

Floristic composition and syntaxonomy of the plant communities with *Carex sempervirens* subsp. *tatorum* in the West Carpathians

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Abstract: In this article the authors solve syntaxonomy and nomenclature of plant communities with *Carex sempervirens* subsp. *tatorum* (ZAPAL.) PAWL., described in the territory of the West Carpathians. Stands on sunny, calcareous and dolomite slopes in the mountains Krivánska Malá Fatra, Veľká Fatra, Chočské vrchy, and Nízke Tatry were analysed in more detail. They were classified within the association *Diantho nitidi-Caricetum tatorum* (SILLINGER, 1933) nom. nov. with three new subassociations: *typicum*, *caricetosum humilis*, and *ranunculetosum pseudomontani*. Communities situated in the calcareous ranges of the Slovak part of the Tatry Mts, until now incorrectly named as *Carduo glauci(ni)-Caricetum tatorum* PAWL. et STECKI 1927, were ordered into the newly described association *Trifolio kotulae-Caricetum tatorum*. Using methods of numerical classification the authors made its differentiation more accurate with regard to the association *Seslerietum tatrae* ŠMARDÁ 1956, because many natural transition stands exist between these two associations. In addition, the correct name for stands on calcareous walls in the montane belt of the Polish West Carpathians was found out. The community was subsequently described as *Festucetum amethystinae* SZAFER, PAWŁOWSKI et KULCZYŃSKI 1923, *Festucetum tatrae* SZAFER, PAWŁOWSKI et KULCZYŃSKI 1927, *Carex Tatorum-Carduus glaucus*-ASS. PAWL. et STECKI 1927 and in the recent Polish literature it was published as *Carici-Festucetum tatrae* SZAFER et al. (1923) 1927. In accordance with the article 43 of the Code of phytocoenological nomenclature the correction of the oldest name into the *Festucetum tatrae* SZAFER, PAWŁOWSKI et KULCZYŃSKI 1923 corr. 1927 seems to be the best solution.

Key words: *Carex sempervirens* subsp. *tatorum*, *Seslerio-Asterion alpini*, *Seslerion tatrae*, calcareous mountain grasslands, syntaxonomy, numerical classification, Slovakia.

Introduction

Large, species rich stands dominated by *Carex sempervirens* subsp. *tatorum* (ZAPAL.) PAWL. attract attention of phytocoenologists since twenties of the 20th century. One of the first who published four relevés from the Veľká Fatra Mts was KLIKA (1926: 72–74). He named the community *Seslerieto-Semperviretum*. Some years later KLIKA (1932: 156–168) ordered numerous relevés from the supramontaneous belt of the Krivánska and the Veľká Fatra Mts into the association *Carex tatorum-Carduus glaucus* var. *fatrensis* (*Semperviretum-Carduetum glaucae fatrense*). He set relevés mostly from the lower elevations of the Veľká Fatra Mts apart into the subassociation *S.-C. caricetosum humilis*. In the brilliant study on vegetation of the Nízke Tatry Mts, SILLINGER (1933: 195–212) brought a detailed and correct analysis of the association *Seslerieto-Semperviretum fatrense*. GREBENŠČIKOV et al. (1956:

36–48, Tab. 1) classified pastures with prevalence of the species *Carex sempervirens* in the surroundings of Kráľova studňa in the Veľká Fatra Mts as a different type of vegetation.

Various syntaxonomical classifications of phytocoenoses with *Carex *tatorum* from the mountains Krivánska Malá Fatra, Veľká Fatra, Chočské vrchy, and Nízke Tatry continued also in the following years. The authors published similar relevés with names *Seslerio-Semperviretum* auct. (GREBENŠČIKOV, 1954: 377), *Seslerio-Caricetum sempervirentis* BR.-BL. 1926 (BERNÁTOVÁ et al., 1982: 141), *Sempervireto-Carduetum glaucae* KLIKA 1932 (CVACHOVÁ et al., 1980: 207–214, Tab. 1; CVACHOVÁ & URBANOVÁ, 1981a: 456–468, Tab. 1, 1981b: 199–208), *Carduo glaucini-Caricetum sempervirentis* (KLIKA 1944) MUCINA 1981 (MUCINA, 1981: 30), later mostly with the name *Seslerio variae-Caricetum tatorum* MUCINA et PETRÍK in MUCINA et MAGLOCKÝ 1985 (BERNÁ-