



## OVERVIEW

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. Valley is situated at an altitude of 700-800 m with average annual precipitation ranges from 350-500 mm. Valley is suitable for raising of grapes, almonds, citrus, olives, and other horticultural crops in specific pockets of pothohar region especially district Khushab, Attock, Jehlum, Rawalpindi and Chakwal

### **Olives**

#### **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.



**Olive cuttings in non soil media**

#### **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**

#### **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).

## 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.

## EFFECT OF DIFFERENT CONCENTRATIONS OF MORINGA OLIFERA 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

#### 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.



### **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.



### **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
<b>T1</b>	136	132	129	157	180
<b>T2</b>	07	13	19	21	09
<b>T3</b>	11	14	17	13	16
<b>T4</b>	05	09	11	18	17
<b>T5</b>	11	13	09	17	21

**14-05-2018**

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



**21-05-2018**

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

**Spray of different chemicals on control of fruit fly**

**FRUIT FLY COUNT**

**30-04-2018**

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

## Cherry

### **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

### **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

### **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

### **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. Varieties are Sun High, Bi-Centinel, Tex-Y5-67, Khyber II, 6.5 Swat, Key Stone, Prim Rose, Loring, Arsum I, Majestic, Sunland, Camden, Sun Brite, June Gold and Khyber-1

### **List of Senior Scientists**

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