

**Investigation of biodiversity, ecology, origin and evolution of hydrobionts  
in the Lake Baikal and waterbodies of Baikal rift zone**

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In spite of well established uniqueness of Lake Baikal fauna and long-term investigations of it the interests of scientist are arise year to year. It depends to a large extent on discussions about time of origin and evolutionary mechanisms of some groups of hydrobionts, type and level of their endemism, on lack of data for fauna of mountain waterbodies in Baikal Rift Zone (BRZ) surrounding Lake Baikal and on real possibilities of application the new approaches for solving these problems.

Research of mountain waterbodies in BRZ region (Lake Baikal and upper part Lena River basins) carried out since 1995 in collaboration with Limnological Institute SB RAS enables to reveal a number of algae, oligochaeta, molluscs and dipteran species rated further as Baikal endemics. Substantial primary materials on molecular biology, genetic, morphology and systematic of all species of fishes, oligochaeta, polychaeta, molluscs, amphipods and different groups of aquatic insects was collected. First data on biodiversity, quantity and biomass of main elements of biota (phyto- and zooplankton, bentos and fishes) from more of 70 different (tectonic, glacial and thermocarst) mountain lakes was obtained.

General directions of planned works are faunistic and molecular-phylogenetic investigations of hydrobionts aimed the determination of alliances, terms, paths and mechanisms of their evolution in BRZ waterbodies.