



Correction of the typification of *Corydalis solida* var. *bracteosa* and lectotypification of *C. densiflora* (Papaveraceae)

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The genus *Corydalis* DC. in Lamarck & Candolle (1805: 637) (Papaveraceae) consists of about 440 species distributed in Eurasia, North America and Africa (Lidén & Zetterlund 1997). *Corydalis densiflora* C.Presl in Presl & Presl (1822: 10) was first described from Sicily based on material collected by C.B. Presl “in nemorosis Nebrodum” during a trip in Sicily in 1817 (Sutorý 2006). According to Lidén & Zetterlund (1997), *C. densiflora* occurs in peninsular Italy, Sicily and Algeria. The plants coming from Algeria have also been described as *C. solida* (Linnaeus 1753: 699) Clairville (1811: 371) var. *bracteosa* Battandier & Trabut (1905: 498), a taxon regarded by Lidén & Zetterlund (1997) as a synonym of *C. densiflora*. The aim of this paper is to identify and study the type material of both names and to clarify their distribution. This study was carried out within the initiative “Italian Loci Classici Census” (Domina *et al.* 2012, Peruzzi *et al.* 2015), aimed at providing data on the original material of the plants described from Italy (e.g. Di Pietro *et al.* 2012, Gallo *et al.* 2012, Peruzzi *et al.* 2012, 2013a, 2013b, Bartolucci & Conti 2013, Bartolucci *et al.* 2013, Bartolucci & Peruzzi 2014, Bartolucci & Domina 2014, Conti *et al.* 2014).

Typification of the names

Corydalis solida var. *bracteosa* Battandier & Trabut (1905: 498)

Type (lectotype designated by Lidén & Zetterlund 1997: 40, corrected here):—[ALGERIA]. Djurjura: pentes ombreuses des rochers calcaires du Tachgagalt, 2100 m, s.d., J.A. Battandier s.n. (LD 1041686!; isolectotypes, MPU 007531!, MPU 007532!, BC 124946!, MA 42846!).

Note:—*Corydalis solida* var. *bracteosa* was described on the basis of materials collected in Algeria: “...massif de l’Haizer, vers 2100 mètres d’altitude, en allant vers Tizi-n-Teslent, près d’un pic nommé Tachgagalt...”. We traced several specimens collected in the type locality, housed in BC, MA, MPU and LD, which are to be regarded as syntypes (Art. 9.5 of ICN, McNeill *et al.* 2012). According to Lidén & Zetterlund (1997) the type of this taxon would be kept in L (Leiden), labelled as: “Algeria, L’Haizer, Tizi-n-Teslent, 2100 m, 25.05.1905, Battandier”. No specimen of *C. solida* var. *bracteosa* collected by Battandier actually exists at L (National Herbarium of the Netherlands, Leiden University). M. Lidén (in litt.) wrote us that it is a mistake and probably he wanted to indicate LD herbarium (Lund University). In addition, the label reported by Lidén & Zetterlund (1997) is incorrect. Therefore, the herbarium citation and the specimen’s label are to be corrected (W. Greuter, in litt.). Hence, the lectotype of *C. solida* var. *bracteosa* is housed in LD.

According to the type and all the original materials seen, we conclude that *C. solida* var. *bracteosa* cannot be considered as a heterotypic synonym of *C. densiflora*. *Corydalis solida* var. *bracteosa* is characterized by longer floral pedicels (the basal ones 8–11 mm) and racemes loose, both character-states pertaining to *C. solida* (Conti *et al.* 2014). We agree with the taxonomic treatment proposed for this taxon by Greuter (1980): *C. solida* subsp. *bracteosa* (Battandier & Trabut 1905: 498) Greuter & Burdet in Greuter (1980: 231).

Corydalis densiflora C.Presl in Presl & Presl (1822: 10)

Type (lectotype, here designated):—SICILY. Scalamadaggio, June 1817, *C. Presl s.n.* (PRC 454783!).

Note:—*Corydalis densiflora* was described from Sicily “in nemorosis Nebrodum” (Presl 1822). We traced in PRC a specimen collected by Presl in 1817 at “Scalamadaggio”, a locality in Madonie mountains (“Nebrodi” in classical times). Thus, this specimen clearly conforms to the information provided by the protologue and is here selected as the lectotype. According to the study of type material, we can consider *C. densiflora* as endemic to Italy and Sicily (Peruzzi *et al.* 2014, continuously updated at <https://docs.google.com/spreadsheets/cc?key=0AiJpWnsqul0MdG1hSkk1azBjN3BoLXB4VTAzc3l1Smc#gid=0>). This taxon is recorded for central-southern Italy in Umbria, Lazio, doubtful in Abruzzo, Basilicata, Calabria and Sicilia (Conti *et al.* 2005, Del Vico *et al.* 2014). During field investigations undertaken in 2013 we were able to confirm the presence of *C. densiflora* in Abruzzo and to identify as *C. densiflora* a population from Marche recently reported as *C. solida* (Gubellini *et al.* 2014). However, our observations on fresh material and the study of herbarium specimens in APP, BC, CAT, CLU, L, LD, MA, MPU, P, PAL and PRC evidenced a certain degree of morphological variability within *C. densiflora*, seemingly linked to geographical distribution. A biosystematic study is in progress to investigate this topic (Conti *et al.* 2014).

Acknowledgements

We would like to thank Gabriele Galasso (Museo Civico di Storia Naturale di Milano, Italy) and Werner Greuter (Herbarium Mediterraneum Panormitanum, Università degli Studi di Palermo, Italy) for nomenclatural advices.

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