Typification of Arisarum vulgare O. Targ. Tozz. (Araceae)

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Abstract

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The typification of the name *Arisarum vulgare* O. Targ. Tozz. (≡ *Arum arisarum* L.) *(Araceae)* is discussed. The designation of the corresponding type is based on the consultation of the Linnaeus's original material and the literature cited in the respective protologue. An illustration from Clusius is designated as the lectotype. An epitype is also designated here in order to avoid any ambiguity in the interpretation of the lectotype specimen.

Key-words

ARACEAE – Arisarum – Typification

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Introduction

The genus *Arisarum* Mill. *(Araceae)* with three species (*A. proboscideum* (L.) Savi, *A. simorrhinum* Durieu and *A. vulgare* O. Targ. Tozz.) is distributed in southwestern Europe, Mediterranean and Macaronesian area (Mayo & al., 1997; Galán & Castroviejo, 2007).

The lectotype of *A. simorrhinum* was designated by Galán (2007) from a specimen in P, and the lectotype of *A. proboscideum* was designated by Galán & Castroviejo (2004) from an illustration of Barrelier. The purpose of this paper is to contribute to the stability of the nomenclature by lectotypification of the name *Arisarum vulgare* (≡ *Arum arisarum* L.). The designation of the corresponding type is based on the consultation of Linnaeus's original material and the literature cited in the respective protologue.

Arisarum vulgare is an herbaceous perennial plant 20-30 (-40) cm; the tuber is irregular ovoid; ovate to arrow-shaped sagittate leaves, with a petiole 5.5-37.5(-51) × 0.1-1.1 cm; the inflorescence is an erect spadix, with a peduncule 9-36(-43.5) × 0.1-0.5 cm, spathe with purplish-brown or olive green striped tube, 2.9-7.5 × 0.6-4 cm, cucullate, tubular, at the top the spadix is club-shaped and curved. Inhabits in damp, fertile sheltered sites in maquis, garrigues and rocky steppes (Boyce, 1990; Mayo & al., 1997; Galán & Castroviejo, 2007). This species hybridizes with *A. simorrhinum*.

Lectotypification of A. vulgare

The protologue of *Arum arisarum* L. (Linnaeus, 1753: 966) consists of a short morphological diagnosis, taken from Linnaeus (1738: 435) and Van Royen (1740: 7), with three synonyms: two are cited from Bauhin (1623: 196): *"Arisarum latifolium majus"*, *"Arisarum latifolium alterum",* and one referred to Clusius (1601: LXXIII, Fig. 1) and Lobelius (1581: 598) *"Arisarum latifolium"*, as well as locality indication "Habitat in Mauritaniae, Italiae, Lusitaniae, Hispaniae, Galloprovinciale nemoribus". The latter two authors provided the illustrations that can be considered original material. In LINN, the specimen no. 1079.10 (image available at http://linnean-online.org/11408/) includes the annotation *"15 Arisarum",* explicitly referring to the number of the species account of *Arum arisarum* L. in Linnaeus (1753: 966). The sheet bears four specimens certainly to be referred to a single gathering.

Boyce (1990: 20) cited Brander's specimen in LINN (no. 1079.10) as "holotype", a typification accepted by Galán (2007: 62), but not indicated by Galán & Castroviejo (2007: 305). However, Jarvis (2007: 318) indicates that this designation is incorrect, because this material was not received by Linnaeus until after 1753. This herbarium sheet (no. 1079.10) has been written by Linnaeus *"Algir"*. The manuscript list *"Algerica Branderi",* was prepared around 1756 by Daniel Solander from Brander's specimens (Jarvis, 2007: 195).

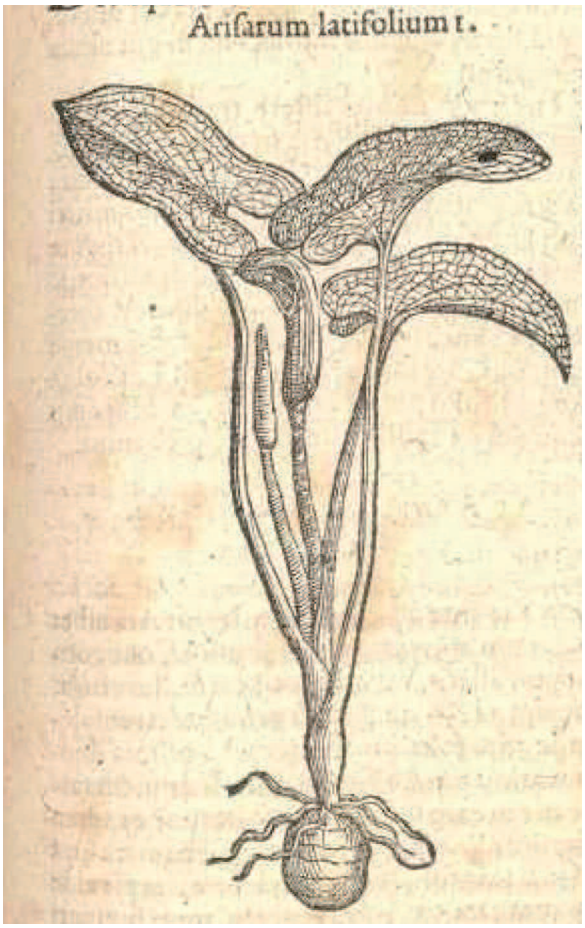


Fig. 1. – Lectotype of *Arum arisarum* L. (Clusius, 1601: tab. LXXIII).

