
**Horticultural
Research station
Nowshera, Soon
Valley, Khushab**



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INTRODUCTION.

Horticulture sector is the only panacea to curtail the global economic degradation. It is the discipline which absorbs maximum labor strength and can play pivotal role for elevation of poverty. It can boost up the economic and social conditions of humanity. It gives the highest economic returns which are 4 – 5 times more as compared to the other agricultural crops. It is a solution for poverty alleviation, job creation and to cater the problem of drudgery on the global level. It is crystal clear that developing countries like Pakistan can find the solution of existing economic downfall through commercial adoptability of the horticulture on scientific grounds.

OVERVIEW

Soon Valley at a glance.

Soothing climatic conditions of soon valley area and its contiguous parts of the pothohar region present an attractive heartening hope for the development of smart agriculture and horticulture industry in the CPEC scenario. Geographical facts and soothing climatic indicators are presented under.

Area: 236736

Altitude: 700-800 m

Average temperature: 20-30 C

Annual precipitation: 35-50 cm

It is helpful for raising of grapes, almonds, citrus, olives, and other horticultural crops in specific pockets of pothohar region especially.

Pothohar Region- Geographical scenario

Districts: Khushab, Attock, Jehlum, Rawalpindi,, Chakwal

Altitude: 300-800m

Rainfall: 30-50cm

Temperature Range: 2-35C

Olives

1. Effect of Soaking Time on Rooting Of Olive Cuttings.

To find out the appropriate time for soaking olive cuttings before plantation to enhance rooting capability.

Cuttings planted after 12 hours dip had the highest root length (3.97 cm), sprouting (92.85 %) and success (51.22%) as compared to all other treatments. Cutting with a 6 hour dip proved to be the next best treatment.



Rooting of olive cuttings

2. Role Of Planting Method In Rooting Of Olive Cuttings Planted In Non Soil Rooting Media.

To find out the efficient planting method for olive cuttings to receive better results.

Cuttings planted in flat beds showed best results in sprouting, success and root length. The data revealed that poorest sprouting and root length was observed in cuttings planted in earthen pots as compared to rest of the

Treatments while success after sprouting was minimal in cuttings planted in rooting cups.



Olive cuttings in non soil media

3. Comparative Studies For Flowering Behavior Of Olive Varieties Under Soon Valley Climatic Conditions.

To catalog the flowering time and flowering period of different olive varieties.

This study was envisaged to catalog the flowering time and flowering period of different olive varieties in order to identify yearly, mid and late season cultivars. Data shows that flowering started in the last week of March till the first week of April. Nocellera had maximum anthesis duration (16 days) followed by SP-1 (14 days) and Frontoio (13 days). Fruit setting was highest in Manzonilla, Uslu, Tagiaska and Leccino. Longest flowering period was recorded in Nocellera (34 days) and Ottobratica (32 days).

4. ENHANCING ROOTING OF OLIVE CUTTINGS THROUGH IBA STIMULATION.

To find out best rooting technique for rooting of olive cuttings. So far the experiment is in progress data regarding all parameters will be provided after the completion of the rooting period.



Application of IBA for the rooting of olive cuttings.

5. EFFECT OF DIFFERENT CONCENTRATIONS OF MORINGA OLIEFERA LEAF EXTRACT ON ROOTING OF OLIVE CUTTINGS CULTIVAR FORONTIO

To find out the best suitable concentration of moringa leaf extract on rooting of olive. Since olive cuttings take almost four months to sprout so the experiment is in progress. Its data regarding all parameters will be shared later.



Peach

6. Adaptability Studies of Early Peach Varieties under Punjab Conditions.

Early peach varieties comprising of Early Grand and Florida king planted at different sites of Punjab were considered for their quantitative and quality characteristics.

Early Grand gave the best results for fruit weight (244 g) and yield (46 kg /plant) at HRS, Nowshera. Ground facts proved the superiority of Early Grand Variety which is the earliest for

4 million per acre. Owing to the high temperature factor ripening is approximately two weeks earlier at Sillanwali as compared to HRS, Nowshera and Attock which enables the farmer to fetch more prices in the market.



7. Effect of foliar application of micronutrients on growth and quality of peach

To enhance the tree growth as well as fruit quality. The given plant variety was sprayed at pre bloom and full bloom stage.



