



Jacobaea vulgaris subsp. *gotlandica* (Compositae), new for Italy and Montenegro

Fabio CONTI¹, Fabrizio BARTOLUCCI¹, Gordana TOMOVIĆ² and DMITAR LAKUŠIĆ²

¹ Dipartimento di Scienze Ambientali, Università degli Studi di Camerino – Centro Ricerche Floristiche dell'Appennino, P.N. del Gran Sasso e Monti della Laga, 67021 Barisciano (L'Aquila), Italy

² Institute of Botany and Botanical Garden, Faculty of Biology, University of Belgrade, Takovska 43, 11000 Belgrade, Serbia

ABSTRACT: *Jacobaea vulgaris* Gaertn. subsp. *gotlandica* (Neum.) B. Nord. was regarded as endemic to the Swedish islands Öland and Gotland. However, recent research of diagnostic characters which define infraspecific taxa within the *J. vulgaris* group revealed that *J. vulgaris* subsp. *gotlandica* is more widespread in Europe (Russia, Austria and Greece) than previously thought. By revision of herbarium specimens of the *J. vulgaris* group from herbarium collections BEOU, CAME and APP it is confirmed that *J. vulgaris* subsp. *gotlandica* grows also in Italy and Montenegro, which represent new subspecies for these two countries. In this paper we present detailed chorological data as well as a distribution map of *J. vulgaris* subsp. *gotlandica* in the Apennine and the Balkan peninsula.

KEY WORDS: *Jacobaea vulgaris* subsp. *gotlandica*, Italy, Montenegro, distribution

Received 29 March 2012

Revision accepted 23 August 2012

UDK

Jacobaea vulgaris Gaertn. is a species widely distributed in Europe and further east in Russia and West and Central Asia. It is a biennial or perennial herb growing mostly in open habitats on sand or gravel, on hill slopes or stony shores, dry meadows, in waste agricultural fields, on roadsides or other ruderal habitats. According to GREUTER & RAAB-STRAUBE (2008) within this species there are two accepted subspecies: *J. vulgaris* subsp. *dunensis* (Dumort.) Pelsér & Meijden distributed in Belgium, Great Britain, Denmark, Germany, Ireland, Netherlands, Norway, Poland and Sweden and *J. vulgaris* subsp. *gotlandica* (Neum.) B. Nord. (syn. *Senecio jacobaea* L. var. *gotlandicus* Neum.) a biennial or short-lived perennial, which is considered to be endemic to Öland and Gotland in Sweden where it grows on calcareous flat bedrock with a thin soil layer. However, recent research based on *nrITS* and *trnT-trnL* intergenic spacer sequences, revealed that *J. vulgaris* subsp. *gotlandica* is a distinct evolutionary lineage more widespread in Europe (Russia, Austria and Greece) than previously thought, and may be considered a southeastern

European floristic element with outliers on the large Baltic islands (WYSK *et al.* 2009). In WYSK *et al.* (2009) diagnostic characters with related taxa (*J. vulgaris* subsp. *vulgaris* and *J. aquatica*) have been better defined. In the light of this paper we revise our specimens and we attributed the following to *J. vulgaris* subsp. *gotlandica*.

Specimina visa:

Italy

Abruzzo, Piani di Pezza (Rocca di Mezzo), 42°10.879'N, 13°29.023'E, UTM-ED50, 1480 m, pascoli, (F. Conti 9357, 26.06.2003, APP; F. Conti, D. Tinti 9509, 01.07.2003, APP);

Gran Sasso, (Monti di Paganica), 1700 m, pascoli a falasca, (V. Marchesoni, 28.07.1961, CAME, as *Senecio jacobaea* subsp. *jacobaea*);

Lago di Barisciano (Barisciano, AQ), 385003N, 4695100E, UTM-ED50, 1600 m, rive (A. Manzi 27851, 09.07.2003, APP, cod.).

Montenegro

- Canyon del fiume Tara, da Đurđevića Tara a Crna Poda, 19.42703E, 43.01055 N, 600 m, substrato calcareo, 600 m (*D. Lakušić, F. Conti, G. Tomović 9031, 11.07.1996, APP*);
- Durmitor, Zminjičko jezero, 19.23893 E, 43.10976 N, 1300 m, stream in spruce forest (*S. Jovanović, M. Mitrović 1846/90, 13.07.1990, BEOU as Senecio erraticus*);
- Durmitor, Goveđe jezero lake, 19.10391E, 43.19175 N, 1500 m, clearing in spruce forest, limestone (*V. Stevanović 1231/94, 12.08.1994, BEOU as Senecio erraticus*);
- Durmitor, Čurevac, 19.09482 E, 43.20173 N, 1600 m, rocky grounds, limestone (*D. Lakušić, F. Conti, G. Tomović 716/96, 06.07.1996, BEOU as Senecio erraticus*);
- Durmitor, Canyon of river Sušica (above lake), 18.99648E, 43.18668 N, 1200 m, *Fago-Abieto-Piceetum mixtum*, limestone (*D. Lakušić, S. Pavić, N. Benić 513/94, 15.07.1994, BEOU as Senecio erraticus*);
- Durmitor, Sušičko jezero lake, 19.00025E, 43.17826 N, 1100 m, pasture, limestone (*S. Jovanović, Z. Bulić, S. Vukojičić 698/94, 15.07.1994, BEOU as Senecio erraticus*);
- Durmitor, Nedajno-Canyon of river Sušica (edge), 18.99312E, 43.19084 N, 1300 m, rocky grounds, limestone (*D. Lakušić, Z. Bulić 626/94, 18.07.1994, BEOU as Senecio erraticus*).

