Phytotaxa 116 (1): 34–40 (2013)
www.mapress.com/phytotaxa/

Article

ISSN 1179-3155 (print edition)
PHYTOTAXA
ISSN 1179-3163 (online edition)

http://dx.doi.org/10.11646/phytotaxa.116.1.3

Knautia dinarica (Caprifoliaceae): taxonomy, typification and update of the Italian distribution

LORENZO PERUZZI[1]*, FABRIZIO BARTOLUCCI[2], GIOVANNI ASTUTI[1], LILIANA BERNARDO[3] & FABIO CONTI[2]

[1] *Dipartimento di Biologia, Unità di Botanica, Università di Pisa, Via Luca Ghini 13, 56126, Pisa, Italy; e-mail: lperuzzi@biologia.unipi.it*

[2] *Scuola di Scienze Ambientali, Università di Camerino - Centro Ricerche Floristiche dell'Appennino (Parco Nazionale del Gran Sasso-Laga), S. Colombo, 67021 Barisciano (L'Aquila), Italy*

[3] *Orto Botanico, Università della Calabria, 87030 Arcavacata di Rende (Cosenza), Italy*

* *author for correspondence*

Abstract

New Italian populations of *Knautia dinarica*, formerly known only for Sila (Calabria, Southern Italy), were discovered in Abruzzo (Central Italy) and Basilicata (Southern Italy). In order to correctly classify these populations, a taxonomic study was carried out, including morphological and karyological analyses and the typification of the names *Knautia sylvatica* var. *dinarica* and *K. arvensis* f. *silana*. We conclude that in Italy only *K. dinarica* subsp. *silana* occurs, to be considered as endemic to central-southern Apennines and vicariant of *K. dinarica* subsp. *dinarica*, occurring in the Balkan peninsula. Both subspecies can be either diploid ($2n = 20$) or tetraploid ($2n = 40$), and are distinguished by the different mean shape of the basal leaves (the ratio length/width is higher in Italian plants).

Key words: Dipsacaceae, Dipsacales, karyology, *Knautia*, taxonomy, typification

Introduction

The dipsacaceous clade within Caprifoliaceae (Dipsacales) contains ca. 300 herbaceous species, mostly distributed in the Mediterranean area, *Knautia* Linnaeus (1753: 101) representing a monophyletic genus with 40–60 species (Carlson *et al.* 2009). *Knautia dinarica* (Murbeck 1891: 111) Borbás (1894: 399) is currently known from Balkan Peninsula (in the former Jugoslavia, Albania, and Bulgaria countries) and Southern Italy (Calabria region) (Ehrendorfer 1976, Conti *et al.* 2005). Verlaque (1977) reported *K. dinarica* also from Greece, but this record was not confirmed in recent Checklists or Floras (Greuter *et al.* 1986, Strid & Tan 1991). *Knautia dinarica* subsp. *dinarica* occurs in the Balkans (mostly on limestones), while in Italy (on siliceous substrates, see Sarfatti 1965, Brullo *et al.* 2007) only the narrow endemic *K. dinarica* subsp. *silana* (Grande 1913: 107) Ehrendorfer (1975: 40) is reported. On the basis of the literature data, the subsp. *silana* differs from the nominal one in hair-type and petiole length of basal leaves (Ehrendorfer 1975, 1976, 1982a). During field research in Central and Southern Italy, we found two populations of *Knautia dinarica* s.l. well outside the historical range and growing on calcareous substrate: the first one in Abruzzo region (Central Italy), the second one in Basilicata region (Southern Italy). In order to correctly classify these populations, we carried out a taxonomic study, including morphological and karyological analyses and the typification of the names involved. This work is also carried out within the initiative "*Italian Loci Classici Census*" (Domina *et al.* 2012), launched in 2010 under the auspices of the Italian Botanic Society (see for instance Di Pietro *et al.* 2012, Gallo *et al.* 2012, Iamonico & Peruzzi 2012, Peruzzi & Carta, 2013, Peruzzi *et al.* 2012, 2013, Iamonico 2013, Bartolucci & Conti 2013, Bartolucci & Peruzzi 2013).

 Accepted by Duilio Iamonico: 17 June 2013; published online in PDF: 9 July 2013