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ENRICHMENT OF PASTURES OF HILL REGION WITH PROMISING FOOD PLANT VARIETIES

***Abstract**: This article describes the issues of increasing the productivity of natural pastures and enriching plant biodiversity through phytomelioration of hill pastures based on the use of promising varieties of pasture forage plants.*

***Keywords**: hill, natural pasture, artificial pasture, phytomelioration, species, pattern, variety, productivity.*

Relevance of the paper: Natural pastures of the Republic of Uzbekistan play the role of food reserves in the development of animal husbandry, which is an important sector of the economy. In recent years, due to the deterioration of the ecological situation, global climate change, the tragedy of the island, as well as the use of pastures without complying with the necessary regulations (unsustainable use of shrubs and semi-shrubs for subsistence, geological prospecting, subsoil use, livestock increase in the norm, etc.) the number of high-nutrient species is declining, they are being replaced by low-nutrient, low-yielding species, is the pasture crisis is intensifying day by day. This is particularly the case in the densely populated hill region.

The hills are the areas that cover the slopes of the mountainous areas of the republic, which are distributed at various points at an altitude of 400 to 1200 (1400) meters above sea level. Characteristic features of the hill region are the unevenness of the relief, the prevalence of gray soils, the vegetation consists of shrubs and semi-shrubs, as well as ephemeral and ephemeroids.The climate is sharply changing

continental, the average annual temperature is around 15 ℃. Annual precipitation is low, 200-250 mm in the hills, 500-550 mm in the high hills, the soil is light and typical gray soils, the amount of humus is 1-1.5%.The essence of the pastures of the hill region is that it is a source of juicy, vitamin-rich nutritious grasses in early spring for livestock that have lost weight in winter. However, the lack of shrubs and semi-shrubs in these pastures does not provide enough fodder reserves for the autumn-winter seasons.

This is one of the most pressing issues today, requiring the cultivation of coastal-resistant, high-yielding forage species suitable for the conditions of the hill pastures, the selection of promising ones and their introduction into production.It should be noted that more than 259 species of plants from the natural flora of Central Asia have been tested as a result of many years of research by scientists of the Botanical Research and Production Center and Botanical Garden, Samarkand State University, Forestry Research Institute and other scientific institutions. In particular, in the experimental field "Nurota" of the Research Institute of Karakul and Desert Ecology, a unique gene pool of 1,200 samples of 50 species of pasture forage plants has been established. As a result of many years of research, promising varieties of pasture forage plants have been created. One of the most pressing issues is the creation of agro-phytocenoses and increasing the productivity of pastures and enrichment of plant biodiversity through the implementation of phytomeliorative measures in the crisis areas of natural pastures on the basis of the use of these selection varieties.

Research methods. The source of research was selected light gray soils of the Nurata hills, ephemeral and ephemeroid typical pasture areas, promising varieties of pasture forage plants and the creation of artificial agrophytocenoses.Implementation of planned field experiments based on the introduction of plants, the use of generally accepted methods in botany [1,3] and other methodological guidelines.

Results. The experiments were carried out in the experimental field "Nurota" of the Research Institute of Astrakhan and Desert Ecology. As a result of many years of research, special attention was paid to the study of drought-resistant, fertile and

rich nutritional value of plant varieties, based on which phytomeliorative work on pastures and measures to increase pasture productivity through the creation of agrophytocenoses.

Table 1. The plants finology and productivity

(A case study of the "Nurota" experimental field)

№	Plant varieties	Survival, number of plants in the picture, thousand pieces / ha, in the den,%	Plant height, cm	Hayyield, kg / ha
1	The "nortuya" variety of haloxylon	2.1 ± 0.1 / 73.8	132,5±5.4	7.6±0.3
2	Izen's"Karnabchulsky"variety	17,6 ± 0,9 / 85,4	91.3±3.9	17.4±0.9
3	Choijonvariety"Jayhun"	14.3 ± 0.6 / 76.2	96.4±3.7	15.3±0.4
4	Teresken's"Tulqin"variety	14.9 ± 0.7 / 72.8	83.8±2.5	14.8±0.5
5	"Salang"varietyofquyrovuq	13.8 ± 0.5 / 68.4	72.4±1.9	12.5±0.3
6	Astragalusvariety "Oqtog"	16.2 ± 0.6 / 84.6	87.6±2.7	16.3±0.4
7	Erkakutvarietyof"Ishonch"	19.8 ± 0.7 / 79.1	67.8±1.8	12.1±0.2

Due to the fact that the main task is to increase the productivity of natural pastures, as the productivity of natural pastures is very low (1.5-5.5 ts / ha), the main goal is to increase the productivity of pastures, according to the table.) was observed. It was noted that the yield of other plant varieties was 12.1-16.3 quintals per hectare, which is 4-5 times higher than the yield of natural pastures.

Conclusions:

1. The results of the study proved that promising varieties of pasture forage plants can grow and produce high yields even in the most unfavorable conditions of arid regions.

2. Establishment of artificial pastures with the participation of promising varieties of pasture forage plants will increase pasture productivity, increase the number of new species of forage plants in the vegetation cover, as well as create opportunities for long-term use of these crops.

3. The created agrophytocenoses have been proved to be 3-5 times higher than natural pastures in terms of length, yield, nutrient content, and viability.

4. The created artificial pastures have a positive effect on increasing plant diversity in the biosystem and play an important role in ensuring ecological sustainability in pastures.

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