KVK, Rewari

On Farm Trials 2020 (Summary)

OFT (Technology Assessment)			
1			
Number of OFTs		Total no. of Trials	
Targets	Achievement	Targets	Achievement
10	10	100	100

Assessment of Micro Nutrient Management in Wheat

Problem Identified- :- Lower productivity and profitability in Wheat.

Cause of problem:- Deficiency of micro nutrients in the soil

Previous crops - Cotton **Irrigated** **Soil Type - Loamy Sand**

Technology Option	No. of trials	Performance Indicator				Grain Yield (qt./ha)	Increase in Yield (%)	Net return (Rs./ha.)	B:C Ratio
		Plant height (cm)	No. of effective tiller/plant	Spike length (cm)	No. of spikelet/Spike				
No application of Zinc sulphate and Ferrous sulphate(FP)	10	86.5	5.8	12.6	18.56	50.8	--	65667	2.35
Z_nSO_4 @ 25kg/ha. & Ferrous sulphate @ 0.5% foliar application (R.P)		90.4	7.2	13.1	19.84	56.5	11.2	77238	2.55

Assessment of different seed rate of Chickpea

Problem Identified :- Low yield in Gram

Cause of problem :- Poor plant population

Previous crops- Bajra Irrigated - Soil Type - Sandy Loam

Technology Option	No. of trials	Performance Indicator				Increase in Yield (%)	Net Return (Rs./ha)	B:C Ratio
		No of branches /plant	No. of seeds/ Pods	Test wt.(g) 1000-grain wt.	Yield (qt./ha)			
40 kg/ha(FF)	10	6-8	1.8	165	18.0	--	56906	2.63
60 kg/ha		6-9	1.9	164.75	19.50	8.33	62658	2.70

Assessment of integrated nutrient management on yield of Pearl millet

Problem Identified- :- Low yield in Pearl millet

Cause of problem :- Low fertility status of soil
Imbalanced fertilizer application

Previous crops - Mustard Irrigated Soil Type- Loamy Sand

Technology Option	No. of trials	Performance Indicator			Increased in Yield (%)	Net return (Rs./ha.)	B:C Ratio
		Earhead length (cm.)	1000 grain wt. (g)	Yield (qt/ha)			
NPKZn(60:30:0:0) (FP)	10	2.55	23.6	23.60	--	34230	2.30
NPKZn (125 :60 :30:25) +5ton compost/ ha.+ Bio fertilizer (Recommended)		3.28	31.5	31.50	33.4	50395	2.62

Assessment of Okra varieties against yellow vein mosaic virus

Problem Identified :- Low yield

Cause of problem :- High Incidence of yellow vein mosaic virus

Previous crops- Mustard Irrigated - Soil Type - Sandy Loam

Technology Option	No. of trials	Performance Indicator				Increase in Yield (%)	Net Return (Rs./ha)	B:C Ratio
		Disease incidence (%)	Avg. Fruit wt. in (g)	No. of fruits/plant	Yield (t/ha)			
T_1-Arka Anamika(FP)	10	8	14.70	18.50	13.40	17.16	141000/-	3.35
T_2-Pusa Bhindi-5		--	16.85	22.90	15.70		170500/-	3.62

Farmers feed back – The cultivar pusa bhindi-5 performed well against yellow vein mosaic virus disease.

Assessment of Nutrient management on yield of Cotton

Problem Identified :- Lower productivity and profitability in Cotton

Cause of problem :- Deficiency of zinc and potash
Low fertility status of soil
Farmers do not use recommended dose of fertilizers

Previous crops - Wheat **Irrigated** **Soil Type - Loamy Sand**

Technology Option	No.of trials	Performance Indicator				Increase in Yield (%)	Net return (Rs./ha.)	B:C Ratio
		Plant height (cm)	No. of Bolls/Plant	Boll weight (gm)	Yield (qt./ha)			
NPKZn (58:25:0:0) (FP)	10	103.4	26.35	4.52	18.40	--	56916	2.27
NPKZn(175:60:60:25) (RP)		121.5	38.55	5.28	25.10	36.4	89711	2.84

Management of zinc deficiency in Kinnow

Problem definition :- Low productivity and profitability in Kinnow

Cause of problem:- :- Deficiency of zinc

Farming situation - Irrigated Soil Type - Sandy loam

Technology Option	No. of trials	Performance Indicator			% Increase in yield	Net Returns (Rs./ha)	BC Ratio
		No. of fruits/plant	Wt. of fruit (g)	Yield (t/ha)			
T_1 control (FP)	10	447.36	190	23.37	12.94	275625	4.67
T_2 Tow spray of zinc sulphate (0.5%) & urea (1%) in the month of May-June & August- September (RP)		468.29	205	26.40		318000	5.07

Farmers feed back – Farmer were satisfied with the result of spray of zinc sulphate & urea

Assessment of Super seeder in wheat cultivation

Problem definition : Low yield

Cause of problem : High amount of crop residue, Delay in sowing

Previous crops - Cotton Irrigated Soil Type – Sandy Loam

Technology Option	No. of trials	Performance Indicator			% Increase in yield	Net Returns (Rs./ha)	BC Ratio
		No. of grain/spike	Thousand grain wt. (g)	Yield (qt./ha)			
Seed drill (FP)	10	48.12	41.63	51.68	15.33	76468	2.51
Super seed		50.37	45.34	61.04		94954	2.99

Assessment of mulching technology in Tomato cultivation

Problem definition : Low yield

Cause of problem : Higher use of irrigation water
High weeds infestation
High mortality of plant in January due to Low temperature & higher moisture loses

Previous crops - Cotton Irrigated Soil Type – Sandy Loam

Technology Option	No. of trials	Performance Indicator			% Increase in yield	Net Returns (Rs./ha)	BC Ratio
		No. of fruit/plant	Fruit wt. (g)	Yield (qt./ha)			
Without mulching (FP)	10	60.8	32.4	250	27.13	166250	3.83
Plastic mulching @ 25 micron		68.3	34.8	343.7		234350	4.13

Assessment of cotton planter

Problem definition : Low yield and high man power

Cause of problem : High cost of implement, poor root development, Less plant population

Previous crops - Bajra Irrigated Soil Type - Sandy Loam

Technology Option	No. of trials	Performance Indicator			% Increase in yield	Net Returns (Rs./ha)	BC Ratio
		No. of bolls/plant	Field capacity (ha/h)	Yield (qt./ha)			
Dibbling(FP)	10	140	0.75	12.00	8.6	23750	1.66
Cotton planter(RP)		165	0.15	13.12		39091	2.09