19th Meeting of the Group of European Charophytologists (GEC 19th)

Vilnius, Lithuania, 11–14 September 2014

PROGRAMME AND ABSTRACTS
CHAROPHYTES OF BAIKALIAN SIBERIA (RUSSIA)

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The aim of the study is to describe species composition, distribution, ecology and communities of charophytes in Baikalian Siberia (Irkutsk Region, Republic of Buryatia, Zabaikalsky Krai).

According to published data the 16 species were reported for the region of the study: Chara abnormiformis Vilh., C. arcuatofoila Vilh., C. contraria A. Braun ex Kütz., C. crassicaulis Schleicher, C. fischeri Mig., C. fragifera Durieu, C. globularis Thuill., C. gymnophylla A. Braun, C. hispida (L.) Hartm., C. strigosa A. Braun, C. tomentosa L., C. vulgaris L., Nitella flexilis (L.) C. Agardh, N. gracilis (Smith) C. Agardh N. mucronata (A. Braun) Miquel and N. opaca (Bruz.) C. Agardh. The specimens of three species only are stored in LE (C. contraria, C. globularis and C. tomentosa). The record of C. abnormiformis is doubtful and this species should be excluded from the list. The presence of 7 other species needs to be confirmed. These species are known from a single (C. crassicaulis, C. gymnophylla) or a few localities (C. arcuatofoila, C. fischeri, C. fragifera, C. hispida, N. gracilis) in Northern Asia.

The studied specimens have been collected during 1979–2013. The 12 species and one variety were found: Chara contraria, C. globularis, C. inconnexa Allen, C. rudis A. Braun in Leonh., C. strigosa, C. tomentosa, C. virgata Kutz., C. vulgaris, Nitella flexilis var. flexilis et var. fryeri J. Groves et Bullock-Webster, N. mucronata, N. opaca, Tolypella prolifer (Ziz ex A. Braun) Leonh.). C. inconnexa is a new record for Russia, genus Tolypella, C. inconnexa, C. rudis, C. virgata, N. flexilis var. fryeri, T. prolifer were reported for Baikalian Siberia for the first time.

The C. globularis and C. contraria are the most frequent species. The majority of species have been found in lakes, C. contraria, C. globularis, C. inconnexa and C. vulgaris are also known from rivers. The communities of N. flexilis, C. globularis, C. contraria, C. rudis, C. strigosa, C. tomentosa, and C. vulgaris have been described.
In deep clear lakes the communities of charophytes are perennial and form own belts.

The charophyte flora of Baikalian Siberia is similar with floras of Altay-Sayan Mountains and Southern Ural (Sørensen index 0.57–0.58), less similar with floras of south-east of Western Siberia (0.51), Kazakh Upland (0.46) and drainage basin of Lake Balkhash (0.36).

At the moment, 20 species of charophytes are known from Baikalian Siberia based on available data, but presence of 12 species only is supported by herbaria specimens.

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