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NATURAL IN PASTURES OF NAVOYI REGION AND ANTHROPOGENIC CONDITIONS CLIMATE

Kha. A. Akbarjonov
1st Stage Master of Tashkent State Pedagogical University named after Nizomiy

ABSTRACT

This article shows the distribution of natural and anthropogenic conditions in the pastures of the agro-landscape of low mountains and deserts in the Navoi region.

Keywords: Agroclimate, thermal resources, hydrometeorology, table, statistical data, temperature, climate, creative works.

INTRODUCTION

The unique location of the agrolandscape of low mountains and deserts of Uzbekistan has a significant impact on the distribution and direction of air currents and their interaction with the earth's surface. It is for these reasons that, depending on the law of verticality, air temperature and atmospheric precipitation are different in mountain pastures and desert pastures. This, in turn, affects the formation and gradual development of natural soils.

From the point of view of agro-climatic zoning, the classification of regions according to specific leading crops distributed in Navoi region is given. For irrigated areas, it is indicated to grow cotton, rice, grapes, and corn crops, and for dry lands - grain crops with spikes. According to this, the territory of the Turan province is divided into a thermal zone and the regions are divided into a natural humidification zone based on atmospheric precipitation [1.].

In the Navoi region, thermal resources are distributed in the form of 8 thermal zones:

1. Hot or very hot - the sum of temperatures is more than 49,000 in the period when the air temperature is above 10 C. Here, the thermal resources are sufficient for more heat-demanding evening primrose, thin fiber cotton varieties.
2. Hot - the sum of temperatures is from 4400 to 4900 C. Here there is not enough heat for very late maturing cotton varieties, but they are enough for medium maturing cotton varieties, which are more common in Uzbekistan.
3. Moderately hot - the sum of temperatures is from 3500 to 4000 C. Thermal resources can ensure the cultivation of only fast growing varieties of cotton.
4. Very warm - the total temperature is from 3500 to 4400 0C. Here, there is not enough heat for cotton to give normal productivity, but mid-ripening varieties of grapes ripen well, early-ripening varieties of rice, and late varieties of grain corn.
5. Warm - the sum of temperatures is from 3100 to 3500 C. Thermal resources are sufficient for growing early varieties of grapes.
6. Moderately warm - the sum of temperatures is from 2800 to 3100 C. Thermal resources are sufficient to grow very early varieties of grapes.
7. Cool - the sum of temperatures is from 1000 to 2800 C. Thermal resources here do not ensure the ripening of grapes, rice and corn, but are fully sufficient for the germination of grain crops.
8. Cold - the sum of temperatures is less than 1100 C. Not suitable for agriculture.

From the above, it should be said that the areas of pastures selected by us correspond to zones with "warm", "moderately warm", "cool" and "cold" thermal resources. This situation shows that it is possible to plant agricultural crops that ripen in a short period of time or to use them in the fields of horticulture and viticulture.

6 zones are divided according to the nature of natural moistening with atmospheric precipitation of the territory of Navoi region:

1) Extremely dry - there is almost no water here, in non-irrigated conditions, grain crops can be harvested (GTK less than 0.11).

2) Very dry - natural moisture supply of spiky grain crops is less than 25% per year, that is, 2-3 years out of 10 years, spiky grain crops can be harvested without irrigation (GTK from 0.11 to 0.20).

3) Dry - spiky grain crops have a natural moisture supply of 25-75% per year, that is, 3-7 out of 10 years, spiky grain crops can be harvested on dry land (GTK 0.20 to 0.30).

4) Arid - natural moisture resources of grain crops - precipitation supply - 75-99%, in which 7-8 years out of 10 years it is possible to harvest grain crops from grain crops from moisture supply of the region (GTK - from 0.30 to 0.50).

5) Moderately moistened - every year, grain crops are provided with natural moisture resources (GTK more than 0.50-0.75).

6) Hydrated – GTK greater than 0.75. Overlapping of thermal zones and natural moisture zones from atmospheric precipitation allows to determine the following:

a) areas suitable for growing crops in terms of thermal resources, according to their heat demand for cotton, grapevine, grain crops, but artificial irrigation (hot and warm, but dry and very dry regions) conditions;

b) areas, heat-loving crops (cotton, grapevine) are suitable for cultivation only under irrigation in terms of thermal resources; less heat-loving (spike, cereal) - using a resource with natural moisture from atmospheric precipitation (hot and warm, but arid regions);

d) regions, unsuitable for growing heat-loving crops due to the lack of thermal resources, but suitable for spiky grain crops, extremely limited natural moisture resources from atmospheric precipitation (cool, but arid regions) only for irrigation;

e) regions that are unsuitable for heat-loving crops due to the lack of thermal resources, but have natural moisture resources (cool, but arid or humid regions) suitable for grain crops;

g) regions, even for grain crops that require little heat, are unsuitable due to the lack of thermal resources, despite the fact that they are sufficiently provided with natural moisture resources (cold regions).

