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

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**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).