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NEW DATA ON *DRABA SILIQUOSA* (BRASSICACEAE) IN POLAND

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Draba siliquosa M. Bieb. belongs to a group of four closely related species known from European and Asiatic mountains (Buttler 1967; Walters & Akeroyd 1993). Besides *D. siliquosa*, the group comprises *D. dubia* Suter, *D. kotschyi* Stur and *D. tomentosa* Clairv. Three of them (*D. dubia*, *D. siliquosa*, *D. tomentosa*) are diploids (2n = 16) and *D. kotschyi* is tetraploid (e.g., Buttler 1967; Walters & Akeroyd 1993; Marhold *et al*. 2007). Other European species of the genus *Draba* have been found to be also octoploids (Buttler 1967). *Draba siliquosa* was reported in some European floras as *D. carinthiaca* Hoppe, *D. glabrata* (W. D. J. Koch) Simonk., *D. johannis* Host or some other names (e.g., Buttler 1967; Kotov 1979). The complex is still insufficiently known and needs further taxonomic work. Just recently a new species of the *D. siliquosa* complex, *D. orientalis* Karabacak & Behçet, was described from Turkey (Karabacak & Behçet 2009).

The three diploid species, *D. dubia*, *D. siliquosa* and *D. tomentosa*, have a wide Eurasiatic distribution; only *Draba kotschyi* has a very small range confined to the Southern and Eastern Carpathians, and as such is treated as an endemic species of this area (Jordon-Thaden *et al*. 2013). Two of the three others have been reported from Central Europe, including Poland (Walters & Akeroyd 1993). *Draba siliquosa* is known as an Eurasiatic species occurring in alpine mountains from the Pyrenees, to the Alps, Carpathians, Balkan Peninsula, Caucasus, Pontic Mountains in Turkey and three isolated localities in northern and northwestern Iran (Peniašteková & Kliment 2002; Delimat & Borucki 2008, 2009; Noroozi *et al*. 2011). Up to the beginning of the 21th century the species was unknown from Poland, which is situated at its northernmost limit. In 2008 and 2009, *D. siliquosa* was reported for the first time from the Polish part of the Tatras (Western Carpathians) by Delimat and Borucki (2008, 2009). It was found on Żabie Mt. at *ca* 1800 m a.s.l. The population consisting, of *ca* 50 individuals, was confined to a very small patch totalling 6 m^2 on a rocky slope. In 2013 we found a new northernmost stand, also in the Polish Tatra Mts, on the summit of Turnia nad Dziadem Mt. (Wołoszyn Massive) at 1900 m a.s.l. The population there is of very similar size, *ca* 30 individuals distributed on *ca* 20 m^2. These two are the only localities known from the High Tatras. Another few very closely situated micro-localities are outside of the High Tatras in the western part of the Belianske Tatras *ca* 10 km distant (Feráková *et al*. 1999 and references therein).

At the newly discovered locality, *D. siliquosa* occurs on mylonitized granitic rock in open places exposed to the south, southeast and southwest. The species is accompanied by plants representing both calcareous and siliceous grassland (*Seslerietalia variae* Br.-Bl. 1926 and *Caricetalia curvulae* Br.-Bl. *in* Br.-Bl. & Jenny 1926) and other habitats (*Androsacion vandelii* Br.-Bl. *in* Br.-Bl. & Jenny 1926, *Androsacion alpinae* Br.-Bl. *in* Br.-Bl. & Jenny 1926, *Potentillion caulescentis*

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Br.-Bl. *in* Br.-Bl. & Jenny 1926). Some of the species accompanying *D. siliquosa* are rare or very rare in the Tatra Mts (*Saussurea pygmaea* (Jacq.) Spreng., *Gentiana nivalis* L., *Saxifraga hieraciifolia* Waldst. Kit.); the others are more or less frequent [*Agrostis rupestris* All., *Anemone narcissifolia* L., *Anthoxanthum alpinum* Á. Löve & D. Löve, *Avenula versicolor* (Vill.) M. Lainz, *Bartsia alpina* L., *Botrychium lunaria* (L.) Sw., *Campanula polymorpha* Witasek, *Cardaminopsis arenosa* subsp. *borbasii* Zapał., *Carex sempervirens* Vill., *Doronicum clusii* (All.) Tausch, *Euphrasia tatrae* Wettst., *Festuca airoides* Lam., *F. tatrae* (Czakó) Degen, *F. versicolor* Tausch, *Gentiana germanica* L., *G. nivalis* L., *Geum montanum* L., *Gymnadenia conopsea* (L.) R. Br., *Hieracium alpinum* L., *Huperzia selago* (L.) Bernh. *ex* Schrank & Mart., *Hypochoeris uniflora* Vill., *Leontodon pseudotaraxaci* Schur, *Luzula spicata* (L.) DC., *Minuartia sedoides* (L.) Hiern, *Mutellina purpurea* (Poir.) Thell., *Pedicularis oederi* Vahl, *P. verticillata* L., *Phyteuma orbiculare* L., *Poa alpina* L., *P. laxa* Haenke, *Primula minima* L., *Pulsatilla alba* Rchb., *Ranunculus glacialis* L., *R. oreophilus* M. Bieb., *R. pseudomontanus* Schur, *Rhodiola rosea* L., *Saxifraga paniculata* Mill., *Silene acaulis* (L.) Jacq., *Soldanella carpatica* Vierh., *Solidago alpestris* Waldst. & Kit., *Swertia perennis* L., *Thymus* sp., *Traunsteinera globosa* (L.) Rchb., *Veronica aphylla* L.].

In reporting this new finding we want to stress its northernmost localization and the phytogeographical importance of the finding. The extreme rarity of *Draba siliquosa* in the whole Western Carpathians and the smallness of its populations means that it is seriously threatened in this part of the range. The authors of regional (Slovak, Polish, Carpathian) 'Red Data Books' listed *D. siliquosa* as one of the most endangered elements of the flora (Čeřovský *et al*. 1999; Mirek & Piękoś-Mirkowa 2008; Kaźmierczakowa *et al*. 2014). A similar threat status is accorded it in the easternmost marginal part of the distribution in Iran (Noroozi *et al*. 2011).

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