

GENERAL DESCRIPTION OF SEED FRUIT GARDEN AGROSENOSES OF WESTERN FERGANA

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ABSTRACT

This article provides a general description of the Western Fergana region, a description of the agrocenoses of the seed and fruit garden. The climatic conditions of the Western Fergana region are characterized by relatively dry and high temperatures during the season, and sometimes there is a large-scale increase of harmful insects and the formation of breeding centers in these regions.

Keywords: Temperature, soil, fruit, collector, precipitation, relief, monitoring, vegetation, humus.

INTRODUCTION

General description of the research area, soil properties and climatic conditions. Fergana region is located in the south-east of Uzbekistan, in the south-west of the Fergana valley. The territory of the province is a unique region of the desert region, and in terms of the total annual useful temperature, this country does not lag behind the subtropics. Fergana region borders the Republic of Tajikistan to the west, Namangan region to the north, Andijan region to the east, and Osh and Bishkek regions of the Kyrgyz Republic to the south. The border line is 600 km long. The boundary line of the region resembles the structure of a silkworm cocoon, the western and eastern parts are wide in the meridian direction, and the middle part is much narrower. The border line runs along the right bank of the Syrdarya River at a distance of 50-55 km in the west, in the north it consists of the sands and outcrops of central Fergana, and in the south it consists of hills and inter-hill plains. Located in the mountain region between the villages of Shakhimardon and Sokh, they occupy heights of 1400-1800 meters. The land area of the region is 7.3 thousand square km. 79.2% of the region's territory is occupied by plains and low plains, 20.8% by mountain slopes, foothills and hills. Sand dunes occupy about 7% of the land area of the plains. As a result of farming in these lands since ancient times, especially in the following years, the relief of the plain in the region has changed dramatically. Today, in all places, only the mapped lands surrounded by irrigation and meleoation dams, coastal elevations consisting of dirt piles on both banks of the collector-Zovur reservoirs, and irrigation ravines of various sizes are visible.

Due to the geographic location of the region in the interior of the Eurasian continent, as well as solar radiation, the structure of the Earth's surface and atmospheric circulation, it has hot, dry and long summers, mild and short winters, and precipitation occurs mainly in spring and autumn. continental type of subtropical climate is formed. For example, on June 22, the sun rises 73 degrees above the horizon in Fergana, and 74 degrees in Shakhimardan. The period of sunlight lasts a long time and corresponds to 2600-2800 hours on average in all districts of the

region. The topography of the valley has a great influence on the formation of the climate. The relief features and the location of the earth's surface at different heights are evident in the differences in climate between some districts of the region, especially in the distribution of heat and humidity. The biggest difference is between plain and mountain districts of the region. Since the western side of the valley is open, air masses enter from this side. High mountains trap air mass and cause more precipitation in the mountains.

The climate of the region is also affected by human economic activity. The presence of irrigated oases occupying especially large areas significantly reduces the maximum summer temperature. Increases moisture, reduces the strength of garimcells. The average annual temperature is 13-14⁰ C in the plains and 9-10⁰ C in the mountains. The coldest temperature in the region is -30⁰C. The highest temperature was 46⁰ C in Besharik, and the lowest temperature was -30⁰ C in Shakhimardon.

The frost-free period lasts an average of 200-300 days in the plains and 190 days in the mountains.

Rainfall in the region is distributed by region and season. The average annual rainfall is 900-200 mm in the plains and 300-600 mm in the mountains. The least rainfall (80-100 mm) is in the Koqon Shorsuv range, and from here it increases to the east and towards the mountains. The most rain will fall in the south of the villages of Shakhimardon, Yordon and Mindon. Winds blowing from "Fergana gate" to the valley are called "Kokan wind". These winds are observed in May and July. Windy days will last 40-50 days in the west.

It is known that in the territory of Fergana region, like the whole of Central Asia, it is characterized by its dry, hot summer and hot spring, and such hydro-hill conditions in winter are definitely one of the factors affecting the distribution of the soil cover of the region.

