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# Three perplexing names of species of *Campanula* L.

Fátima Sales & Ian C. Hedge

## Abstract

SALES, F. & I. C. HEDGE (2010). Three perplexing names of species of *Campanula* L. *Candollea* 65: 143-146. In English, English and French abstracts.

The status of three “Oriental” names of species of *Campanula* L., *Campanula asperrima* Zuccagni, *Campanula decurrens* Zuccagni and *Campanula ajugifolia* Schult. is investigated. It is impossible to establish with any confidence the identity of the first two because there are no known type specimens and their protologues are imprecise. *Campanula ajugifolia*, was considered as an “incertae sedis” and is here typified by a specimen in the Willdenow herbarium at Berlin. It is shown that *Campanula ajugifolia* is the earliest name for the Turkish endemic species currently known as *Campanula argaea* Boiss. & Balansa.

## Key-words

CAMPANULACEAE – *Campanula* – Typification – Nomenclature

## Résumé

SALES, F. & I. C. HEDGE (2010). Trois noms d'espèces énigmatiques de *Campanula* L. *Candollea* 65: 143-146. In English, English and French abstracts.

Le statut de trois noms d'espèces «orientales» de *Campanula* L., *Campanula asperrima* Zuccagni, *Campanula decurrens* Zuccagni et *Campanula ajugifolia* Schult. est étudié. Il est impossible d'établir l'identité des deux premières espèces avec certitude en absence de spécimens connus et leurs protologues sont imprécis. *Campanula ajugifolia*, jusqu'à présent considérée comme «incertae sedis», est typifiée avec un spécimen de l'herbier de Willdenow à Berlin. *Campanula ajugifolia* est le nom prioritaire pour l'espèce endémique turque actuellement appelée *Campanula argaea* Boiss. & Balansa.

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In the early 1800's, the following three species of *Campanula* L. were described: *C. asperrima* Zuccagni, *C. decurrens* Zuccagni and *C. ajugifolia* Schult. They all referred to plants with spiny-dentate leaves which are more or less tomentose underneath and that possess sessile axillary flowers. They were considered by all later authors as insufficiently known and none of the names had been formally typified. All have connections with Attilio Zuccagni (1754-1807), Domenico Sestini (1750-1832) and the city of Florence. From available evidence, these three names of species might all be Turkish plants, but only one can be linked to an authenticated specimen and a fairly definite provenance. They have also been considered to be related to the Mediterranean *C. alata* Desf. and *C. peregrina* L. (sect. *Pterophyllum* Damboldt) which we are investigating, hence our re-assessment of their status.

### The fate of the specimens collected by Domenico Sestini

No specimens have been traced for the two Zuccagni names. Attilio Zuccagni was director of the Museo di Fisico e Storia Naturale at Florence and his herbarium (also the specimens of Domenico Sestini) was deposited there (FI). However, when P. Parlatore came to Florence as director in 1842 he found that these specimens were inadequately labelled and so badly destroyed by insects that he threw them away (PARLATORE, 1874: 6). Recent searching at FI (Chiari Nepi, *pers. comm.*) failed to find any remnants of these collections. The only clue to the identification of the *Campanula* species is, therefore, a combination of their original descriptions, and their collector and provenance. Both were described “ex herb. orient. D. Sestini innominata” without any other indication of provenance; we have been unable to trace any archival material which might shed light on what the Sestini herbarium might have contained.

### The travels of Domenico Sestini

Abbé Sestini, born in Florence, was clearly a polymath who travelled extensively in different parts of southern Europe and western Asia. Among his varied interests (FRUTTUOSO, 1837) he made observations on and collected plants. How many plants he actually collected is unknown, but both BOISSIER (1867), though not directly citing any of his specimens, and GRISEBACH (1843: ix) were aware of him as a collector. Grisebach noted that many of his plants were sent to Willdenow in Berlin. The genus *Sestinia* Boiss. (*Lamiaceae*) (a synonym of *Hymenocrater* Fisch. & C. A. Mey.) was named for him, as was *Sestinia* Boiss. & Hohen. (*Rubiaceae*) [nom. inval.] (an invalid synonym of *Wendlandia* DC. [nom. conserv.]). SESTINI (1786) deals with his travels from Constantinople (Istanbul) to Basra, another travelogue (SESTINI, 1794) from Constantinople to Bucharest via

European Turkey. SESTINI (1794: 118-121) listed some plants and their uses in Galatia, central Turkey, but there is no mention of *Campanula*. We came to the conclusion that the *Campanula* plants must have been collected during the previous trip. In fact, SPRENGEL (1827: 378) has in the entry for Sestini: “invenerat plantas, cum Willdenovio communicavit, qui, quod Galacz (oppidum ad Danubium) ascriptum erat, Galatiam interpretatus est, falsam patriam”. Time must have elapsed before Sestini knew of Willdenow's identifications of his plants and the list of the names could only be included in the second book.

