

## KVK, Rewari

### On Farm Trials 2021 (Summary)

OFT (Technology Assessment)			
1			
Number of OFTs		Total no. of Trials	
Targets	Achievement	Targets	Achievement
06	06	60	60

### Nutrient Management in Wheat

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

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

**Previous crops - Pearl millet**

**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 spikelets/Spike				
<b>Control (FP)</b>	<b>10</b>	<b>88.2</b>	<b>5.6</b>	<b>11.5</b>	<b>16.6</b>	<b>46.4</b>	<b>--</b>	<b>92068</b>	<b>2.83</b>
<b>Potash @ 30 kg/ha and ZnSO<sub>4</sub> @ 25kg/ha. (RP)</b>		<b>92.5</b>	<b>7.4</b>	<b>13.8</b>	<b>19.9</b>	<b>54.5</b>	<b>17.4</b>	<b>111812</b>	<b>3.13</b>



**Feed Back – Application of Potassium and Zinc sulphate increased tillering, no. of grains/spike and yield of wheat**

# Effect of different seed rate on yield 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 plants/sq m.	No. of seeds/ Pods	Test wt.(g) 1000-grain wt.	Yield (qt./ha)			
40 kg/ha(FF)	10	24.4	1.6	163.5	13.65	--	41998	2.3
60 kg/ha		26.5	1.8	163.7	15.10	10.63	49900	2.54



**Feed Back – Farmers were satisfied with plant population**

## Management of shoot and Fruit borer in Brinjal crop

**Problem Identified :- Low yield**

**Cause of problem :- Heavy infestation of shoot & fruit borer**

**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
		No. of fruits/plant	Infected fruit/plant	Insect infestation	Yield (t/ha)			
<b>T<sub>1</sub>-Control (FP)</b>	<b>10</b>	<b>20</b>	<b>8</b>	<b>40</b>	<b>37.5</b>	<b>33.33</b>	<b>225000</b>	<b>2.50</b>
<b>T<sub>2</sub>-Collect and destroy affected shoot &amp; fruit Foliar spray of 0.02% spinosad 45EC</b>		<b>30</b>	<b>3</b>	<b>10</b>	<b>50</b>		<b>550000</b>	<b>3.75</b>



**Farmers feed back – Application of spinosad reduce infestation of shoot and fruit borer and increased yield of brinjal**

## Assessment of Nutrient management on yield of Cotton

**Problem Identified :- Lower productivity and profitability in Cotton**

**Cause of problem :- Low fertility status of soil**

**Farmers do not use Potassium nitrate at flowering & Boll formation stage**

**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)			
<b>Control (FP)</b>	<b>10</b>	<b>108.0</b>	<b>26.0</b>	<b>3.78</b>	<b>17.35</b>	<b>--</b>	<b>57996</b>	<b>2.34</b>
<b>Two foliar application of 1.0% Potassium Nitrate ( flowering &amp; Boll formation stage) (RP)</b>		<b>116.5</b>	<b>34.5</b>	<b>4.98</b>	<b>19.30</b>	<b>11.2</b>	<b>82366</b>	<b>2.70</b>



**Feed Back – Foliar application of potassium nitrate reduce dropping of flowers and increased no. and size of bolls**

## Assessment of different sowing times of African Marigold (Cv. Pusa Bahar) during winter

**Problem definition :-** Low yield and poor quality of flowers during winter season

**Cause of problem:- :-** Farmers are not adopting recommended sowing time of Cv. Pusa Bahar

**Farming situation - Irrigated**

**Soil Type - Sandy loam**

Technology Option	No. of trials	Performance Indicator			% Increase in yield	Net Returns (Rs./ha)	BC Ratio
		Days taken to flowering after sowing	No. of flowers per plants	Yield (t/ha)			
<b>T1 sowing in mid August (FP)</b>	<b>10</b>	<b>105</b>	<b>44</b>	<b>21.5</b>	<b>16.28</b>	<b>480000</b>	<b>2.86</b>
<b>T2 Sowing in mid October (recommended) IARI, Delhi</b>		<b>98</b>	<b>58</b>	<b>25.0</b>		<b>700000</b>	<b>3.33</b>



**Feed back** –Sowing in mid October reduce days taken to flowering and increased no. of flowers and yield of marigold

# Assessment of Super seeder in wheat cultivation

Problem definition : **Low yield**

Cause of problem : **High cost of cultivation, Delayed 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 grains/spike	Thousand grain wt. (g)	Spike length (cm)	Yield (qt./ha)			
Seed drill (FP)	10	57.6	41.5	11.6	46.6	13.2	57399	2.14
Super seeder		63.1	46.1	13.4	53.7		68660	2.31



**Feed Back – Super seeder reduce cost of cultivation and time for field preparation**

## Performance of different tillage practices in Bajra cultivation

**Problem Identified- :- Low yield in Pearl millet**

**Cause of problem :- Poor root formation due to hard crust layer  
Higher weeds infestation**

**Previous crops - Mustard**

**Irrigated**

**Soil Type- Loamy Sand**

Technology Option	No. of trials	Performance Indicator				Increase d in Yield (%)	Net return (Rs./ha.)	B:C Ratio
		Plant height (cm)	Earhead length (cm)	1000 grain wt. (g)	Yield (qt/ha)			
<b>Land prepared by harrow, cultivator (FP)</b>	<b>10</b>	<b>120.2</b>	<b>25.4</b>	<b>6.9</b>	<b>21.7</b>	<b>--</b>	<b>38332</b>	<b>2.69</b>
<b>Land prepared by reversible MB plough (Recommended)</b>		<b>180.1</b>	<b>27.3</b>	<b>7.3</b>	<b>24.9</b>	<b>12.8</b>	<b>47643</b>	<b>3.32</b>



Reuters/Amit Dave