According to the conditions of soil creation and the influence of irrigation, the following soil types can be distinguished in the territory of Fergana region; Hard soils. This type of soil is distributed in places with an altitude of 1200-1600 m above sea level, the amount of humus in the surface parts is more than 4 percent, it gradually decreases towards the lower layers, and the top of the soil consists of a well-worked layer. But the slopes are washed to different degrees, so the mechanical composition of the soil is light, sandy, skeletal and stony. The use of this soil is very limited, and agrarian forest mining is required to prevent flooding. These soils are distributed in the valley of the Sokh river, on the slopes of Tarontor, and the total area is more than 3000 hectares. These lands can be used for horticulture, agriculture and pasture.

Most of the territory of the province is occupied by gray soils. These soils are mainly divided into 3 types, from top to bottom, they are divided into dark typical (original) and light gray soils. Dark gray soils are mainly distributed on the mountain slopes of the Sokh River below the brown soils in vertical descent. With a total area of more than 10,000 hectares, the soil's water regime is not good due to steep and stony slopes, they are heavily washed, therefore, these soils are not well developed, stony, gravelly, and the vegetation cover is sparse. The humus layer reaches 30-50 cm, the amount of humus does not exceed 1.5-2 percent. It is recommended to plant drought-resistant trees and bushes (almonds, pistachios, etc.) in these areas, where these soils rich in carbonates are scattered, in order to save water and fight against erosion. Irregular use of pastures, blind cutting of trees and bushes should also be avoided.[1]

Typical (original) gray soils cover the entire southern part of the region, from the valley of the Isfara River in the west to West Ferganasoy in the east. These soils are distributed on mountain slopes, hills, and low plains between hills and hills. Accordingly, the thickness and mechanical composition of these soils vary depending on different conditions. In the Sokh-Isfara range, strongly washed stony and gravelly types are distributed, fine-grained soils are distributed in the hills, and fine-grained sandy, typical gray soils are also distributed in the east around Garbiy Fergonasay. Irrigated gray soils occupied large areas in the inter-hill and post-hill lowlands. This soil is rich in carbonates, but the carbonate layer starts at a depth of 25-30 percent. The amount of humus is not much, it decreases to 2% in the top layer and at a depth of 20 cm. Suitable for production.

Light gray soils and dark brown soils occupied the plains at the foot of the mountains and undulating soils on the scale of the regional borders. The total area is over 140,000 hectares.

Brown soils are scattered among gray soils and cannot be separated. In addition, the yellow-brown soils that have been used for irrigated farming have lost their characteristics and resemble gray soils that are irrigated in many ways.

The main large areas are occupied by pale gray soils. The parent material layer in the soil is gravel, mixed with sand and small particles. That is why there is a lot of gravel in the soil. The amount of humus is 0.5-1%, the gray soil with a thin layer of carbonate is spread to a depth of 15-20 cm, and 10,000 hectares of gravel in the region are gravel.

Meadow soils are characterized by the following signs: 1) throughout the entire vegetation period, the soil is evenly moistened with surface water; 2) rich in organic matter, non-stop growth of plants; 3) alternating aerobic and anaerobic decomposition of organic substances; 4) high location of ground water.

Salt marshes and marshy soils occupy 22 percent of the region's territory and are mainly distributed in the intersections of the Sokh, Isfara, Altariq and Margilon-Isfayramsoy rivers, along its foothills, and in the low plains of the plains. Complex alluvial meadows, alluvial meadow-swamp soils are scattered on the especially rough terrains of the Sirdarya highways of Fergana region, mainly consisting of forests. In these soils, cotton is planted in areas that are not covered by river water. Sandy lands also occupy a large area here.

In general, the entomofauna of western Ferghana is closely related to the above-mentioned indicators and vegetation.[4]

Uchkoprik district, where constant observations were made, was established in September 1926. Over the years, the district was changed several times under the names of Bibi-Ubayda, Uchkoprik, Molotov, Leningrad. By the decision of the Presidium of the Supreme Council of the Republic of Uzbekistan No. 581-XII dated May 8, 1992, the suspension under the name Uchkoprik was started. The area is 280.0 sq.km. The permanent population is 218,700 people. The total border length is 121.3 km. 23.4 km with Dangara district. 31.5 km with Buvaidda district. 27.1 km with Baghdad district. 28.7 km with the district of Uzbekistan. 6.4 km with Rishton district. 4.2 km from the city of Kokan. The number of farms is 868, of which 518 are horticulture and viticulture, 330 are legal farm. There are 1299.1 hectares of orchards in the district. 49.5 hectares of local productive gardens are 1-2 years old, and 1228.8 hectares are more than 3 years old. There are also 20.8 hectares of intensive gardens. According to the results of monitoring carried out in 2020, 63.9 hectares of orchards were found to be ineffective. General