Among all the natural factors in the mountainous and adjacent regions of Navoi region, climatic indicators play an important role in the formation of mountain, sub-mountain and sub-mountain pasture soil cover, especially mountain soils determine external and internal factors. In addition, the complex orographic structure of its territory has created unique and correspondingly unique agro-landscapes in different regions. In mountainous areas, gully erosion caused by snow and heavy rainfall, irrigation erosion in mountainous lowlands, and mainly wind (eolian) erosion dominates in the desert region [2.].

According to V.V. Dokuchaev, natural soil gradually develops due to the processes that take place over time under the influence of soil-forming factors - mother rock, relief, climate, flora and fauna, and human activity.

Soil-forming factors are in harmony with each other, one factor cannot be replaced by another. Only under the influence of their joint activity, under certain conditions, normally developed soils are formed. For example, living organisms in the soil are considered sources of organic matter, and their life activity depends on climatic conditions, that is, moisture and solar energy. Other factors also play an important role in the process of soil formation.

In the pastures of the Navoi region, moisture evaporation is several times less in the mountain pastures than in the desert zone. The main part of the annual precipitation falls in the autumn-winter and spring months, and in some high mountain areas, precipitation is observed even in the summer months. For this reason, grassland plants grow well in the areas where meadow-steppe soils are scattered.

According to the long-term average climate data of the Hydrometeorological Center of the Republic of Uzbekistan, the long-term average air temperature in Kyzylkumchol region is +11+16ºC, and all regions are absolute maximum air temperature indicators +39+42ºC. Such a high temperature leads to a sharp decrease in the amount of water necessary for the life of natural vegetation. Duration of cold days is 55-99 days in Kyzylkumchol region.

In the pastures of the Navoi region, the cold steady state of soil surface temperature for more than 100 days is 104 days in Qiziltepa, 110 days in Khatirchi, 113 days in Navbahor, and 127 days in Nurota. This situation shows that there is a possibility of planning the placement of intensive horticulture, viticulture and quick-growing agricultural crops in high mountain pastures.

Areas with desert pastures mainly belong to the province of the Central Asian dry continental climate of the Turan subtropical climate region and are distinguished by their unique characteristics, occupying the mountainous semi-desert region. The climatic conditions of this region are determined by its distance from the southern ocean and seas, and the proximity of deserts and mountain ranges. The general climatic conditions of the region are formed under the influence of two factors: the climate of the desert and the climate of the mountain deserts [3.].

The general features of the climate are its sharp continental dryness in the plains and highlands, a decrease in air temperature in the south of the hypsometric highlands, an increase in the amount of precipitation, solar radiation, large fluctuations in daily, monthly, annual and seasonal temperatures, and atmospheric fat It is reflected in the uneven distribution of their income throughout the year.

Atmospheric precipitation prevails over climate components in the formation of morphogenetic features of low mountain soils in Navoi region, i.e. formation of humic and carbonate layer, decalcification and other processes.

In conclusion, it can be said that the effect of rainfall is clearly felt in the areas of mountain pastures. In this case, the amount of precipitation falling on high mountain and mountain pastures, firstly, enriches the soil moisture reserve to one degree or another, secondly, it ensures the growth and development of plants, and thirdly, not only horticulture can be done on soils with sufficient moisture. , viticulture, but also indicates the wide possibility of placing

agricultural crops. In addition, based on the fact that the geographical location of pasture lands is the same as that of dry lands, when pasture lands are evaluated on the basis of the scale developed for dry lands for the assessment of natural fertility, the score of pale and typical gray soils is 21-30 and 31-40 points. ("below average"), dark gray and mountain brown soils indicate that the score credit is equal to 41-50 and 51-60 points ("average"). From the point of view of the law of verticality, it is appropriate to evaluate the soil fertility of pasture lands on the basis of the scale developed for the assessment of the natural fertility of dry lands.

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