

## KVK, Rewari

### On Farm Trials 2018 (Summary)

OFT (Technology Assessment)			
1			
Number of OFTs		Total no. of Trials	
Targets	Achievement	Targets	Achievement
10	09	100	90

#### OFT-2: MICRO NUTRIENT MANAGEMENT IN MUSTARD

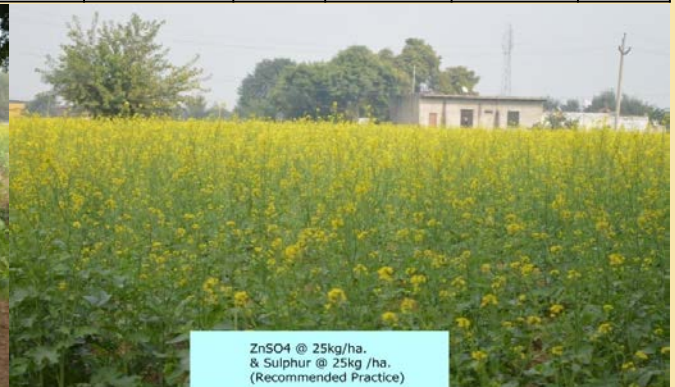
**Problem Identified:-** -Lower productivity and profitability in Mustard cultivation due to deficiency of micro nutrients in the soil.

**Cause of problem:-** Yield losses due to micro nutrient deficiency in crop (10-20%)  
 Farmers do not use micro nutrient fertilizers  
 Low oil content in mustard due to sulphur deficiency.  
 Deficiency of zinc sulphate effect on uptake of phosphorus.

Technology Option	No. of trials	Plant height (cm)	No. of Siliquae/pl ant	No. of seeds/ Siliquae	Test wt.(g) 1000-grain wt.	Yield (qt./ha)	Increase in Yield (%)	Net return (Rs./ha.)	B:C Ratio
No application of Zinc sulphate and sulphur (F.P)	10	190	82.4	16.5	4.4	23.60		69908	3.09
ZnSO <sub>4</sub> @ 25kg/ha. & Sulphur @ 25kg /ha. (R.P)		202	90.2	18.4	5.2	27.50	16.52	81363	3.38



Control



ZnSO<sub>4</sub> @ 25kg/ha.  
& Sulphur @ 25kg /ha.  
(Recommended Practice)

### OFT-3 :- MANAGEMENT OF MICRO NUTRIENT IN WHEAT

**Problem Identified:-** Lower productivity and profitability in Wheat cultivation due to deficiency of micro nutrients in the soil.

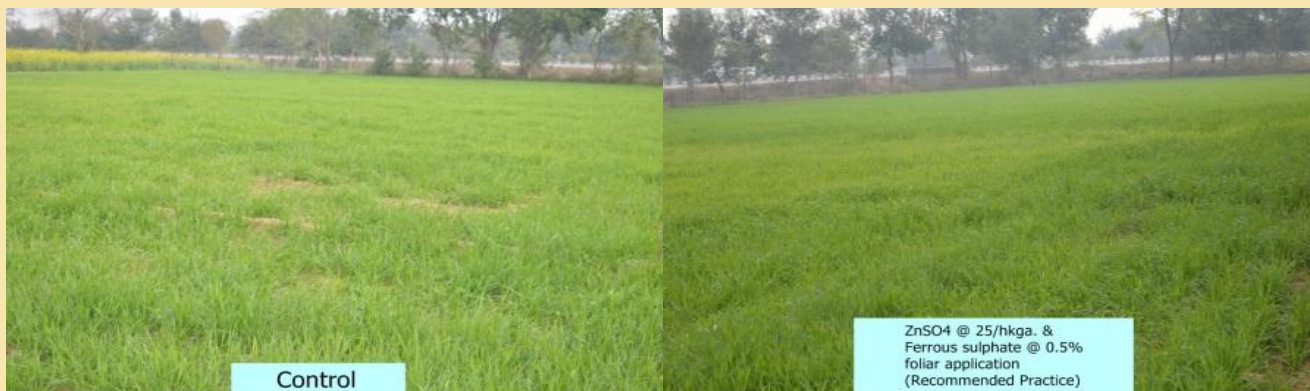
**Cause of problem:-** Yield losses due to micro nutrient deficiency in crop (10-20%)

Micro nutrient deficiency in soil.

Farmers do not use micro nutrient fertilizers.

Deficiency of zinc sulphate effect on uptake of phosphorus.

