

On-Farm Trials laid on 2018-19

OFT-1

1	Title	Dormancy breaking in Potato
2	Problem Diagnose/defined	Sprouting in Potato
3	Details of technologies selected for assessment/refinement	Soaking of whole tubers in a solution containing 1% thiourea and 1 ppm GA3
4	Source of technology	SKUAST -K
5	Production system thematic area	Crop production
6	Thematic area	Crop Production
7	Performance of the Technology with performance indicators	Satisfactory
8	Final recommendation for micro level situation	Two crops of potato can be cultivated by adopting the said technology
9	Constraints identified and feedback for research	Incidence of rodents damage is more which results in loss of yield
10	Process of farmer's participation and their reaction	Satisfactory

Results of On Farm Trial-1

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Potato	Irrigated	Sprouting	Dormancy breaking in Potato	03 Palpora Noorbagh KVK Sgr	1% thiourea and 1 ppm gibberlic acid	Yield	See table -1	Satisfactory	Steps should be taken to control rodent damage

Area: 5 Marlas

Table-1

Crop	Location 1 Palpora		Location 2 Noorbagh		Location 3 KVK Srinagar	
	Treated (Kgs)	Untreated (Kgs)	Treated (Kgs)	Untreated (Kgs)	Treated (Kgs)	Untreated (Kgs)
Kufri girdhari	312.5	250	302	237	307	229
Kufri surya	225	192	213.7	187	217	179
Kufri giriraj	262.5	202	257.4	200	270	198.6

OFT-2

1	Title	Clutches for early seedling production
2	Problem Diagnose/defined	Nursery failure
3	Details of technologies selected for assessment/refinement	Black polythene, paddy straw and white polythene
4	Source of technology	SKUAST-K
5	Production system thematic area	Crop production
6	Thematic area	Crop production
7	Performance of the Technology with performance indicators	Satisfactory
8	Final recommendation for micro level situation	Clutches with white polythene showed better results
9	Constraints identified and feedback for research	-
10	Process of farmer's participation and their reaction	Farmers participation was active as the results were satisfactory

Results of On Farm Trial –2

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Tomato (S-II)	Irrigated	Nursery failure	Clutches for early seedling production	01 KVK Sgr	Use of black polythene, paddy straw & white polythene	Yield	See table -2	Table 2	Satisfactory and with higher rate of adoption

Table-2

Crop	Parameters	T1	T2	T3
		Black Polythene	Paddy Straw	White Polythene
Tomato (S-II)	Germination %	81%	87%	90%
	Days taken to 50% germination	12 days	17 days	15 days
	%age mortality	19%	13%	10%

OFT-3

1	Title	A study on Farmers Practice and Recommended Nutrient Management Practices in Brown Sarson (KS-101)
2	Problem Diagnose/defined	Low adaptation of soil test based recommended practice by farmers.
3	Details of technologies selected for assessment/refinement	Application of soil test based nutrient management
4	Source of technology	SKUAST-K
5	Production system thematic area	Crop production
6	Thematic area	Crop production
7	Performance of the Technology with performance indicators	Crop production increased using nutrient management which resulted in increase of yield.
8	Final recommendation for micro level situation	Soil test based fertilizer application
9	Constraints identified and feedback for research	-
10	Process of farmer's participation and their reaction	Farmers were involved learning by doing

Results of On Farm Trial -3

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Brown Sarson	Irrigated	Low adaptation of soil test based recommended practice by farmers.	A study on Farmers Practice and Recommended Nutrient Management Practices in Brown Sarson	02 Telbal Khonmoh	Soil test based nutrient management	Yield	See table-3	Increase in yield & yield attribute characters	Satisfactory

Table-3

Treatment	Plant height(cm)	Branchplant ⁻¹	Siliquae plant ⁻¹	Seed siliqua ⁻¹	1000 seed weight (g)	Seed yield (q ha ⁻¹)
T1=(Farmers practice)	85.52	7.06	112	9.2	3.62	7.39
T2= (Recommended NPK)	90.22	9.92	138	9.6	3.68	10.70
T3=STB fertilizer application	94.30	10.28	144	10.2	3.71	12.06

