

Typification and current taxonomic position of *Senecio arnautorum* Velen.

Vladimir Vladimirov

Institute of Botany, Bulgarian Academy of Sciences, Acad. Georgi Bonchev St., bl. 23, 1113 Sofia, Bulgaria (e-mail: vdvlad@bio.bas.bg)

Received 23 Nov. 2009, revised version received 29 Nov. 2009, accepted 30 Nov. 2009

Vladimirov, V. 2010: Typification and current taxonomic position of *Senecio arnautorum* Velen. — *Ann. Bot. Fennici* 47: 493–495.

The name *Senecio arnautorum* Velen. is lectotypified with a herbarium specimen kept at PR. In most taxonomic works the taxon was considered synonymous with *Senecio pancicii* Degen or treated at infraspecific rank under the latter species. Careful examination of Velenovský's material revealed that *S. arnautorum* differs from *S. pancicii* and is identical to *Jacobaea subalpina* (W.D.J. Koch) Pelsler & Veldk. (*Senecio subalpinus* W.D.J. Koch).

Key words: Asteraceae, *Jacobaea*, lectotypification, nomenclature

The aim of this paper is to designate the nomenclatural type of the name *Senecio arnautorum* Velen. and discuss the present taxonomic position of the species.

***Senecio arnautorum* Velen. (Fig. 1)**

Sitzungsber. Königl. Böhm. Ges. Wiss., Math.-Naturwiss. Cl., 1888(3): 45. 1889. — *Senecio erubescens* Pančić var. *arnautorum* (Velen.) Stoj. & Stef., Fl. Balg. 2: 1145. 1925. — *Senecio alpinus* (L.) Scop. subsp. *arnautorum* (Velen.) Hayek, Prodr. Fl. Penins. Balc. 2: 680. 1931. — *Senecio pancicii* Degen var. *arnautorum* (Velen.) Stoj. & Stef., Fl. Balg., ed. 2: 1017. 1933, *op. c.*, ed. 3: 1170. 1948, Stojanov *et al.*, *op. c.*, ed. 4, 2: 1109. 1967. — *Jacobaea arnautorum* (Velen.) Pelsler, Compositae Newsletter 44: 5. 2006. — LECTOTYPE (designated here): Bulgaria. *In pratis alpinis sub cacumine m. Rujen* (Osog. Planina), VIII.1887 J. Velenovský *s.n.* (PR 615645!; isolectotype PRC!).

The labels of the two herbarium sheets kept in PR and PRC are in Velenovský's handwriting

and differ slightly in their habitat descriptions. The lectotype at PR states '*in pratis alpinis ...*' and the isolectotype at PRC, '*in pratis humidis ...*'. In the original description, it was published as '*In pratis humidis alpinis ...*'. The specimen at PRC is in vegetative state, with only leaves and therefore not my first choice for designation as lectotype. Velenovský also collected other specimens during his August 1887 trip, which were not cited in the original description. The label of one specimen deposited at WU reads: '*Senecio arnautorum* Velen., *in rivularibus sub cacumine m. Rujen* (Osog. Plan.), VIII.1887, J. Velenovský'. The only difference is the habitat citation and this indicates the specimen was not part of the type gathering, but should be regarded as a syntype. In *Flora Bulgarica* (Velenovský 1891) all three habitats were mentioned.

According to the protologue *S. arnautorum* is most similar to *S. subalpinus* W.D.J. Koch and also resembles *S. erubescens* Pančić in capitula



Fig. 1. Lectotype of *Senecio arnautorum* Velen.

size and ligule colour.

In the first edition of *Flora of Bulgaria* Stojanov and Stefanov (1925: 1145) treated the taxon as a variety of *S. erubescens*. Due to the fact that *S. erubescens* Pančić was a later homonym of *S. erubescens* Ait., and thus illegitimate (Art. 53.1., McNeill *et al.* 2006), the correct name for this taxon is *S. panicii* Degen. Therefore, in the later editions of *Flora of Bulgaria* (Stojanov & Stefanov 1933: 1017, 1948: 1170,

Stojanov *et al.* 1967: 1109) *S. arnautorum* was treated as a variety of *S. panicii*.

