

## Taxonomy of Mongolian Bulrushes (Cyperaceae Juss.)

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### Abstract

The taxonomic position of Mongolian species belonging to the genus *Scirpus* L. is revised here. Five species are included in this genus. In this paper, three of them are transferred to the genus *Schoenoplectus* (H.G.L. Reichenb.) Palla. Keys for the identification of these two genera and species, species descriptions and data on their distribution in Mongolia are given.

**Key words:** Mongolia, *Schoenoplectus*, *Scirpus*, systematics,

### Introduction

Bulrushes belong to the family Cyperaceae Juss., the sixth biggest family in the Mongolian Flora (Gubanov, 1996). The study on systematics of the sedge family of Mongolia is part of an ongoing project for creating the "Flora of Mongolia". Mongolian plants belonging to the sedge family are well studied, but detailed research defining the genera, except *Carex*, is still lacking.

In Mongolia, five species of bulrushes have been included in the genus *Scirpus*: *S. hippolyti*, *S. orientalis*, *S. radicans*, *S. supinus* and *S. triqueter*. It should be noted that there is one more genus in Mongolia which includes bulrush species - the genus *Bolboschoenus* Palla, which includes three species (Gubanov, 1996).

Bulrushes occur in marshes, lakeshores, streams and riverbanks, sometimes in the water. Oriental bulrush (*S. orientalis*) and Hippolyt's bulrush (*S. hippolyti*) are rarely eaten by livestock (Ulzikhutag, 1985). There is no data on the edibility of other species.

Distributions of bulrush species in Mongolia are given in Gubanov (1996). The botanical-geographical regionalisation of Mongolia by A.A. Yunatov and V.I. Grubov (Grubov, 1982) is used here. There are 16 regions: (1) Khuvsgul, (2) Khentei, (3) Khangai, (4) Mongol-Daurian, (5) Great Khyangan, (6) Khovd, (7) Mongolian Altai, (8) Middle Khalkh, (9) East Mongolia, (10) Depression of Great Lakes, (11) Valley of Lakes, (12) East Gobi, (13) Gobi-Atai, (14) Dsungarian Gobi, (15) Transaltai Gobi and (16) Alashaa Gobi.

In the distribution section, after the description of each species, the numbers are given for the respective regions where the species occurs.

### Materials and Methods

Bulrush specimens 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 were used for the present study. There are 74 sheets of specimens in total, which were collected by a number of scientists between 1924 and 1990. This study was conducted using traditional methods of plant systematics.

### Results

Mongolian flora includes two species of *Scirpus* and three species of *Schoenoplectus*. For the construction of keys to the two discussed genera and species, Timokhina's (1990) key was partially used.

### Key to two closely related genera of Cyperaceae

- 1 Leaf blades reduced; inflorescence pseudolateral; perianth bristles present or missing . . . . . *Schoenoplectus*
- Leaf blades present; inflorescence terminal; perianth bristles always present . . . . . *Scirpus*