700@350/kg (for 9kg)	1,487	2.2	



