ON-FARM TESTING
2015-16

OFT--1

Title	Assessment of Sulphur & Boron application in Groundnut.			
Crop & Variety	Groundnut, Devi			
Season & Year	Rabi-2015-16			
Problem	Low yield due to imbalanced nutrition in Groundnut.			
Farmers Practices	No use of S & B with imbalanced dose of fertilizer.			
Detail of Technology Demonstrated T3	T2- Application of Sulphur@30kg/ha. T3- Application of Sulphur@30kg/ha & two spraying of Boron @0.2% at flowering & 20 days after flowering stage along with recommended dose of fertilizer @20-40-40 kg NPK per ha (soil test based)			
Recommendation	OUAT-2010			
Characteristic of technology/variety	Application of S & B increases oil content, quality of pod & yield of groundnut			
Area (ha)	0.13ha	No. of demo- 13	Farming situation	Irrigated medium land

Results	Yield (q/ha)	% change in Yield	No.of pods per plant	% change in Parameter	Cost of cultivation (Rs/ha)	Avg. Gross return(Rs/ha)	Net Income (Rs./ha)	BC Ratio
T1	17.3		17		34800	69200	34400	1.98
T2	20.1	16.18	21	23.52	35250	80400	45150	2.28
T3	21.6	24.85	23	35.2	35625	86400	50775	2.42

Title	Assessment of onion varieties			OFT--2
Crop & variety	Onion, . Bhima Super			
Season & Year	Kharif, 2015			
Problem	High market price of onion in Kharif due to scarcity of kharif onion			
Thematic area	Varietal evaluation			
Farmers Practices	Usual onion cultivation in Rabi season T1- Cultivation of multiplier onion			
Detail of Technology Demonstrated	T2- Cultivation of N-53 T3- Var. Bhima Super with recommended package of practices i.e, 120:60:60 kg NPK/ha, need based plant protection measures			
Recommendation	National Research Center of Onion and Garlic , Pune, 2012			
Characteristic of technology/ variety	Bulb maturity in 115-120 days after transplanting in late kharif. It produces single centered bulbs average Yield 260-280 qtl./ha, suitable for kharif season			
Area (ha)	0.13	No. of Demo- 13	Farming situation	Medium land

Results	Yield (q/ha)	% change in Yield	bulb weight	Cost of cultivation(Rs/ha)	Avg. Gross return(Rs/ha)	Net Income (Rs./ha)	BC Ratio
T1	162.4	32.63	4.26g	39200	97440	58240	2.48
T2	215.4		72.2 g	49200	1,15,540	101580	3.06
T3	236.2	45.44	78.6 g	49800	1,50,280	115540	3.3

OFT--3

Title	Assessment of Integrated pest management practices against tobacco caterpillar in cabbage			
Crop & variety	Cabbage			
Season & Year	Rabi,2015-16			
Problem	Heavy infestation leads to crop disaster, reduce quality and production of crops			
Thematic area	IPM			
Farmers Practices	T1- Spraying of Triazophos 2ml /lit			
Detail of Technology Demonstrated	T2- Application of neem cake @250kg/ha ,Spraying of Thiodicarb 2gm/lit at 10days interval thrice at 20, 30, 40 DAT T3-Application of neem cake @250kg/ha ,installation of ph traps 50/ha, spraying of Spinosad 2.5SC			
Recommendation	Department of Entomology , OUAT, 2010			
Characteristic of technology/ variety	IPM effectively reduces pest infestation and increase yield			
Area (ha)	0.13	No. of Demo- 13	Farming situation	Irrigated Medium land

Results	Yield (q/ha)	% Change in yield	% infestation	Cost of cultivation (Rs./ha)	Gross cost of cultivation (Rs/ha)	Net Income (Rs./ha)	BC Ratio
T1	265		22	55500	159000	103500	2.9
T2	285	7.5	15	57200	171000	113800	2.98
T3	305	15	9	58350	183000	124650	3.2

OFT-4

Title	Assessment of performance of tractor drawn seed cum fertilizer drill for sowing paddy		
Crop & Variety	Paddy, swarna		
Season & Year	Kharif, 2015		
Problem	Broadcasting of paddy leads to uneven plant population and difficulty in intercultural operation		
Farmers Practices	Broadcasting		
Detail of Technology Demonstrated	T2:Bullock drawn five row seed cum fertilizer drill T3: Tractor drawn seed cum fertilizer drill		
Recommendation	Commercial , tested at C.A.E.T., O.U.A.T.		
Characteristic of technology/ variety	Line sowing of paddy seed along with fertilizer leads to good plant growth & more yield and easy in intercultural operation, row to row spacing 25cm.		
Area (ha)	1ha	No. of Demo- 13	Farming situation / Irrigated medium land

Results	Field Capacity (ha/h)	Seed rate (Kg/ha)	Yield (q/ha)	Cost of cultivation (Rs/ha)	Avg. Gross return(Rs/ha)	Net return (Rs./ha)	B :C ratio
T1	0.57	75	36.3	27250	45375	18115	1.66
T2	0.163	37.5	39.2	28250	49000	20750	1.73
T3	0.4	37.5	39.4	29500	49250	19750	1.67

OFT- 5

Title	Assessment of Drudgery reduction by use of four row drum seeder by farm women		
Crop & Variety	Paddy,		
Season & Year	Kharif, 2015		
Problem	Drudgery due to manual transplanting		
Farmers Practices (FP)	T1-Manual Transplanting T2-Use of two row drum seeder		
Detail of Technology Demonstrated (RP)	T3-Use of four row drum seeder		
Recommendation	ANGARU, Hyderabad, 2008		
Characteristic of technology	pre-germinated paddy seeds(24 hour soaking+draining & then keeping it for 24 hour germination) sown by drum seeder		
Area (ha)		No. of Demo- 5	Farming situation- Rainfed Medium land

Treatments	Yield (q/ha)	Labour required(Nos/ha)	Output m2/hr	Est. Energy Expenditure kj/min.	WHR beat/min	% reduction in drudgery	% increase in efficiency
T1	42.5	36	142	13.22	138	-	-
T2	43.6	2	840	11.5	127	13.01	491
T3	44.1	1	925	11.95	130	9.6	551