8. EFFICACY OF DIFFERENT PREVENTIVE MEASURES FOR CONTROL OF FRUIT FLY.

To compare different preventive measures for effective control of fruit fly. Since all treatments were applied at the end of May, 2018 during the onset of fruit fly season and this experiment is under process. However few glimpses of the trial is given below:





07-05-2018

Treatments	B1	B2	B3	B4	B5
T1	136	132	129	157	180
T2	07	13	19	21	09
T3	11	14	17	13	16
T4	05	09	11	18	17
T5	11	13	09	17	21



14-05-2018

Treatments	B1	B2	B3	B4	B5
T1	200	178	112	290	364
T2	27	33	29	42	53
T3	23	19	33	29	22
T4	15	19	22	13	29
T5	23	17	19	20	27

Spray of different chemicals on control of fruit fly

FRUIT FLY COUNT

30-04-2018

Treatments	B1	B2	B3	B4	B5
T1	33	44	23	61	73
T2	04	09	16	17	12
T3	13	17	11	10	13
T4	03	06	10	08	17
T5	04	11	09	12	13

21-05-2018

Treatments	B1	B2	B3	B4	B5
T1	178	213	98	227	266
T2	36	28	39	42	39
T3	28	29	41	33	29
T4	19	21	27	21	27
T5	13	27	29	33	37

Cherry

9. ADOPTABILITY STUDIES OF CHERRY UNDER SOON VALLEY CLIMATIC CONDITIONS

Different growth and yield parameters of Cherry cv. “Sasha” planted in January 2017 in the research area of the station will be studied to assess its performance and fruit potential in the area.

Grape

10. Impact of Retractable Polyethylene Covering On Late Maturing Grape Variety cv.”Italia”.

To save “Italia” cv. of grape from rainfall impact to avoid fruit rotting and berry cracking. Polyethylene covering reduced Rottening and splitting of fruit berries while berry weight and TSS was higher. It is recommended to use polyethylene covering during rainy season.

Fig

11. Collection and Acclimatization of Indigenous And Exotic Fig Germplasm.

To collect indigenous and exotic fig germplasm from different resources / areas for strengthening of gene pool of the station. Fig Germplasm was collected from different location in the Punjab. Preliminary data regarding growth rate is being recorded.

. Pecan Nut

12. Standardization Of Propagation Method Of Pecan Nut

Pecan nut is a prominent member of nut family. It is a lovely nutritious and popular fruit among the masses. Conventional propagation method for pecan nut is through cuttings. The present study was conducted to find out the appropriate and rapid propagation technique for Pecan Nuts.

Data revealed that maximum sprouting (85.3)%, growth rate (5.8 cm) and plant height (9.2 cm) were obtained through seed followed by aerial layering. Propagation through cuttings had the lowest results. Soon valley area and its adjacent parts have the agro climatic conditions that are very conducive for the commercial production of olive varieties. Propagation is the main concern owing to low percentage of rooting success.



Introduction

Fruit and vegetable development project was initiated during 2006-2007. After making hectic efforts GPU of peach was established at Kathwai which comprises of sixteen varieties of peach in mother block while there are eight varieties are included in the multiplication block, A brief account of the same is given as under:-

MOTHER BLOCK.

Mother block of the GPU consist of 16 varieties as detailed under. Following cultural practices/operations were carried out in multiplication block of peach:

China -5	Ryan Sun
A-6	Spring crest
Maria Delizia	Summer Lady.
Indian Blood	Flame Crest
Alberta	Florida King
Benedict	Early Grand
Coronet	Plain-4
Florida Gold	A-669

MULTIPLICATION BLOCK

Multiplication block comprising of Two Plots has been established at Khatwai. Following cultural practices/operations were carried out.

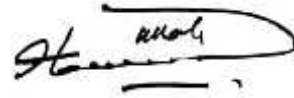


Sr No.	Variety name	Total
1	Early Grand	85
2	Ryan Sun	50
3	Alberta	20
4	Indian blood	20
5	coronet	50
6	Florida Gold	50
7	A-669	50
8	Florida king	50
	Total	395

Success story:

After a thorough study of the sixteen varieties in the mother block have been screened out which are included in the while out of eight varieties- four varieties i.e. Early Grand, Florida King, A-669, and Plain-4 have been registered. Budwood of the following fifteen new medium low chill Varieties have been budded in the nursery to test out the adaptability response.

Sr No.	Variety
1	Sun High
2	Bi-Centinel
3	Tex-Y5-67
4	Khyber II
5	6.5 Swat
6	Key Stone
7	Prim Rose
8	Loring
9	Arsum I
10	Majestic
11	Sunland
12	Camden
13	Sun Brite
14	June Gold
15	Khyber-1



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