OFT -4

1	Title	Evaluation of feed supplement on milk production and reproductive performance in dairy Cattle
2	Problem Diagnose/defined	Poor production performance. Anestrous and repeat breeding
3	Details of technologies selected for assessment/refinement	Mineral mixture supplementation
4	Source of technology	SKUAST-K
5	Production system thematic area	Milk yield
6	Thematic area	Dairy
7	Performance of the Technology with performance indicators	Increased milk production and low incidence of repeat breeding
8	Final recommendation for micro level situation	Supplementation by mineral mixtures enhance milk yield.
9	Constraints identified and feedback for research	Farmers felt difficulty in giving intra muscular injection.
10	Process of farmer's participation and their reaction	Farmers prefer supplementation for increased milk production and profitability

Results of On Farm Trial – 4

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Dairy animal	Un balanced feeding of animals	Poor production performance, Anestrous & repeat breeding	Evaluation of feed supplement on milk production and reproductive performance in dairy Cattle	02 08 cows/trial/treatment	Mineral mixture supplementation & incidence of repeat breeding	Milk yield	Increased milk production from 12.3 lts/day to 15.3lts/day/animal	Increased production	Farmers are satisfied with the results

Yield data: Yield (liters/animal/day)

Treatments		Yield (liters /animal/day)	
T1	No mineral mixture	12.3	High incidence of anestrous (30 % of cows came into heat within 03 months period of observation.
T2	Mineral mixture (30 g/ day)	14.1	Very low level of anestrous (60 % of cows came into heat within 03 months period of observation.
T3	Mineral mixture (30 g/ day)+ Tonophosphan	15.3	Low incidence of anestrous (80 % of cows came into heat within 03 months period of observation.

OFT -5

1	Title	Integrated Nutrient Management on growth and yield parameters of Maize (Variety:- SMC7)
2	Problem Diagnose/defined	Low yield
3	Details of technologies selected for assessment/refinement	Integrated Nutrient Management.
4	Source of technology	SKUAST-K
5	Production system thematic area	Crop production
6	Thematic area	Crop production with reference to nutrient management.
7	Performance of the Technology with performance indicators	Increase in yield.
8	Final recommendation for micro level situation	Integrated nutrient management
9	Constraints identified and feedback for research	No constraint for the technology-advocated
10	Process of farmer's participation and their reaction	Learning by doing & seeing is believing

Results of On Farm Trial – 5

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Maize	Irrigated	Low yield	Integrated Nutrient Management on growth and yield parameters of Maize	Total: 05 Gund Hasibhat(03) Check Dhara (02)	INM 1. Inorganic ferlizer 2.Vermicompost 2.Bioferlizer (Azotobacter and PSB)	Increase in yield & yield attribute characters	See table-4	Increase in yield	Satisfied

Table-4

Variety	Plant height (cm)	Cob length (cm)	No of cobs/plant	Kernal row/cob	No. of grains/cob	100 seed weight(g)	Yield q/ha
T1: Farmers practice	150.3	16.00	1.00	12.00	478	23.90	45.00
T2: Recommended NPK application	196.8	20.00	2.00	14.00	523.79	26.57	53.40
T3:Recommended NPK + Vermicompost +Biofertilizer	200.4	23.60	2.00	18.00	550.2	30.33	56.00

OFT-6

1	Title	Nutrient fungicide compatibility in apple
	Problem Diagnose/defined	water core, bitter pit
3	Details of technologies selected for assessment/refinement	Calcium with fungicide
4	Source of technology	SKUAST-K
5	Production system thematic area	Crop production
6	Thematic area	Fruit Quality
7	Performance of the Technology with performance indicators	Satisfactory
8	Final recommendation for micro level situation	Needs repeated trial
9	Constraints identified and feedback for research	Adoptability
10	Process of farmer's participation and their reaction	Satisfactory

Results of On Farm Trial – 6

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Apple	Irrigated & un-irrigated	water core, bitter pit	Nutrient fungicide computability in apple	03 Faqirgujri Darbagh Taibal	Use of nutrient with fungicide	Compatibility and physical disorders	Table-5	Continued	Satisfied

