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AGRO-TECHNOLOGY FOR THE SMELTING OF SUBTROPICAL PLANT IN UZBEKISTAN

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The President of the Republic of Uzbekistan, SH.M.Mirziyoyev, speaking at the session of the People's Deputies of the Surkhandar region on 11 February 2017, set the objectives that the reduction of a certain cotton paddle in our country, the creation of fruit, subtropical, citrus orchards and vineyards, Planting of higher-quality crops, renovating old orchards through intensive cultivation contributes to high yields, thus providing the population with fruit and vegetables and the rest will be exported to foreign countries (1).

The word subtropics from Latin means subtropically closer to the tropics. A belt located between 300 northern and 200 southern latitudes from the equator is called a tropical belt, which is home to two seasons of heavy rainfall and low rainfall, and the belt closest to it is called a subtropical belt.

The subtropical belt in the sphere of the CIS covers the eastern Caucasus, the coasts of the black sea of the Caucasus, Azarbaijan, Georgia, the southern coast of the Crimea, Moldova and parts of Central Asia.

Due to the origin of the subtropical culture under such conditions, the climate is highly demanding with high temperature.

Subtropical crops have a variety of norepods with only four species: pomegranate, figs, persimmon and unabi.

Because subtropical crops are heterogeneous, they are called heterogeneous. They are also called leaf-dropping, as they are constantly falling leaves during the growing season. Subtropical crops and their composition are also diverse. For example, the fruit of the grenade contains 15-20% sugar of 0.5-0.9% citric acid, tannide, iron, various vitamins. For figs, sugar reaches up to 30%, and for sugar, figs rank first among fruits.

Persimmon contains a lot of sugar, up to 25%, a lot of vitamins A and C, iron, protein, tannid and other useful hangings. The unoabi foetuses contain the weight of routine, which is important in the treatment of

cardiovascular diseases, and in the foetuses up to 25% sugar, 1.8-2.9% protein, 3.7% oil and 10-15 times more vitamin C than in the citrus.

The frost resistance of these crops is not solitary, but the height of the trees is very different.

If the persimmon reaches 12-15 meters, then unabi-8-12 m fig-4-12 m, grenade-3-4 m (2.3). Subtropical crops, as opposed to seed, pebble and nut crops, are not stable to low temperatures, and at temperatures of 17-180C they are severely damaged, but only unabi lives up to 300C of frost.

Yields differ according to the variety and the care of the varieties until they are fully fruitful.

One persimmon tree can give 150-200 kg, ounce 50-80 kg, figs 80-100 kg, pomegranate 20-30 kg of fruit.

Also different period of beginning of fruiting, grenade after 3-4 years, figs 2-3, persimmon 3-4, unabi 2 years, correspondingly different and the period until full maturation.

Depending on the origin of the species and agricultural machinery, the duration of life

varies, in particular in granite 200-300 years, figs 50-60 years, persimmons 60-80 years, unabi 80-100 years.

Although they occurred in close family conditions, they also occurred during harvesting and transportation.

Subtropical species and family

Table-1

species		Family	
in Russian	in Latin	in Russian	in Latin
Grenade	Granatum	Pomegranate	Punicaceae
Figs	Eleagnus	Mulberry	Moraceae
Persimmon	Diospuros	Edinoe	Diospuraceae
unabi	Zizuphus	Cruise ship	Zizuphaceae

The table shows that subtropical plants belong to different families, so it is impossible to cross them.

Origin and distribution of subtropical plants

Subtropical plants as a species occurred in humid subtropical zones with a high temperature climate.

The wet subtropics cover the Eastern Caucasus, the Black Sea coast of the Caucasus, Iran, Turkey, Georgia, Dagestan, Azarbaijan, South Central Asia, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan, the South Coast of the Sea of Japan, Eastern China, India, the South Flat Mountains of Brazil, America, Southeast Africa, subtropical Australia.

In these regions, they are found in wild forms, including about 40 species of unabi, about 200 species of persimmons, and many types of pomegranate and figs, which occupy significant ploshads.

Among the subtropical crops in Central Asia, grenade is the most common. It has long been cultivated and has developed a distinctive high-yield agricultural technology.

Uzbekistan, too, is home to the culture of pomegranate. It is mainly distributed in the Namangan, Andijan, Fergana, Kashkadarya and Surkhan-Darya oblasts, where high yields meet world standards.

Persia has been widely dispersed in the republic in recent years. Three species are Caucasian, Virginia and Wasotnaya. Of these, Virginia and Wasotnaya are widely used in the breeding of new high-yielding varieties. Numerous studies have shown that better and better harvests can be obtained under the conditions of Surkhan-Darya in Kashkadarya oblasts.

Unabi is mostly found in the homestead.

Pomegranate, figs and unabi are multiplied by cuttings and persimmons only by crossing between different varieties within the species (2.3).

Land selection, preparation for planting and planting of subtropical crops

Subtropical crops are well grown in all types of soil, except inhabited, wetland and with groundwater below 1-2 m. In preparation for sowing, the soil is cleaned of weeds, small stones and other harmful elements, followed by autumn ploughing, 40-45 cm deep. Before ploughing, 20-30 tons of manure, 100-150 kg of phosphorus, and 100 kg of potassium per hectare are added.

In the spring, the soil is levelled and ploughed, and before planting the seedlings in the spring, the land is divided according to the planting scheme.

