Full day field trip to Mt. Snežnik (1796 m a.s.l.), the highest mountain of the Liburnian karst

Due to the distinct geographical position of Mt Snežnik (1796 m a.s.l.. **Fig. 1**), the highest peak of the Liburnian karst and NW Dinaric Alps above the Kvarner bay, its flora and vegetation, which is composed of Alpine, (sub)Mediterranean and Dinaric/Illyrian species, is comparatively well known.

Fig. 1: Mt. Snežnik (1796 m a.s.l.), the highest peak of the Liburnian karst in early autumn.

The first botanist who climbed the mountain and pointed out the floristic and phytogeographic peculiarities of the area was Henrik Freyer in 1827. However, it was his finding of *Campanula graminifolia* (now known as *Edraianthus graminifolius*, **Fig. 2**), a typical Balkan endemic with a disjunction on the Carpathians, Apennines and Sicily, which raised a lot of attention to the botanists afterwards and since then the biogeography of the flora became a trademark of this floristically renowned area.

Fig. 2: Edraianthus graminifolius, a Balkan endemic with disjunctions on the Carpathians, Apennines and
Sicily.

Dry calcareous grasslands (all. Satureion subspicatae and Scorzonerion villosae, **Fig. 3**) dominate the southern foothills of the mountain where stands with *Sesleria juncifolia* completely prevail (ass. *Carici humilis-Centaureetum rupestris seslerietosum juncifoliae*).

Fig. 3: Dry calcareous grasslands from the alliances Satureion subspicatae and Scorzonerion villosae.

The summit is surrounded by extensive and continuously distributed Illyrian (fir-)beech forests (ass. *OmphalodoFagetum*, *Ranunculo platanifolii-Fagetum*; all. Aremonio-Fagion) throughout a typical karstic plateau with highly diversified relief. Spruce forests (ass. *Hacquetio-Piceetum, Lonicero caeruleae-Piceetum*) are developed only azonally and are confined to dolines with pronounced temperature and thus vegetation inversion (**Figs. 4 & 5**).

Fig. 4: Vegetation inversion in Velika kolobarnica doline, N of the summit of Mt. Snežnik.

Fig. 5: Stands of the association Drepanoclado uncinati-Heliospermetum pusillae in one of the freezing ravines with pronounced temperature and thus vegetation inversion on the Snežnik plateau.

Tree line is formed by subalpine beech stands (ass. *Polysticho lonchitis-Fagetum*, **Fig. 6**) at approximately 1500 m a.s.l., where transition to stands of dwarf pine begins (ass. *Hyperico grisebachii-Pinetum mugo*).

Fig. 6: Subalpine beech stands of the association Polysticho lonchitis-Fagetum forming a tree line on Mt. Snežnik.

Dinaric tussock grasslands (ass. *Edraiantho graminifolii-Caricetum firmae, Helianthemo alpestris-Caricetum kitaibelianae, Scabioso silenifoliae-Caricetum mucronate, Hyperico grisebachii-Caricetum ferrugineae, Festucetum bosniacae*; all. Seslerion juncifoliae, Festucion bosniacae. **Fig. 7**) cover the summit and host some of the most interesting plants of the NW Adriatic.

Fig. 7: Dinaric tussock grasslands on calcareous bedrock of the Liburnian karst.

Participants will be able to observe the most important botanical aspects along the whole elevational gradient of the mountain. Majority of the sites will be accessible by bus, but the summit is only accessible by foot (approx. two hours of walk). Plant collecting is not permitted above the subalpine beech stands, since the summit belongs to botanical reserve since 1964. Wear sturdy footwear, sleeves and hat.

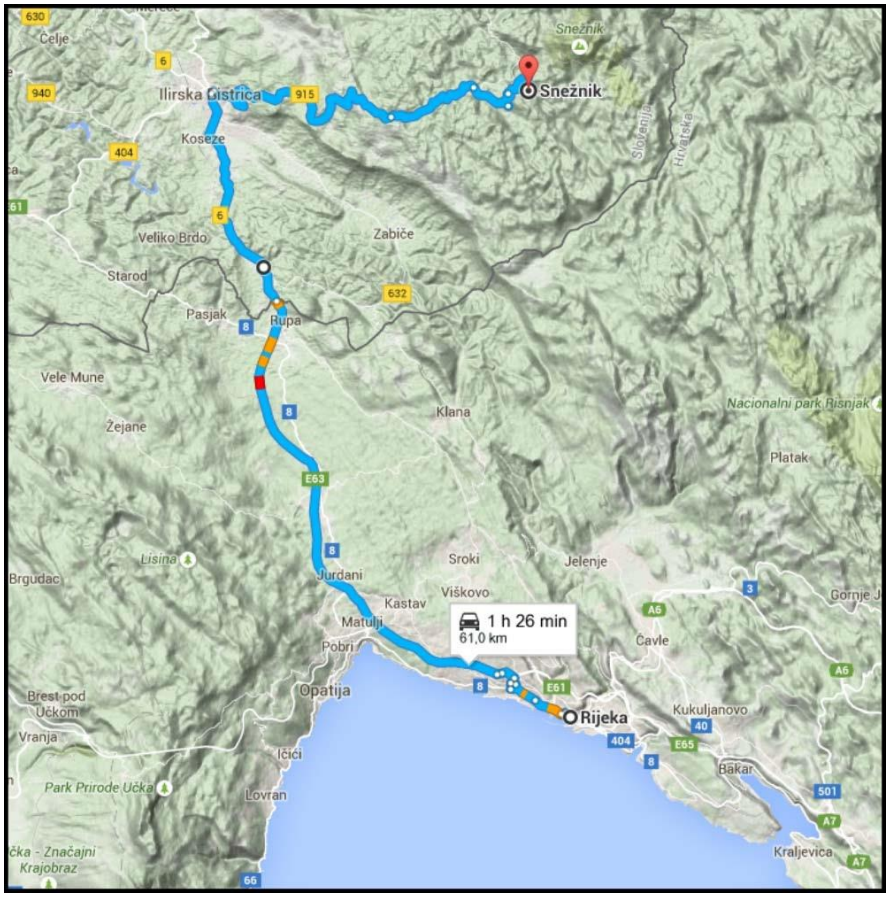

Fig 8: Travelling and walking rute to the Mt. Snežnik.

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