Hayek (1931: 680) distinguished *S. arnautorum* from *S. panicii* and accepted it as a subspecies of *S. alpinus* (L.) Scop. which was represented by two subspecies: *S. alpinus* subsp. *subalpinus* (W.D.J. Koch) Hayek and *S. alpinus* subsp. *arnautorum* (Velen.) Hayek. In *Flora Europaea* (Chater & Walters 1976: 201) the combination *S. alpinus* subsp. *arnautorum*

(Velen.) Hayek was listed as a synonym of *S. pancicii*.

Recently, Pelsner *et al.* (2006: 5) proposed the combination *Jacobaea arnautorum* (Velen.) Pelsner. It was based on the fact that *Senecio arnautorum* Velen. was the earliest legitimate name at specific rank for *S. pancicii* as traditionally accepted in the Bulgarian botanical literature. However, careful examination of Velenovský's original material at PR, PRC and WU revealed that *S. arnautorum* differs from *S. pancicii* in the shape of basal and lower cauline leaves which are about as long as wide, ovate to triangular-ovate, cordate at base (ovate to oblong-elliptical, dentate to almost lacinate at base in *S. pancicii*) and by the green involucre (purplish in *S. pancicii*) and is clearly identical with *S. subalpinus* W.D.J. Koch. Therefore, *S. arnautorum* should be regarded as a synonym of *S. subalpinus* or *Jacobaea subalpina* (W.D.J. Koch) Pelsner & Veldk. if treated in *Jacobaea*. *Senecio pancicii* Degen is the earliest legitimate name for the species known as *S. arnautorum auct.*

Dimitrov (1998) reported *S. subalpinus* as a new species for the Bulgarian flora based on material (SO 99057) collected in Osogovo Mts. in 1987. The taxon had in fact already been collected in the same area by Velenovský a century earlier.

Acknowledgements

Financial support of the Bulgarian Ministry of Education and Sciences (proj. B 1503/2005) for a visit to WU is gratefully acknowledged. The author is indebted to Dr. František

Krahulec (Průhonice, Czech Republic) for help with obtaining the photo of the herbarium specimen, to the staff of the herbaria PR, PRC and WU as well as to Dr. Kit Tan (Copenhagen) for correcting the English.

References

- Chater, A. O. & Walters, S. M. 1976: *Senecio* L. — In: Tutin, T. G., Chater, A. O., DeFilips, R. A. & Richardson, I. B. K. (eds), *Flora Europaea* 4: 191–205. Cambridge Univ. Press, Cambridge.
- Dimitrov, D. 1998: A supplement to the flora of the Balkan Peninsula. — *Phytologia Balcanica* 4: 57–60.
- Hayek, A. 1931: Prodrromus Florae Peninsulae Balcanicae. — *Repertorium Specierum Novarum Regni Vegetabilis*, Beihefte 30: 577–1152.
- McNeill, J., Barrie, F. R., Burdet, H. M., Demoulin, V., Hawksworth, D. L., Marhold, K., Nicolson, D. H., Prado, J., Silva, P. C., Skog, J. E., Wiersema, J. H. & Turland, N. J. (eds.) 2006: International Code of Botanical Nomenclature (Vienna Code). — *Regnum Vegetabile* 146: I–XVIII, 1–568.
- Pelsner, P., Veldkamp, J.-F. & van der Meijden, R. 2006: New combinations in *Jacobaea* Mill. (Asteraceae–Senecio-*neae*). — *Compositae Newsletter* 44: 1–11.
- Stojanov, N. & Stefanov, B. [Стоянов, Н., Стефанов, Б.] 1925: [*Flora of Bulgaria*], vol. 2. — State Printing House, Sofia. [In Bulgarian].
- Stojanov, N. & Stefanov, B. [Стоянов, Н., Стефанов, Б.] 1933: [*Flora of Bulgaria*], 2nd ed. — Guttenberg Press, Sofia. [In Bulgarian].
- Stojanov, N. & Stefanov, B. [Стоянов, Н., Стефанов, Б.] 1948: [*Flora of Bulgaria*], 3rd ed. — University Press, Sofia. [In Bulgarian].
- Stojanov, N., Stefanov, B. & Kitanov, B. [Стоянов, Н., Стефанов, Б., Китанов, Б.] 1967: [*Flora of Bulgaria*], 4th ed., vol. 2. — Nauka i Iskustvo, Sofia. [In Bulgarian].
- Velenovský, J. 1891: *Flora Bulgarica. Descriptio et enumeratio systematica plantarum vascularium in principatu Bulgariae sponte nascentium*. — Fr. Řivnáč, Prague.