



## CULTIVATION TECHNOLOGY OF PISTACHIO

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**Abstract:** Information on the technology of pistachio and pistachio leaf growing in Surkhondarya region.

**Keywords:** pistachio, blunt leafy pistachio, essential oil, chops, provitamins.

### Introduction

In our developing country, as in every field, a number of activities are being carried out in the field of growing fruits and vegetables and exporting them. For example, during his visit to Surkhondarya region on January 19-20, President Shavkat Mirziyoev got acquainted with the projects implemented in the region for the development of forestry. The declaration of 2018 by the head of state as the year of active entrepreneurship, support for innovative ideas and technologies paves the way for the implementation of promising projects in the field of forestry. In particular, special attention is being paid to the effective use of rocky, infertile land, which has been used as pasture until now, the expansion of green areas by planting pistachio groves, the planting of medicinal plants between the rows until the pistachio tree begins to yield, and the cultivation of valuable raw materials. The projects implemented in Surkhondarya region are important in this respect. In the mountain and sub-mountain areas of the region, there are many unused land areas, on which pistachio groves were planted on an average of 350 hectares every year. Now it is planned to establish pistachio plantations on 30,000 hectares in the balance of the Bobotog State Forestry in Uzun district alone. According to the project, 2.5 thousand hectares of pistachios will be created this year. In 2018-2020, pistachio plantations will be expanded to 8,000 hectares and 2,000 jobs will be created.

The pistachio tree is a member of the Pistaceae family, and the pistachio tree typically lives up to 300 years. Pistachios are widespread mainly in Southern Europe, Western and Eastern Asia, East Africa and Central America. In our republic, mainly pistachios, Handon pistachios (*Pistaceae vera*) and Blunt-leaved pistachios (*Pistaceae mutica*) grow. Pistachios are usually adapted to grow in dry lands, the seedling grown from the seed will naturally harvest in 10-12 years. This makes it possible to harvest earlier, that is, it will be harvested in 6-7 years.

Pistachios contain substances necessary for human health. Currently, efforts have been made to create varieties of pistachios that can be harvested earlier and grow on irrigated lands, and to find ways to increase them and use them in technology. It is 2.5-10 meters tall, and its branches are 10-12 meters wide. Pistachio 2-housed plant can withstand -40 degree frost. It blooms in April-May, first male and then female bushes. The flower consists of a panicle, pollinated by the wind. The fruit ripens from the end of August to the beginning of September. After the pistachio fruit ripens, the outer skin peels off and the tip opens. Pistachios are naturally harvested in 10-12 years in dryland,

and in 8-9 years in irrigated lands. One bush of wild pistachios gives up to 15 kg of fruit, and 35-40 kg can be obtained from an 8-year-old tree. The pistachio tree is drought tolerant [1].

Pistachio planting in our country began in 1937 in the Bobotog mountain of the Surkhandarya region, more than 2000 pistachio groves were established around the Kattakorgon reservoir. The total area of pistachio fields in Uzbekistan is more than 80 thousand hectares. At the Forestry Institute of Uzbekistan, 6 varieties of pistachio were created, more than 30 varieties of pistachio were collected.

Pistachios do not differ from nuts in terms of composition, they contain essential oils. The color of the fruit is green, the core is surrounded by a thin skin. The pulp contains up to 63% fat, 22% protein, 7% carbohydrates. It also contains B group vitamins and A group provitamins. The fruit is eaten dried or fried.

In addition, pistachios contain antioxidants, useful fats, dietary fiber, protein, calcium and phosphorus. Pistachio is a cure for many diseases, including it provides heart health, calms the nerves, improves metabolism, has skin rejuvenating properties, strengthens the conjunctiva, contains iron and is a cure for camponitis [2].

For the experiment, we chose Uzun District, a region where pistachios are widely distributed, and in order to reduce the time of pistachio seeds entering the harvest, a well-opened seed mouth was selected. First, the seeds are treated with special chemical drugs, then the drugs are placed in a container filled with water and frozen. The seeds are frozen for 3-5 days. After thawing, the seeds are removed from the water and buried in a mixture of wet soil and sand, covered with wet gauze, and after the moisture of the gauze escapes, it is covered again with moisture. A small amount of sunlight should fall on the seeds. The seeds remain in the soil for 3-4 days, and after germination, the seed pods are carefully removed from the soil and transplanted into special 30-40 cm long salafan containers with good soil and a small amount of sand and manure. The sprouted seedling is buried in the soil, the climate should be moderate. A small amount of sun will fall on the seed. Depending on the condition of the soil, a small amount of water is poured into the soil every 2-3 days.

The seeds will turn blue in 5-7 days, it is recommended to pour water until they turn blue, other chemicals should not be given until germination. Every 3 days after sprouting, the surrounding area of the seedling is softened with a knife without damaging the root of the seedling. In addition, 1 cap of carbomite is mixed with 1 liter of water and given every 3-4 days, more than 1 cap of carbomite can cause wilting of new seedlings. In addition, it is necessary to pay attention every day. With good care, the length of seedlings reaches 30-40 cm in 3 months. Now the seedlings have been planted for more than 2 months and their length has reached 20-25 cm. So the growth of seedlings increased by 0.4 cm per day. 70 seeds were planted for planting and all of them sprouted. Later, 12 of them died due to the excessive use of chemical drugs. The remaining 58 seedlings are now developing well and are growing normally.

Today, the price of pistachios is expensive compared to other fruits, for example, because pistachios are difficult to grow, and it takes many years for them to come into fruit. The market price of pistachios is around 70-80 thousand. We learned that pistachios are highly medicinal and contain many useful substances. It should be noted that 100% to 80% of the population can use it, but it is difficult for the rest to use it due to its high cost and low availability. Taking this into account, we would have found a solution to this problem if we could provide quick-harvesting varieties of pistachios or old varieties using chemical and biological methods. Currently, we are carrying out this work, and if this experiment has a positive result, this work will be expanded and planted in the district, region, and republic. Among our people, it is said that if you eat 5-10 pistachios a day, your memory will be stronger. Pistachio is a cure for many diseases and is widely used in medicine.

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