A comment here on the name “Galazia” is relevant because SPRENGEL (1827: 378) referred to Sestini's Galazia as Galacz (today Galati) on the Danube, in Romania. However, in his check-list Sestini gave some local names in Turkish, referred to some plants used to feed Angora goats, mentioned Elma Dag (a mountain near Ankara) and Kaiserie (Kayseri). He also referred to Tournefort's earlier travels there. This leaves no doubt that he was writing about Turkey and not Romania. The reason for Sprengel's confusion may have been the name “Valachia” in the title of Sestini's second book. At the time of this journey, Sestini was secretary to the Prince of Valachia, the area of S-SE Romania known today as Walachia. GRISEBACH (1843) also referred to “Galatiae” in Turkey.

Sestini also spent time in Sicily, the Aegean (Khalki), Cyprus, Thrace and in what today is Iraq. Therefore, the two *Campanulas* that Zuccagni described “ex herb. orient. Sestini” could have come from any of these areas, but with a greater likelihood of Turkish/Iraq provenance, because of the word “orient.”.

### What is the application of the names *Campanula asperrima* Zuccagni and *Campanula decurrens* Zuccagni?

What clues can be found in their brief diagnoses and descriptions? Very few, especially in such a large and polymorphic genus as *Campanula*, but presumably their epithets were chosen for what their author considered salient characteristics such as the scabrid, rough-to-touch indumentum of *C. asperrima*. CANDOLLE (1830: 341-342) in his monograph of the family, and CANDOLLE (1839: 485), included this species in his “species incertae sedis” exactly repeating Zuccagni's original protologue, and giving *C. ajugifolia* Schult. (with the wrong authority “Sestini in Spreng. Syst. 1. p. 732”) as a synonym under *C. asperrima*. This was also followed by VATKE (1874). Our assessment of *C. asperrima*, however, is that it is impossible, based on the existing evidence, to establish what the species is.

CANDOLLE (1830: 341-342, 1839: 485) also listed *C. decurrens* Zuccagni under “species incertae sedis”. Presumably he did not see any specimens. In both publications he noted “An *C. alatae* Desf. affinis/proxima?”. Candolle did not notice the

existence of the earlier valid *C. decurrens* L. of 1753, as this was rectified by STEUDEL (1840: 269) with the new and valid name *C. orientalis* Steud. ( *C. decurrens* Zuccagni non L.). BOISSIER (1875) also dealt with *C. decurrens*, and *C. asper- rima*, under “species ex descriptione incomplete non recognoscendae”, but, in contrast to de Candolle, he consid- ered *C. decurrens* as possibly related to *C. peregrina*.

FEER (1890) brought yet another name into this problem. This was *C. argaea* Boiss. & Balansa (BOISSIER, 1859: 119), which he considered a synonym of *C. decurrens*. He found Zuccagni’s description good and considered that the indumentum, decurrent leaves and glomerulate flowers on a short peduncle were enough to characterise it. However, one feature in the original description of *C. decurrens* is quite out of char- acter with *C. argaea*: “folia ... subtus reticulata et nonnihil tomentosa”. In *C. argaea*, the leaves are always densely tomen- tose-hispid. In recent times, GREUTER & al. (1984) cited “? = *C. decurrens* Zuccagni” in the synonymy of *C. peregrina*. However, we found no evidence confirming the identity of *C. decurrens*, as for *C. asper- rima*.

### The application of the name *Campanula ajugifolia* Schult.

*Campanula ajugifolia* Schult. is another name that has lurked in the shadows. It was not dealt with by DAMBOLDT (1979), despite it having been described from Galatia (Central Turkey). During the present investigation, we studied a spec- imen of it in the Willdenow herbarium (B-W 3833). Added to the sheet one finds a label with a handwritten description and the mention “Hab. in Galatia”. On the sheet Willdenow added the original collector of the specimen, “Sestini”. VATKE (1874) also cited Willdenow 3833 as an original specimen of *C. ajugi- folia*. In the absence of any other known specimen or any illus- tration, this is the obvious choice of lectotype for the name.

A later handwritten annotation on this sheet, signed by Henri Feer in 1891 is: “*C. decurrens* 1806, *C. asper- rima* 1806, *C. ajugaefolia* 1819, *C. orientalis* Steud. 1840, *C. argaea* 1859”. The assumption is that Feer considered them all to be the same, but this was never published as he died the following year (in 1892), though he had already synonymised *C. argaea* and *C. decurrens* in 1890. Feer worked from G, but there are no specimens there of the Zuccagni names or Sestini collected specimens (F. Jacquemoud, *pers. comm.*).

We agree with Feer that *C. ajugifolia* is identical to and the earlier correct name for *C. argaea*. *Campanula ajugifolia* is a clearly distinct species restricted to several provinces in SW

and Central Turkey. To date, we have been unable to ascertain where Sestini collected the specimen; maybe his exact route and the type locality of *C. ajugifolia* will never be known, unless relevant correspondence comes to light in Florence or among Willdenow’s archives.