Subtropical plant seedling scheme
table-2

Plant	Spacing m	Between plants M	Number of plants w
Grenade	4	4	625
Figs	5	4	500
Persimmon	6	6	280
unabi	6	6	330

Care of young and productive trees

After planting and forming young seedlings to reflect solar radiation 2/3 part of stems white with a solution of lime. This process is repeated in the autumn period. For the purpose of watering, the grooves are cut on two sides from the burners on a growth of 30 cm.

During the growing season, the soil spills 2-3 times around the stem area. Prior to the fruiting of the trees, it is possible to sow early-ripe crops such as potatoes, marcovix, cucumber, tomato, radish, and cotton.

In spring the soil is broken up 3-4 times at a depth of 10-12 cm, during the ripening of the soil after each irrigation. Prior to spreading, 8 kg of manure, 150-180 g superphosphate or 120-150 g ammophosphate, 80-100g of potassium chloride around the stem area are applied to the soil.

It then develops, trims and combats the diseases and pests of these crops (4.5).

Subtropical crop varieties

It's been a long time since, through an unscrupulous and ingenious selection of local varieties. Farmers have created a series of mesic varieties.

Thanks to the development of science and technology, new breeding varieties have been developed. When planting these varieties, farmers collect high-quality crops.

Diseases and pests of subtropical crops and measures to combat them Pomegranate diseases and pests

The white wing is assembled around the buds and at the ends of the young shoots, the juices of the plant are sucked out, and they reproduce very quickly. The grenade leaves are deformed, yellow.

Control measures: Wash the plant with a weak soap solution. In case of a severe infection, be treated by an actress or a fufanon.

The panel is located at the bottom of the leaves. Adults live under the protection of a wax board that is tightly attached to the leaves. There are yellow spots on the grenade's leaves, and when the leaves are heavily contaminated, they fall.

Control measures: remove the pests, treat the whole plant with soap solution, in case of large contamination - actelle (15-20 drops per 1 litre of water).

The spider mite settles on the bottom of the leaves, covering it with a web. The grenade leaves are discoloured, blackened and burned.

Control: Regularly moisturize indoor air and spray water on the plant. If you have a severe infection, treat it with an actress or decidis.

Aphids cause discoloration and pomegranate leaf twisting.

Control measures: treat the grenade with a soap solution, in case of severe infection by the actelle (15-20 drops per 1 litre of water).

The mealy dew on the leaves and stems appears a mealy or dusty stain. The grenade leaves are brown and falling.

Control: Remove all affected parts, treat the plant with fundazol (1 g per 1 litre water).

Fig diseases and pests

Red moth of figs. This pest will give three generations in a season, severely injure its caterpillars, and bite the larvae and pulp of the fetus up to 30-50%.

Control measures: Spraying of Karate 58 during 1-2 generation reproduction.

Grey rot in figs

The disease is fungal in nature, damaging the harvest of the fig tree and influencing its appearance and overall development. In the presence of grey rot, there is a mass rot of mature and immature fruit, the death of shoots. Conidines and fungal spores spread rapidly throughout the tree, and then increase the range of the infection to adjacent sites. At the initial stage of the disease, figs are marked with shape deformation, a white patch which eventually turns into a rotting brown patch. The appearance of the fig tree shows a noticeable weakening, leaves and shoots lack juice for normal growth. The disease most often develops when the temperature of the air is lower and the humidity is higher.

How to Fight:

In the past, sulphur rot in the early stages of disease was combated by the spraying of alkaline solution with benzimidazoles. Some time later, horticulturalists noticed the inefficiency of these products, as mutated grey rot mushrooms adapted to survive the application of the solutions to the tree.

The Bordeaux liquid has proved to be positive against the grey rot of figs, but due to its direct impact on the quality of the fruit, spraying is best done only in early spring, or in autumn. Disease-resistant plants are those whose seeds were pre-treated with grey fungicides prior to planting.

Preventing the further spread of grey rot in the tree of figs begins by splitting the

infected fruit into a separate bucket with little water. Next, we begin to trim the unfit sprouts that will need to be burned with the fruit away from the garden. Preparations with a wide range of action, including grey rot, include «Actellic». A single spray is sufficient for the figs and is carried out before flowering begins.

Persimmon diseases and pests

Most damage to persimmon is caused by grey rot, and from pests is caused by Japanese false shielding. Grey rot affects not only the young shoots, but also the flowers, tied, even the fruits. She shows up in May. And it is possible to get rid of the grey rot three times by spraying the crown with 1% solution of borscht liquid. The first was in early April, then before the bloom, and finally after the bloom.

False shield maggots look like tiny white stars. It usually hatches in July. Adult females are rounded, bulging. Both the shoots and the leaves are affected. During the hatching period, a 3% mineral-oil emulsion of the preparation is treated.

Persimmon pests Domestic persimmons are rarely affected by pests. Sometimes you can find a shield or a spider web made by pincers. Such pests feed on plant juice. At home they can be easily disposed of by watering under the root of Aktara and spraying with Carbophos. In the gardens, pests such as worms and shields are most commonly found in the tree.

Various biopharmaceuticals, such as boveerin, bicol, acarin and actophyte, are used to control pests and treat diseases. Haupsin is a double-acting drug that helps to eliminate both diseases and certain pests. It is desirable that pests are collected regularly by hand and destroyed.

Diseases and pests unabi. Unabi is almost unhealthy, and pests don't touch him either. Birds are interested in ripe fruit, so

berries should be removed as soon as they are ripe.

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