Table-5

Yield: kg/tree				Disease incidence %			Effect of Ca on fruit firmness (lb.psi)		
Variety	Faqirgujri	Darbagh	Taibal	Faqirgujri	Darbagh	Taibal	Faqirgujri	Darbagh	Taibal
T1:	149.24	146.52	155.78	17.2	21.9	18.3	16.16	15.36	16.06
T2:	155.36	159.43	163.57	1.3	2.7	2.1	16.76	16.46	17.01
T3:	158.87	162.81	165.43	0.7	1.6	1.1	17.09	16.67	17.19

OFT-8

1	Title	Management of cut worm in vegetables
	Problem Diagnose/defined	Cut worm damage
3	Details of technologies selected for assessment/refinement	Drenching of Alphamethrin, carbofuron granules application.
4	Source of technology	SKUAST-K
5	Production system thematic area	Crop production
6	Thematic area	IPM of cutworm
7	Performance of the Technology with performance indicators	Performance of the technology satisfactory in controlling cutworm damage
8	Final recommendation for micro level situation	In case of severe infestation / quick knockdown application of alphametrin may be carried out
9	Constraints identified and feedback for research	-
10	Process of farmer's participation and their reaction	Farmers were cooperating and got satisfied

Results of On Farm Trial – 8

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Chilli & Kale	Irrigated	Cut worm	Management of cut worm in vegetables	02 Noorbagh Narkura	Application of Alphametrin	Plant mortality	See table-	Satisfactory	Satisfied

Treatments	Plant Mortality (%)
T1	Farmers practice 29
T2	Recommended practice 13
T3	Alphamethrin drenching @ 1.2 ml / liter of water 03

OFT-9

1	Title	Management of Chilli Wilt
	Problem Diagnose/defined	Fusarium wilt
3	Details of technologies selected for assessment/refinement	Carbendazium drenching and application of <i>trigoderma harzianun</i>
4	Source of technology	SKUAST-K
5	Production system thematic area	Crop production
6	Thematic area	IDM in Chilli
7	Performance of the Technology with performance indicators	Application of <i>trigoderma</i> in compost & mixed with soil followed by carbendazium showed best results in management of chilli wilt
8	Final recommendation for micro level situation	<i>Trigoderma</i> application should be done in compost
9	Constraints identified and feedback for research	-
10	Process of farmer's participation and their reaction	Farmers were cooperating and got satisfied

Results of On Farm Trial –9

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Chilli	Irrigated	Wilting of seedlings	Management of chilli wilt	02 Noorbagh Narkura	Application of <i>trigoderma</i> followed by drenching of carbendazium	Plant mortality	See table-	Satisfactory	Satisfied

Treatments	Plant mortality (%)
T1	Farmers practice 35
T2	Drenching of carbendazium 11
T3	Application of <i>trigoderma</i> followed by drenching of carbendazium 06

OFT-10

1	Title	Effect of Boron on yield and quality of Saffron
	Problem Diagnose/defined	Low yield
3	Details of technologies selected for assessment/refinement	Recommended NPK + 0.15% boron
4	Source of technology	SKUAST-K
5	Production system thematic area	Crop production
6	Thematic area	Saffron production
7	Performance of the Technology with performance indicators	Yield
8	Final recommendation for micro level situation	Increase in the yield and yield attributed characters
9	Constraints identified and feedback for research	No constraints
10	Process of farmer's participation and their reaction	Farmers were cooperating and got satisfied by the results.

Results of On Farm Trial –10

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessment	Data on the Parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Saffron	Un irrigated	Low yield	Effect of Boron on yield and quality of saffron	02 Balhama	Recommended NPK + 0.15% boron	yield	See table-	Satisfactory	Satisfied

Results

Treatments	Plant height (cm)	No. of shoots/corm	Flower weight (g)	Length of stigma (mm)	Stigma weight (g)	Flower yield (kg/kanal)	Dry saffron yield(kg/kanal)
T1: Control	28.0	6.08	0.200	28.9	0.019	30	0.39
T2: Recommended NPK	29.9	7.17	0.215	29.0	0.022	35	0.47
T3: Recommended NPK+ 0.15% Boron	30.5	7.42	0.250	30.3	0.024	40	0.52