Damboldt placed *C. argaea* in sect. *Spicatae* (Fomin) Damboldt and considered it to be without close relatives. The species has, however, some features in common with the com- moner and more widespread *C. peregrina* (sect. *Ptetrophyllum* Damboldt) especially the very similar facies with basally winged/decurrent hispid leaves and spicate inflorescences; but in some other features it is clearly different, much smaller flow- ers and a capsule opening by basal, not median, pores.

### Conclusions

*Campanula asper- rima* Zuccagni, Cent. Observ. Bot.: [16]. 1806.

*Campanula decurrens* Zuccagni, Cent. Observ. Bot.: [16]. 1806.

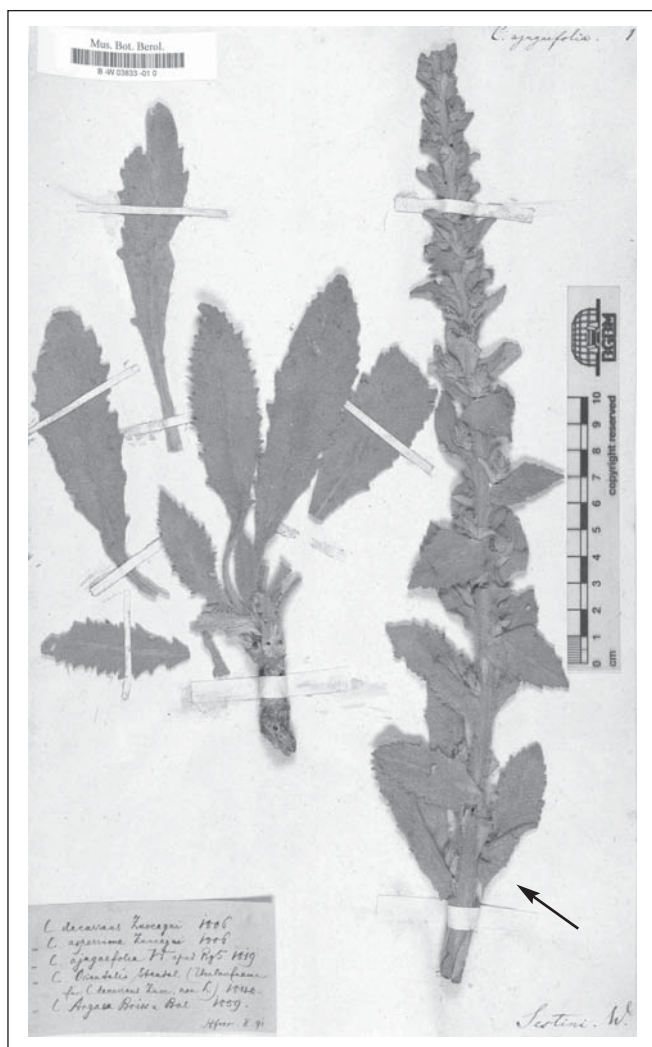
*Campanula asper- rima* Zuccagni and *C. orientalis* Steud. (≡ *C. decurrens* Zuccagni non L.) cannot be typified and, therefore, are names that cannot be used. For this reason, although ambiguous, they do not qualify for formal rejection under art. 56 or art. 14 of ICBN (McNEILL & al., 2006). There is no evidence with which to correctly identify *C. asper- rima* and *C. orientalis* or to establish their relationships, as has been done with *C. alata* (endemic to Algeria and Tunisia) or *C. pere- grina* (E Mediterranean).

*Campanula ajugifolia* Schult. in Roem. & Schult., Syst. Veg. 5: 132. 1819.

**Lectotypus** (designed here): **TURKEY**: “Galatia”, s.d., *Ses- tini s.n.* (B! [B-W 03833-00 0, B-W 03833-01 0] (Fig. 1).

= *Campanula argaea* Boiss. & Balansa in Boiss., Diagn. Pl. Orient. ser. 2, 6: 119. 1859. **Typus**: **TURKEY**: Cap- padoce, Mont-Argée, 1400 m, VII.1856, *Balansa 610* [*Plantes d’Orient 1856: n° 1023*] (holo-: G-BOIS!; iso-: G-BOIS!).

*Campanula ajugifolia* Schult. should replace *C. argaea* Boiss. & Balansa as the correct name for this Turkish endemic species. Such a nomenclatural change is not sufficiently dis- advantageous to justify a proposal to conserve *C. argaea* because this name is not in widespread use.



**Fig. 1.** – Lectotype of *Campanula ajugifolia* Schult. [specimen in the right side, with the arrow].

[Sestini, s.n., B] [© Botanischer Garten und Botanisches Museum Berlin-Dahlem. Reproduced with permission]

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