

Perspective Species of Desert Plants for Creation of Artificial Pasture

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Abstract: The republic has all ecological soil types of the desert region (sandy, gypsum, shorkhok), and the plants in the pastures are distributed according to the soil types. According to S. E. Erejepov (1978), 876 species of plants belonging to 78 families and 383 genera grow in this area. Of these, 786 species are nutritious plants. Among the edible species, astragalus, wormwood, sedges, teresken, gorse, yantok, male grass, cherkes and saxovules can be a vivid example.

Keywords: Desert, Artificial Pasture.

In recent years, the process of desertification in the republic is increasing day by day due to many negative situations such as the deterioration of the ecological situation, global climate changes, and the Arol disaster. Such negative situations are especially deplorable in the Aral region. According to S.G. Sherimbetov (2016), minerals such as sulfates, chlorine, sodium, and magnesium are increasing year by year in the chemical composition of Orolkum soil. The negative situations that occurred in the pastures of the Republic of Karakalpakstan require immediate implementation of measures for their rational use, conservation and enrichment of biological diversity through phytomelioration of the plant cover of the pastures in crisis. In recent years, large-scale reforms related to the mitigation of the ecological situation are being carried out in the territory of the island. In particular, it is worth noting that saxophone groves being established in the dry part of the island serve as protective forests and block the path of rising dust as a "green shield". One of the most important tasks is to carry out large-scale works related to the improvement of the state of pastures in the republic, among the huge creative works to be performed in the future.

As a result of many years of research conducted at the scientific-research institute of animal husbandry and desert ecology, promising species of pasture nutritious plants have been isolated and technologies for establishing artificial pastures have been developed from them. These isolated promising species allow for a dramatic increase in pasture productivity.

Research source and methods. The source of the study was the types and samples of pasture nutritious plants that spread wildly in the natural pastures of Central Asia. Planned field experiments, phenological observations, biometric measurements, nutrient stockpiling were carried out on the basis of plant introduction and the use of methods generally accepted in plant science.

Research results and their analysis. As a result of the scientific research conducted at the Scientific Research Institute of Cattle Breeding and Desert Ecology, 25 types of pasture nutritious plants have been determined to be promising. The following plants are suitable for the soil and climate conditions of the Republic of Karakalpakstan.

It is a shrub, semi-shrub species, 40-180 cm tall. It blooms in March, flowers from June to September, and the seeds ripen in October. Annual branches (leaves) and seeds are considered food and are mainly eaten by livestock in autumn and winter. Hay contains 14% protein, 2.7% fat, 36.9% AEM, 20.6% ash and 23% fiber. 100 kg of hay keeps 37-50 feed units throughout the seasons.

A semi-shrub, 40-110 cm tall, belonging to the Teresken family. The stem is branchy and grows by forming side branches. It turns green again in March, flowers from June to August, and the seeds ripen

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in September. Annual branches and leaves are eaten by livestock. Hay contains 16% protein, 2.7% fat, 34% fiber. The satiety of 100 kg of hay is equal to 40 nutritional units.

Koyrovuk - from the family of sardines, 30-85 cm tall, semi-shrub. The gorse is a branched plant with woody perennial branches. It blooms in March-April, blooms from June to October, and its seeds ripen in the first ten days of November. Sheep, goats and camels eat tails in autumn and winter. Its hay contains 17.5% protein, 2.9-3.2% fat, 36.5% AEM, 18.2% ash and 24.8% fiber. 100 kg of hay contains 64.4 nutritional units in spring, 45.4 in summer, 38 in autumn, and 29.6 in winter.

Izen belongs to the family of sardines, 60-120 cm tall, a semi-shrub. It forms a large number of branches growing vertically from the base of the stem. *Izen* is divided into 3 ecotypes: sandy, gravelly and loamy. Blooms in March and remains green for a long time from early spring to late fall, with seeds ripening in October. *Izen* is a nutritious feed for all types of livestock and is welcome in all seasons of the year. Hay contains 14.3-15.6% protein, 2.7-3.3% fat, 39.5-43.5% AEM, 15.4% ash and 26.5-30% fiber. 100 kg of hay contains 45.9-83.5 nutritional units.

Wormwood is a semi-shrub from the family of complex flowers. Their height reaches 20-100 cm depending on their species. It turns green at the end of February, stops growing in hot temperatures (June-August). It will continue to grow from September. It blooms at the end of September, the seeds ripen in November. Cattle eat earthworms mainly in autumn and winter. Hay contains 8-12% protein, 3.3-5.5% fat, 35.2-43.5% AEM, 12.3-15.4% ash and 26.5-42.4% fiber. 100 kg of hay contains 40.5-45.9 nutritional units depending on the seasons.

Male grass - 55-70 cm tall, drought- and cold-resistant perennial herb belonging to the family of sedges. It blooms in February-March, blooms at the end of May, and its seeds ripen in the third ten days of June. It is eaten by livestock throughout the year. Its hay contains 10.7% protein, 2.8% fat and 32% fiber. 100 kg of hay contains 48.7 nutritional units.

Also, along with the above-mentioned plants, it is advisable to use the types of plants in the pasture to improve the condition of the pastures, increase their productivity and balance the ecological situation. They include black and white saxophones, cherkes, kandym, astragals, yantoq, shirminiya and h.z.o.

In order to establish artificial pastures from promising types of pasture nutritious plants, it is necessary to establish their seed areas, and at the next stage, to select plants suitable for the soil-climatic conditions of each region and introduce them into production [2].

It is advisable to establish artificial pastures in the form of multi-component pasture agrophytocenoses (association of 6-8 plant species). In this case, the biodiversity of the plants in the pastures increases, as well as the grazing by livestock in all seasons of the year is also noteworthy.

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