Technology Option	No.of trials	Plant height (cm)	No. of grains /spike	Test wt.(g) 1000-grain wt.	Yield (qt./ha)	Increase in Yield (%)	Net return (Rs./ha.)	B:C Ratio
No application of Zinc sulphate and Ferrous sulphate (F.P)	10	92.5	36.6	39.4	48.50		61983	2.17
ZnSO <sub>4</sub> @ 25/hkga. & Ferrous sulphate @ 0.5% foliar application (R.P)		101.5	40.8	42.9	56.00	15.46	78828	2.48



## OFT-4 :- EVALUATION OF WHEAT VARIETY HD-3086

**Problem Identified- :- Low productivity in Wheat**

**Cause of problem:- Low yield of old variety**

Technology option	No.of trials	Yield (qt/ha.)	Increase in yield(%)	Net return (Rs./ha.)	BC Ratio
HD-2967 (Farmers Practice)	10	55.65	--	72731	2.32
HD-3086 (Recommended Practice)		57.0	2.42	75890	2.38



## OFT-5 :-IMPACT OF ZINC & UREA SPRAY ON PRE-MATURE FRUIT DROP IN BER

**Problem Identified- :- Pre-Mature fruit drop in ber orchard effecting yield losses about 30%**

**Cause of problem:- Losses due to fruit drop 15-30 %**

**Imbalance use of fertilizer**

**Farmers avoid zinc application**

Technology option	No. of trials	Pre-Mature fruit drop (%)	Fruit Yield (t/ha.)	Increase in yield(%)	Net return (Rs./ha.)	BC Ratio
Control (FP)	10	22	20	--	250000	2.67
Two spray of zinc sulphate (0.5%) & urea (1.5%) with 500 lt of water in the month of July & November		5	24	20	320000	3.0

## **OFT-6 :-MANAGEMENT OF NEMATODE THROUGH RESISTANT VARIETY IN TOMATO**

**Problem definition :- Low yield and quality of tomato due to infestation of root knot nematodes.**

**Cause of problem:- Yield losses due to root knot nematodes above 10%**

**Heavy infestation of root knot nematodes**

**Evaluate nematodes resistant variety**

**Nematodes management is very expensive**

<b>Technology option</b>	<b>No. of trials</b>	<b>Infestation of root knot nematodes (%)</b>	<b>Fruit Yield (t/ha.)</b>	<b>Increase in yield(%)</b>	<b>Net return (Rs./ha.)</b>	<b>BC: Ratio</b>
<b>Pusa hybrid -4 (FP)</b>	<b>10</b>	<b>13</b>	<b>48.00</b>	<b>--</b>	<b>264000</b>	<b>3.20</b>
<b>Pusa hybrid -2</b>		<b>--</b>	<b>50.50</b>	<b>5.28</b>	<b>284000</b>	<b>3.36</b>

## OFT-7 :- IMPACT OF TIME OF SOWING IN QUALITY & YIELD OF FRENCH MARIGOLD

**Problem definition :-** Low yield & quality of French marigold due to sowing under un recomded sowing time.

**Cause of problem:-** Yield losses due to unfavorable sowing time

Farmers not adopt recommended sowing time

Sowing & seedlings transplanting in high temperature

Technology option	No. of trials	Yield (t/ha.)	Increase in yield(%)	Net return (Rs./ha.)	BC Ratio
Sowing in 1 <sup>st</sup> fortnight of August (FP)	10	12	--	165000	3.20
Sowing in 1 <sup>st</sup> fortnight of September(R.P)		15	25	225000	4.00



## OFT-8 :-WEED MANAGEMENT IN PEA BY TWINE HAND WHEEL HOE

•Problem definition :-Low yield (15-20%)

•Cause of problem:- Heavy infestation of weeds after 1<sup>st</sup> & 2<sup>nd</sup> irrigation

Poor weed management practices

Hand weeding is very expensive

Technology option	No. of trials	Yield (q/ha.)	Increase in yield(%)	Net return (Rs./ha.)	BC Ratio
No Weeding (FP)	10	23.0	--	62500	3.12
Twine hand wheel hoe (2 Times, after 1 <sup>st</sup> & 2 <sup>nd</sup> irrigation)		26.6	11.54	75900	3.49



## OFT-9 :- ASSESSMENT OF DIFFERENT TILLAGE PRACTICES ON WHEAT YIELD

•Problem definition :- **Low productivity & high cost of land preparation.**

•Cause of problem:- **High cost of cultivation  
Hard crust layer formed**

Technology option	No. of trials	Yield (q/ha.)	Increase in yield(%)	Net return (Rs./ha.)	BC Ratio
Land preparation by harrow+cultivator	10	60.8	--	105013	4.06
Land preparation by M.B.Plough +rotavator		62.2	2.30	111931	4.51

