BIOECOLOGICAL CHARACTERISTICS OF THE COUSINIA GROUP INCLUDED IN THE RED BOOK AND MEASURES FOR THEIR PROTECTION.

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Abstract: This article provides information about the specific characteristics of plants belonging to the cousinia family and their role in nature and human life. The article also discusses measures for the protection of plants belonging to the cousinia family included in the Red Book of Uzbekistan.

Key words: Red book, cousiniaspecies, observation, area, resource, population, fodder.

Introduction:

Humans have been using plant resources for various purposes since ancient times. Plants are used for construction, food, medicine, fodder and other purposes. People's inefficient use of plant resources is causing their number and species to decrease. As a result, some plants are in danger of disappearing completely. Such plants are included in the disappearing species category of the Red Book. Several species of the cousinia series are included in different categories of the Red Book according to their number in nature, among them there are also many rare and endemic species that need serious protection. In 2019, 20 species of cousinia series are published in the Red Book of Uzbekistan.

Literature analysis and methods: Information about the structure, distribution and systematics and importance of the cousinia series is given in several scientific articles, literature, monographs. For example, "Cousinia morphology, taxonomy, distribution and phytogeographical implications" published in 1986 by K. Rechinger [2] and "Distribution patterns of The Genus Cousinia (ASTERACEAE) in Iran" published in 2013 by M. Zare, A. Khosravi, M. Joharchi [3]. In the article, detailed information about the representatives of this category was given. Methods such as observation and comparison were used in the study of the representatives of the cousinia group, which are distributed in nature and included in the Red Book.

Discussion:

As a result of the destruction of natural lands, extensive grazing of livestock, cutting for fodder and adaptation to growing in specific soils, the

number of representatives of the cousinia family is decreasing and their area is changing.

Representatives of the cousinia family are mainly adapted to grow on the stony slopes of the upper part of the mountains, on gravelly, limestone, gypsum-rich soils and some species are adapted to grow in immobile sand piles concentrated in the desert and they live and breed only in this environment. People take construction materials such as gravel and limestone from the areas where they grow, and that's it the number of species in their population is decreasing due to the fact that plants do not grow and multiply in different soil environments. In addition, agricultural work is carried out in the hills as a result, several species belonging to the cousinia family (cousinia candicans, cousinia pseudolanata popev Tacherneva, cousinia rhodantha) are rarely seen today.

Representatives of the Cousinia genus are mainly perennial and biennial plants with a height of 15-90 cm. Their stems are linear, hairy, branching from a serbar base, single-headed, green leaves, pink flowers in a basket, elongated ovoid seeds, blooming in may-july, and fruiting in july-august.

All livestock like to eat cousina both when it is green and after drying. Livestock farms prepare sufficient quantities of cousinia for winter feed. Cousina is also crushed with the help of special machines like alhagi and fed to cattle. Cousina is harvested at the time of flowering, because during this period, its leaves and stems contain a lot of vitamins and carbohydrates. It is possible to collect 1.5-2 tons of dry cousina hay from one hectare of oil years. During the flowering period, it contains 8% protein and 64% fiber. Its grain is rich in protein. Cattlemen appreciate it very much. The number of cousina is decreasing in recent times because they mainly belong to the family of fodder plants

Cousiniaadenophora, cousinia allolepis, cousinia butkovii, cousinia vvedensky, cousinia plastystehia, cousinia dshisakensis, cousinia umblicata, cousinia glaphyrocephala, cousinia candicans, cousinia pterolipida, cousinia pseudolanata, cousinia stricta, cousinia dolichophylla, cousinia haplophylla, cousinia haesitabunda, cousinia campyloraphis, cousinia rhodantha, cousinia spryginii, cousinia praestans are included in the 2019 edition of the Red Book of Uzbekistan.

For the restoration of the number of the type of Sughd cousinia, which was in the 2009 edition removed from the Red Book.

Among the above mentioned cousinia species: cousinia campyloraphis, cousinia praestans, cousinia allolepis are protected in the Hisar State Reserve, cousinia species are cousinia glaberiseta is protected in the Surkhan State

Reserve. According to information, cousinia dshisakensis has been planted in the Botanical Garden of the SA of the Republic of Uzbekistan since 1962. However, measures have not been developed to protect the remaining cousinia species. To protect these cousinia species:

 In- depth study of the representatives of the cousinia family from a scientific point of view; regarding their reproduction and restoration of their existing number in nature development of special events;

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 To introduce the endangered cousinia species to the population and explain that they should be careful when using them;

 When using the cousinia plant, following the norm, use in quantities that do not affect population size;

 Raising livestock in areas where cousinia grows, strictly prohibiting the use of meadows;

 Determining the declining cousinia species and their growth find and protect their territories;

 Restoration of their number in specially protected areas is one of the important tasks;

Outcome:

In order to prevent extinct these rare plants a lot of researches are being conducted. Rare species of cousinia is planted lots of areas of Uzbekistan. Nowadays, important features of cousinia are introduced to students who are studying natural sciences. In addition, despite of decreasing number of cousine, Uzbek researches are trying to increase these species. As a result, rare cousinia species are reviving day by day.

Conclusion:

It is very important to preserve the plants in nature, to study them, to improve the ecological condition of the environment and to preserve the biological diversity of our planet. Therefore, it is important to study the cousinia plant, to restore its number, to find the cousinia species included in the Red Book, but protection measures have not been developed learning and care is of great practical importance not only for people but also for nature.

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