

“High Mountains botanical diversity and modern ecological problems of Piraketi khevsureti”

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Piraketi khevsureti is located on the southern slopes of the Caucasus Mountains and belongs to the basin of the River Aragvi. It is characterized by medium and high mountain landscape, which includes the mountain forest, sub-alpine, alpine and subnival zones, however, the major landscapes are broad-leaved forests and high mountain subalpine-alpine meadows.

- Subalpine crooked forest is formed: *Betula litwinowii*, *B. raddeana*, *Sorbus caucasigena*. As well as there can be found: *Populus tremula*, *Pinus sosnowskyi*.
- Underbrush is represented: *Ribes biebersteinii*, *Padus racemosa*, *Juniperus oblonga*, *J. depressa*, *Rosa oxyodon*.
- Subalpine tall herbaceous is generated: *Heracleum sosnowskyi*, *Symphytum asperum*, *Lilium monadelphum subsp. georgicum*, *Ligusticum alatum*, *Petasites album*, *Aconitum nasutum*, *A. Tuscheticum*

Alpine zone is represented by:

- High-mountain meadows: *Festuca varia*, *F. ovina*, *Calamagrostis arundinaceae*, *Agrostis planifolia*, *Poa alpina*, *Betonica macrantha*, *Aetheopappus pulcherrimus*, *Trifolium pratense*, *T. alpestre*, *T. campestre*, *Alchemilla sericea*, *Carex buschiorum*, *C. panicea*, *C. dacica*.
- Alpine shrubbery: *Rhododendron caucasicum*, *Vaccinium myrtyllus*, *V. vitis-idaea*, *Empetrum caucasicum*, *Salix kazbekensis*.

In Piraketi Khevsureti, nearby Gudani - Datviskvari are noticed landslide processes, which is caused by cutting high mountain forests and overgrazing. A significant problem will appear by collecting *Rhododendron* shrubs, which is produced by Ltd “Aragveli”. *Rhododendron* collection will lead to fragmentation and extinction of its populations. *Rhododendron* has more valuable functions like erosion/avalanche resisting and water regulation, than medicinal. In addition to this, it is a relict and sub-endemic plant of the Caucasus, plus it is included in the Red List of protected plants. *Rhododendron* bushes are the best habitats for the Caucasus grouse and other mountainous species.

