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ОСОБЕННОСТИ ВЫРАЩИВАНИЯ ЯБЛОК В ПРОВИНЦИИ ВАРДАК РЕСПУБЛИКИ АФГАНИСТАН

FEATURES OF APPLE GROWING IN WARDAK PROVINCE OF THE REPUBLIC OF AFGHANISTAN

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Точных свидетельств или документации о происхождении и начале выращивания яблок в провинции Вардак нет. Однако изучение истории этой культуры указывает на то, что яблони были завезены из других провинций Афганистана, поскольку дикие виды этой культуры до сих пор выращиваются в Афганистане. Местные старейшины свидетельствуют, что культура яблок в провинции Вардак культивировалась с древних времен. Из древней истории яблок следует, что некоторые сорта яблок могут быть выведены в провинции Вардак. Достоверно известно, что четыре десятилетия назад в провинции Вардак выращивали более тридцати местных сортов яблок

There is no exact evidence or documentation about the origin and beginning of apple cultivation in Wardak province. However, the study of the history of this crop indicates that apple plants were brought from other provinces of Afghanistan, since wild species of this crop are still grown in Afghanistan. Local elders test that apple culture has been cultivated in Wardak province since ancient times. From the ancient history of apples, it follows that the origin of some apple varieties may be Wardak province. It is reliably known that four decades ago, more than thirty local varieties of apples were grown in Wardak province

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There is no exact evidence or documentation about the origin of apple cultivation in Wardak province. However, the ancient history of apples shows that the modern cultivated apple was first introduced to other parts of the world from Afghanistan, as wild varieties of fruit trees are still grown in Afghanistan. Since ancient times, most of the local varieties of apples were grown in Wardak province.

From the ancient history of apples, it is evident that the origin of some apple varieties may be Wardak province. Since ancient times, most of the local varieties of apples in Wardak province were not grown by farmers in the traditional way. Four decades ago, more than thirty local varieties of apples were grown in Wardak province. With the advent of improved varieties, many local varieties of apples were displaced, and some of them were destroyed by drought ten years ago. About thirty years ago, the former Minister of Agriculture Dr. Abdul Wakil first brought improved varieties of apples (Maling, Beiruti) from the Middle East to the country, which were first introduced to Wardak province and then to other provinces.

Maidan Narakh district is one of the world centers of apple breeding. Improved varieties quickly became popular in the province due to early maturity, better quality, high yield and a number of other advantages. It is not surprising that the Swedish Committee for Afghanistan established the first apple orchards in a number of districts of the province and provided farmers with improved seedlings, which led to the widespread introduction of improved apple varieties and the establishment of orchards. Currently, fifty percent of the irrigated land in the province is occupied by orchards, most of which are used for apple orchards, which is considered a good source of income [1,2,3,4].

In Wardak province, according to the representatives of the provincial agricultural department and some farmers, there are many varieties that produce a large harvest every year and have good resistance [5,6,7,8]. The following apple varieties are found in Wardak province:

- 1. Anna: has large cylindrical, red, sweet fruits that ripen in September.
- 2. Beverly Hills: Blooms late, produces medium-sized yellow fruits.

- 3. Breadburn: Flowers in early summer, produces medium-sized, reddish-brown fruit with an attractive appearance. It was first produced in New Zealand.
- 4. Dorsett Golden: Ripens in autumn, similar to the Golden Delicious variety.
- 5. Fuji: This variety blooms late, has medium-sized fruits, slightly flattened, yellow, colorful, with sweet syrup and sweet, honey taste. Ripens in October and stores well. Now it has become popular in Wardak province.
- 6. Gala: It blooms in April, has medium, small yellow fruits and is very susceptible to fire blight. It is now abundant in Wardak province and produces excellent yields.
- 7. Gordon: It blooms in April and when ripe it forms large fruits with green skin.
 - 8. Opening: has a bright red color
 - 9. The red devil is reddish-yellow in color.
- 10. The tasty variety has a red color and does not fade from the stem to the end.
 - 11. Red Windsor, which has a reddish-brown colour.
- 12. Yantar The fruit is oval-shaped, with a red stripe on the top. The fruits are sweet, with a dense skin, very convenient for transportation.
- 13. Yellow Newton. This apple variety is large, round and yellow. The flesh is creamy, very juicy, of excellent quality.
- 14. Star King. The fruits are red, the skin is thick, the juice is very sweet, the flesh is white, ripens in May.

15. The beauty of Rome. It is large, round and of good quality. It ripens within the first month. It is one of the self-fertile varieties, the fruits of which are stored for a very long time.

