# The Genus Kobresia Willd. (Cyperaceae Juss.) in the flora of Mongolia

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## **Abstract**

Taxonomic position of the Mongolian bog sedge species belonging to the genus *Kobresia* is revised. Seven species and one subspecies are recorded in the Mongolian Flora. Identification keys for the species, conspectus of all taxa and data on their habit, ecology and distribution in Mongolia are given. Distribution types are classified. Briefly discussed about history of dispersal of *Kobresia*-species in the Mongolian territory.

Key words: Kobresia, Cyperaceae, systematics, Mongolian Flora

#### Introduction

The genus *Kobresia* belongs to the most advanced tribe Cariceae in the family Cyperaceae, while this genus is primitive in the tribe. About 35 species of this genus are distributed in the temperate to frigid zones of the Northern Hemisphere. Almost all species are found in Asia.

The studies of this genus in the Mongolian flora have been conducted in the frame of flora research, but the detailed study defining the members of the genus is still lacking. Some data on identification of the species, species conspectus, habitat, distribution and edibility are can be found in the works by Grubov (1955, 1982), Yunatov (1968), Ulziikhutag (1985), Gubanov (1996) and others. The present work is a part of an ongoing project for creating the "Flora of Mongolia".

### **Materials and Methods**

The collections of the *Kobresia*-species from the Herbarium of the Institute of Botany, Mongolian Academy of Sciences (UBA) and the Herbarium of the National University of Mongolia (UBU) as well as additional literature data are used for the present study. There are 252 sheets of specimens in total, which were collected by a number of scientists between 1928 and 1997. This study was conducted using traditional methods of plant systematics, i.e. the identification keys to the flora of Mongolia, Siberia, Central Asia and USSR were used to identify species status and to gather information on the species distribution (Sergievskaya, 1935; Egorova, 1967, 1983;

Grubov, 1982; Doronkin, 1990). The nomenclature was followed by Egorova (1983) and her key was partially used for the keys to the species. Distributions of the species in Mongolia are given in Gubanov (1996), ecological group classification is followed as in Ulziikhutag (1989), names and limits of the phytochoria for the distribution type definition are according to those in Takhtajan (1978). Species habitats are described mainly on the basis of collection data. In the following parts, species are listed in alphabetical order. Similarity index of the species is calculated using EstimateS 6.0b1, Statistical calculations with StatSoft 5.5; SPSS programs.

#### Results

Systematical overview of the genus Kobresia in the flora of Mongolia. Species composition of the genus in Grubov (1982) and Gubanov (1996) has been changed as follows. It is revealed that seven species and one subspecies of Kobresia occur in the Mongolian Flora. From the Gubanov's list a species, K. simpliciuscula (Wahlenb.) Mackenz. is excluded. According to Doronkin (1990), the nominal subspecies of this species is distributed in Europe (Scandinavia, England, Pyrenees and Carpathian mountains) only. Previous data on this species now belongs to K. simpliciuscula subsp. subgolarctica Egor.

Key to the species and subspecies of *Kobresia* 

1. Perigynia utricle like, closed up to middle. Scales and perigynia ca. 10 mm long