The seeds include pears, apples, quinces, hawthorns, etc., and the most common of them is the apple. The biological characteristics of all fruit trees are different, some of them are similar to each other. Fruit trees begin to grow when the air temperature exceeds 10°C. A temperature of 20-30°C is the most favorable for their full growth. But the air temperature higher than 40°C burns the leaves and fruits of fruit trees, and their quality deteriorates. In some years, the temperature is warm in the spring and the trees are flowering, then the cold hits them when they produce fruit. [5]

Fruit trees like fertile, nutrient-rich, light, porous soils. Roots do not breathe well in heavy soils. A high yield can be obtained if the physical and chemical processes are good in the 100 cm part of the soil above the ground. The main feeding roots are located in the upper part. Fruit trees absorb more than 70 chemical elements from the soil. Macroelements nitrogen, phosphorus, potassium, and potassium, iron, sulfur, boron, copper are required more than microelements. Feeding gardens with organic fertilizers leads to a significant increase in productivity. [2]

CONCLUSIONS

The climatic conditions of the Western Fergana region are characterized by relatively dry and high temperatures during the season, which sometimes causes the large-scale increase of harmful insects in these regions and the formation of foci of their spread.

Winds blowing from "Fergana gate" to the valley are called "Kokan wind". These winds are observed in May and July, and strong windy days last 40-50 days in the west. This situation causes many pests to spread over long distances along the wind direction. The territory of Uchkoprik district, where constant observations were made, is 280.0 sq. km, the number of farms is 868, of which 518 are horticultural and viticultural, and 330 are farms with legal status. There are 1299.1 hectares of orchards in the district. 49.5 hectares of local productive gardens are 1-2 years old, and 1228.8 hectares are more than 3 years old. There are also 20.8 hectares of intensive gardens. According to the results of monitoring carried out in 2020, 63.9 hectares of orchards were found to be ineffective. In orchards, there are pears, apples, quinces, etc., the most common of which is apple.

REFERENCES

1. Ахмедов М.Х. Дендрофильные тли Западного Тянь-Шаня (фауна, формирование и зоогеографические особенности). Автореф. дис. ...канд. биол. наук. - Баку, 1980, - 26 с.
2. Добровольский Б.В. Фенология насекомых. М.: Высшая школа, 1969. -232 С.
3. Мухамедиев А.А. Тли Ферганской долины. - 1979. -Т.: Фан. -80 с.
4. O'zbekiston Respublikasi Qishloq va suv xo'jaligi vazirligi hamda o'simliklarni himoya qilish va agrokimyo markazi ma'lumotlari. 2008 y.
5. Xo'jaev Sh.T., Xolmurodov E.A. Entomologiya, qishloq xo'jalik ekinlarini himoya qilish va agrotoksikologiya asoslari. – Toshkent: Fan, 2009., – 73 b.
6. 16. Musaxanovna K. L., To'lanboevna M. M. PISA-OF STUDENTS AS AN INTERNATIONAL SCIENCE LITERACY ASSESSMENT PROGRAM. – 2023.
7. Madraximova Munojatxon To'Lanboyevna BO'LAJAK BIOLOGIYA O'QITUVCHILARIDA RAQAMLI TEXNOLOGIK KOMPETENTSIYASINI RIVOJLANTIRISH // SAI. 2023.

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8. Madraximova M. TALABLARNI TIMSS XALQARO BAHOLASH SO'ROVIGA TAYYORLASH TA'LIM SIFATINI YUKSALTIRISH OMILIDIR //Fan va innovatsiyalar. – 2023. – T. 2. – №. B9. – S. 323-328.
9. Mansurjonovna K. Z. MEDICINAL PLANTS AND THEIR IMPORTANCE IN HUMAN LIFE //Galaxy International Interdisciplinary Research Journal. – 2023. – T. 11. – №. 4. – C. 37-44