

Vegetation and flora of Mount Rohatín in the Strážovské vrchy Mts

Daniela Micháľková

*Slovenská akadémia vied, Botanický ústav,
Dúbravská cesta 14, 845 23 Bratislava, Slovensko, daniela.michalkova@savba.sk*

Mount Rohatín (832,4 m above sea level) is located in the central part of the Strážovské vrchy Mts, near the village of Mojtn, in the district of Púchov. Geologically Rohatín is formed of mesozoic limestones and dolomites. The locality hides extraordinary botanical values. For this reason, Rohatín was designed to become a nature preserve in 1987, at the time when the Protected Landscape Area of the Strážovské vrchy Mts was being established. Unfortunately, this project has not been realised yet.

The area of the studied locality is only 250 hectares. In spite of the size, it has high plant diversity as well as diversity of plant communities. The central part of the Strážovské vrchy Mts is known for being a meeting point of the flora of the Danube River Lowland and flora of the Carpathian Mountains. This fact has a great influence on the biodiversity of Rohatín. Rohatín is a dynamic complex of rocks, pinnacles, screes, narrow valleys, gorges and slopes with different aspects. The difficult structure of the terrain has enabled developing of many different environments. Besides the dry and sunny sites, there are also cold and humid stands with the typical mountain microclimate. Therefore it is easy to find the thermophilous as well as mountain plant communities in Rohatín.

The results of the first detail botanical research of Rohatín are presented here. Although some authors have earlier mentioned the locality in their works, this is the only complex botanical research that has been realised so far. The phytocenological and floristic research of Rohatín was held during three vegetation seasons in 2000 – 2002. There were 107 phytocenological relevés (methodology of the Zürich – Montpellier school) used. There were 29 syntaxa from 14 classes found out in Rohatín, consisting of 6 forest, 1 shrubby and 22 herbaceous communities. The complete communities list below is set up according to the phytocenological classes and physiognomy of the communities, beginning with the forest, continuing with the shrubby and herbaceous communities.

Quercus-Fagetum Br.-Bl. et Vlieger in Vlieger 1937: *Cephalanthero-Fagetum* Oberd. 1957, *Quercus petrae-Carpinetum* Soó et Pócs (1931) 1957, *Aceri-Tiliatum* Faber 1936, *Aceri-Carpinetum* Klika 1941, *Scolopendrio-Fraxinetum* Schwickerath 1938

Erico-Pinetea Horvat 1959: *Carici humilis-Pinetea* (Klika 1949) Fajmonová et Šimeková 1972

Alnetea glutinosae Br.-Bl. et R. Tx. ex Westhoff et al. 1946: *Salicetum cinereae* Zólyomi 1931

Festuco-Brometea Br.-Bl. et R. Tx. 1943: *Minuartio langii-Festucetum pallentis* Sillinger 1930, *Saxifrago paniculatae-Seslerietum calcariae* Klika 1941, *Carici humilis-Seslerietum calcariae* Sillinger 1931, *Brachypodium pinnatum*-community, *Convallaria majalis*-community, *Calamagrostis varia*-community

Sedo-Scleranthetea Br.-Bl. 1955: *Jovibarbo-Sedetum albi* Valachovič in Valachovič et al. 1995

Asplenietea trichomanis (Br.-Bl. in Meier et Br.-Bl. 1934) Oberd. 1977: *Cystopteridetum fragilis* Oberd. 1938

Thlaspietea rotundifolii Br.-Bl. 1948: *Vincetoxicetum officinalis* Kaiser 1926

Trifolio-Geranietea sanguinei T. Müller 1961: *Lembotropis nigricans*-community

Phragmito-Magnocaricetea Klika in Klika et Novák 1941: *Carex paniculata*-community

Scheuchzerio-Caricetea fuscae R. Tx. 1937: *Caricetum davallianae* Dutoit 1924

Galio-Urticetea Passarge ex Kopecký 1969: *Urtico-Parietarietum officinalis* Segal in Mennema et Segal ex Klotz 1985, *Sambucus ebulus*-community, *Aegopodio-Menthetum longifoliae* Hilbig 1972, *Urtica dioica*-community, *Petasites albus*-community

Molinio-Arrhenatheretea R. Tx. 1937 em. R. Tx. 1970: *Geranium palustre*-community, *Prunello-Ranunculetum repentis* Winterhoff 1963

Epilobietea angustifolii R. Tx. et Preising in R. Tx. ex von Rochow 1951: *Eupatorietum cannabini* R. Tx. 1967,

Epilobio-Atropetum bellae-donnae R. Tx. 1931 em. 1950

Isoëto-Nanojuncetea Br.-Bl. et R. Tx. ex Westhoff et al. 1946: *Cyperus fuscus*-community.

The high diversity of plant communities indicates also high number of plant species growing at the studied locality. There were altogether 618 taxa of vascular plants, bryophytes and lichens recorded in Rohatín. It includes 516 species and subspecies of vascular plants, 64 species of bryophytes and 38 species of lichens. 41 taxa are threatened and rare (5 endangered, 19 vulnerable, 17 lower risk), 20 species are protected by act and 6 are endemic.

From the botanical point of view, Rohatín is a very valuable and relatively undamaged locality. In the Strážovské vrchy Mts it belongs to the group of localities with the highest diversity of plant communities and plant species. Based on the extraordinary high diversity, it is necessary to protect nature of Rohatín. Therefore the Strážovské vrchy Mts Protected Landscape Area Administration Office is preparing the locality to be declared a protected area (level of a nature preserve (PR) or a national nature preserve (NPR) in the near future.