**DIVERSITY AND TAXONOMY OF CRUSTOSE LICHENS IN**

**SARY CHELEK, KYRGYZSTAN**

Anna Goetz1\*, Kerry Knudsen2, Alexander Paukov3, Ulrik Søchting4, Ulrike Ruprecht1

 1 Paris Lodron Universität Salzburg; 2 Czech University of Life Sciences Prague 3 Ural Federal University; 4 University of Copenhagen; \*anna.goetz@stud.sbg.ac.at

Kyrgyzstan is characterized by a diverse landscape structure, which results in a rich biodiversity. Lichenologically, most of the areas are vastly under-researched and especially knowledge about crustose lichens is rare. For this study the diversity of saxicolous crustose lichens was analyzed along an elevational gradient (1.457 to 2.278 m.a.s.l.) in the Sary Chelek Nature Reserve, Kyrgystan. This area is mainly influenced by two high mountain ranges in the north and east, and is due to this sheltered topography known for its high biodiversity. Additionally, tectonic activity with accompanying landslides have shaped the prevailing landscape and ecosystems and therefore, the investigated habitats along the elevational gradient differ not only climatically, but also the substrate is diverse, which results in a high number of lichen species. Taxonomic classification was carried out with morphological, chemical and molecular methods. Additionally, newly generated sequences of species that had previously only been described morphologically were included. Altogether 143 species were investigated and most of them could be assigned to the genera *Aspicilia, Lobothallia*, *Caloplaca*, *Calogaya, Xanthocarpia, Circinaria, Diploschistes* and *Lecidella.* Several species were reevaluated based on existing literature and/or newly described. Species distribution along the elevational gradient shows for the low areas a wide range of very different genera like *Circinaria, Diploschistes* and *Lecidella* whereas in the high elevated areas, mainly on calcareous rocks, the genus *Aspicilia* is the most abundant group. The unique and species rich saxicolous communities of crustose lichens are mainly influenced by the sheltered topography of the area, the varying climate conditions along the elevational gradient and the diverse substrate caused by multiple landslides. Funding: BMBF, 01DK17049, Germany.