Wardak Province is located at (68.86383) degrees longitude, 34.39458 degrees latitude and at an altitude of 2210 meters above sea level. On average, 10,980 hectares of arable land in the province are occupied by orchards. In 2013, the area of fruit crops was 6400 hectares. The annual fruit production was 900,000 tons. The sources of water in this province are rivers, karezes, springs and deep wells. Wardak Province is considered one of the few provinces in the country where in winter the mountains and plains are covered with snow, and all nature is white, and in summer the weather is mild [9,10,11,12,13,14,15,16]. Wardak Province is one of the provinces in Afghanistan with the best climatic conditions for growing apples. Below are the characteristics of the districts of the province:

✓ Central District:

The area, like other areas, has a favorable climate, weather and soil. Although the area of this area (center) is small, it still has 720 hectares of land under apple orchards. The varieties commonly found in the region are Gala, Galaxy, Shahi, Beiruti, Japanese Sweet, Silver, Sari and other local varieties.

✓ Saidabad District:

The area has an area of 1,033 square kilometers, an average altitude of 2,100 meters above sea level and is located between 43 and 68 degrees longitude and 34 and 48 degrees latitude.

On average, 1280 hectares of land are occupied by apple orchards. The best apple in this area is Tangi Dari, Sheikhabad, Shaniz, Danhi Valley, Musa Khel and other areas are also worth mentioning as they give more produce every year.

The following apple varieties are common in the region: Spini, Maling, Dzhursi, Hogi, Shahi, Tarkhki, Troshi and others.

✓ Bandchak District:

The area has an area of 1,192 square kilometers, an average altitude of 2,200 meters above sea level and is located between 35 and 68 degrees longitude and 34 and 60 degrees latitude.

On average, 1,450 hectares of land are occupied by apple orchards. In this area, apples are grown in large quantities, including the varieties Khawat Dari, Siab Dari and Goda., Boxmand, Alisha.

✓ Darrukh District:

The area has an area of 480 square kilometers, is located at an altitude of 2200 meters above sea level and is located between 48-68 degrees longitude and 22-34 degrees latitude.

About 1400 hectares of land are occupied by apple orchards. Apples are grown in abundance in this area. In the villages of Sadmardi, Chinzai, Omarkhel, Akchi, Dadal, Karim Dad, Shahabuddin, Durani and Badam.

✓ Jalgay and Daymirdad districts:

The area has an area of 1,357 square kilometers, is located at an altitude of 2,450 meters above sea level and is located between 18 and 68 degrees longitude and 13 and 34 degrees latitude.

On average, 1,320 hectares of land are occupied by apple orchards.

The region is divided into two parts: the lower plain and the upper plain. However, the best areas with the most orchards are: Changa, Shar.Tidi, Nazkihel, Tuika, Chatwa and Sadakhel. Who has more apples, who earns more every year?

Common varieties found in this area are Berati, Gala, White, Red, Japanese, Hogi, Samrit, Shahi, Maling (6,9,11,12).

✓ Jagatu District:

The area of this region is 1,367 square kilometers, it is located at an altitude of 2,330 meters above sea level between 21 and 65 degrees longitude and 15 and

36 degrees latitude.

On average, 340 hectares of apple-growing areas are occupied by orchards in the region.

There are not many apple orchards in this region but still in some areas like Guldari, Savsang, Aryab, Bedmashk, Kunj Jaghato and Durani there are apple orchards but their productivity is very low.

✓ Jalrez District:

The area has an area of 1,139 square kilometers, an altitude of 2,225 meters above sea level and is located between 39 and 36 degrees longitude and 28 and 34 degrees latitude.

On average, the area of apple orchards in the region is 1,360 hectares.

Many of the most interesting varieties of apples in this region grow in these areas (Takani, Pasni Jalrez, Sarchma, Sanglah and other areas).

And usually the varieties grown in this area are Gala, White, Red, Japanese, Samrit, Shahi, Maling, Hoshi, Troshi and other similar varieties and the farmers earn a lot of money from this.

✓ Two districts of Behsud:

Part One: The area has an area of 1,327 square kilometers, an altitude of 2,950 meters above sea level and is located between 15-28 degrees longitude and 30-43 degrees latitude.

Second part: The area of the district is 2198 square kilometers, the altitude is 2975 meters above sea level and is located between 57-67 degrees longitude and 21-34 degrees latitude. There are not many apple orchards in this district, but they are still found in the lower districts such as Tagab, Rakul, Sarthala, Sangshande, Hasht Darakht, Sarh Abad, Aab Shirom and others, but the annual production is not so high. The average area of apple cultivation in these districts is 380 hectares.

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