



FIRST EUROPEAN SYMPOSIUM
RESEARCH, CONSERVATION AND MANAGEMENT
OF BIODIVERSITY IN THE EUROPEAN SEASHORES

OPIMOS

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BOOK OF ABSTRACTS





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PLANT BIODIVERSITY
IN AKSAY GORGE OF TRANS-ILI ALATAU

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Trans-Ili Alatau is the central ridge of the Northern Tien Shan Mountains. Trans-Ili Alatau has one of the richest floras, which reflects with a few exceptions the flora of whole Northern Tien Shan. Of special concern for the preservation of plant gene pools of Trans-Ili Alatau is strong anthropogenic pressure on natural biocoenoses that now leads to the destruction of entire communities and populations of plants. The mountain forest belt, located closely to Almaty city and subjected to the most intensive development, suffers particularly from excessive human intervention.

First of all grassy tier, then the shrubs and undergrowth of forest trees are destroyed due to immoderate recreational load. In addition, losses of many indigenous species from plant community composition and their replacement by introduced weed species are observed.

Biodiversity of fruit plants was studied in Aksay gorge of Trans-Ili Alatau. A total of 74 plant species belonging to 58 genera and 27 families were detected at monitoring sites. The most representative family in floodplain communities of Aksay gorge is the family *Rosaceae*, with 12 genera and 18 species. 15 families have only one genus and one species.

Intra-zonal plant communities, descending along the floodplain of the Aksai River, characterize Aksai gorge. In middle course of the river the typical wild fruit forest communities are formed, the first tier of which is formed by *Malus sieversii*, *Armeniaca vulgaris*, *Crataegus almaatensis* and *Crataegus songorica*, intermixed with *Acer semenovii* and *Padus aviu*. Among shrubs *Berberis heteropoda*, *Rhamnus cathartica*, *Lonicera stanantha*, *L. tatarica*, *Rosa alberti*, *R. laxa* and also some *Cotoneaster* species are typical. *Picea schrenkiana*, *Populus tremula*, *Sorbus tianschanica*, *Juniperus sibirica* are sporadically found. *Hippophae rhamnoides* sometimes occurs in the wild fruit communities

Key words: plant biodiversity, recreational load, Aksai gorge, Trans-Ili Alatau.