So far, in the Apennine and the Balkan Peninsula, *J. vulgaris* subsp. *gotlandica* was known only from Greece (Alexandroupolis, Nomos Evrou, 41.119 N, 25.390 E, *P. Lassen & al. 1078268, 2002, LD*). The new findings in Italy and Montenegro represent the SW limits of the distribution area of the taxon (Fig. 1). Based on our new

data, and on the basis of general distribution data of this taxon (*Wysk et al. 2009*), we can assume that *J. vulgaris* subsp. *gotlandica* is more widespread in the south and southeast Europe.

It is considered a southeast European steppe floristic element. The new findings enrich the already consistent steppe contingent of central Italy and testify to connections between central Italy and east European-Asiatic steppes.

Acknowledgment – The Ministry of Education, Science and Technological Development, the Republic of Serbia, Grant 173030, supported this research.

REFERENCES

- GREUTER W & RAAB-STRAUBE E. 2008. Med-Checklist 2. – Optima Secretariat, Palermo; Med-Check Trust of OPTIMA, Genève; Euro+Med Plantbase Secretariat, Berlin.
- WYSK R, NORDENSTAM B, KADEREIT JW & WESTBERG E. 2009. The identity and geographical distribution of *Jacobaea vulgaris* subsp. *gotlandica*, supposedly endemic of Gotland and Öland (Sweden) – the importance of multiple intraspecific samples. *Taxon* **58**: 1133-1140.

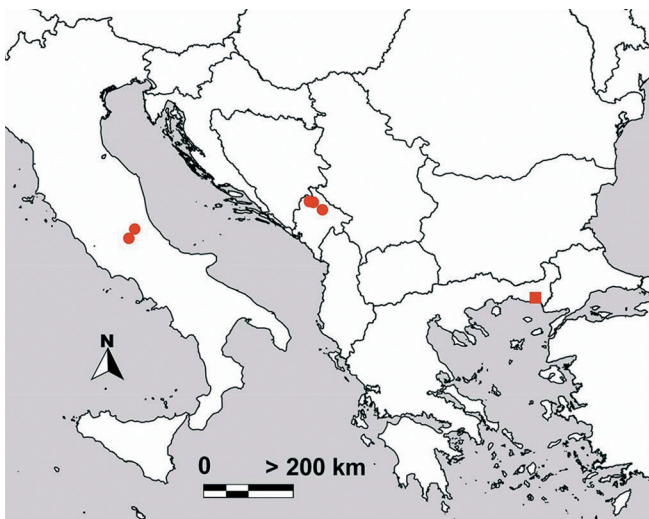


Fig. 1. Distribution of *J. vulgaris* subsp. *gotlandica* in the Apennine and the Balkan peninsula. Legend: **square** - literature data, **circle** - new herbarium data.

Botanica SERBICA



REZIME

Jacobaea vulgaris subsp. *gotlandica* (Compositae), nova vrsta za Italiju i Crnu Goru

Fabio CONTI, Fabrizio BARTOLUCCI, Gordana TOMOVIĆ, Dmitar LAKUŠIĆ

Jacobaea vulgaris Gaertn. subsp. *gotlandica* (Neum.) B. Nord. (*Senecio jacobaea* L. var. *gotlandicus* Neumu.) je do skora smatrana endemičnim taksonom švedskih ostrva Oland i Gotland. Novijim istraživanjima dijagnostičkih karaktera koji definišu unutarspecijske taksonomije u okviru *J. vulgaris* utvrđeno je da je ova podvrsta u Evropi znatno šire rasprostranjena (konstatovana je u Rusiji, Austriji i u Grčkoj), nego što se ranije smatralo. Revizijom herbarijumskog materijala ovog kompleksa u Herbarijumskim zbirkama BEOU, CAME i APP ustanovljeno je da je *J. vulgaris* subsp. *gotlandica* prisutna i u Italiji i Crnoj Gori, što predstavlja nove nalaze za ove države. U radu su prikazani detaljni podaci o novim horološkim nalazima, i data je areal karta sa distribucijom taksona *J. vulgaris* subsp. *gotlandica* na području Apeninskog i Balkanskog poluostrva.

Ključne reči: *Jacobaea vulgaris* subsp. *gotlandica*, Italija, Crna Gora, rasprostranjenje