At UPS-BURSER, an herbarium sheet exists with original material (sheet X: 143) (Fig. 2). The sheet bears two leaves and one label: *"Arisarum latifolium alterum Baúh. / [illegible] in Hort. / 143"*. Linnaeus's citing the polynomial from Bauhin (1623) provides a link to the specimen in UPS-BURSER (Herb. Burser X: 143). Joachim Burser's herbarium was arranged and labelled according to Bauhin (1623) (Stearn, 1957; Jarvis, 2007) and was cited in the introduction to Linnaeus (1753) as one of the sources for that work. This herbarium was in Uppsala when it was used by Linnaeus for the interpretation of the names that appear in Bauhin's work. Therefore, this specimen is undoubtedly original material. However, unfortunately this specimen is very incomplete, and contains only two very different leaves (Fig. 2), and this could have led Boyce to designate the sheet in LINN (no. 1079.10) as the holotype. We have been unable to trace any further original material in any of the other Linnaean and Linnaean-linked herbaria (see also Jarvis, 2007: 318).

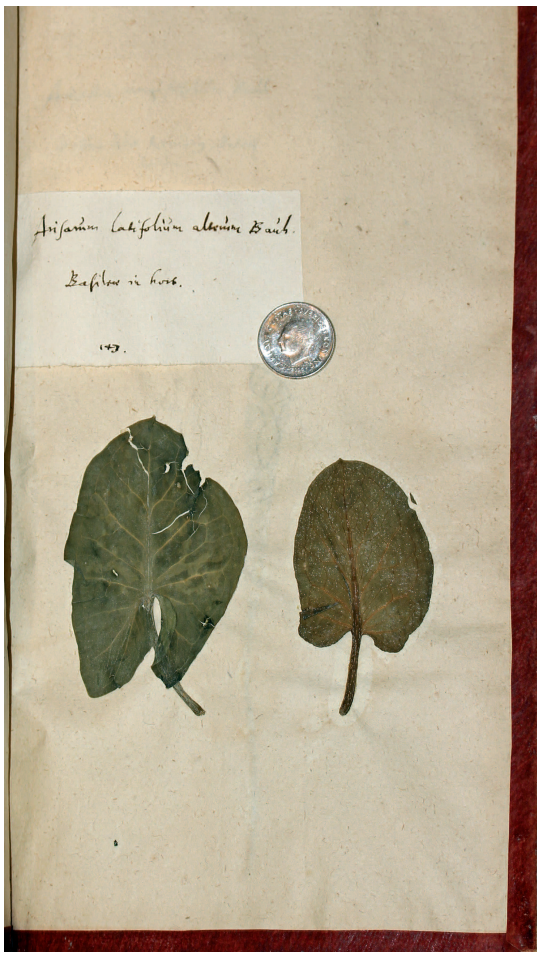


Fig. 2. – Original material of *Arum arisarum* L.
[*s.coll.*, UPS-BURSER] [© Herbarium UPS. Reproduced with permission]

Therefore, as the herbarium sheet in UPS-BURSER (Herb. Burser X: 143) is very incomplete, we select here as the lectotype the element of the protologue which best matches the traditional and current concept of *Arum arisarum.* Among the elements cited in the protologue, the illustrations by Clusius (1601) and Lobelius (1581) clearly shows the characters of the leaves, spathe and spadix as indicated by Linnaeus (1753), *"acaule, foliis cordato-oblongis, spatha bifida, spadice incurvo",* and they are therefore suitable for typification of *A. arisarum*. These two illustrations are identical, therefore we designated here the Clusius's illustration as the lectotype (Fig. 1).

However, these images do not show an important diagnostic character for distinguishing this species from *A. simorrhinum*, that is the greater length of the spathe peduncule in respect to the length of the leaf petioles. In addition, an epitype is also designated here in order to avoid any ambiguity in the interpretation of the lectotype specimen.

Arum arisarum L., Sp. Pl.: 966. 1753.

≡ ***Arisarum vulgare*** O. Targ. Tozz. in Ann. Mus. Imp. Fis. Firenze 2: 67. 1810.

Lectotypus (here designated): *"Arisarum latifolium I"*. (Clusius, 1601: tab. LXXIII) (Fig. 1).

Epitypus (here designated): **Spain. Prov. Valencia:** Xàtiva, Castillo de Xàtiva, 30SYJ1518, 140 m, 2.III.2014, fl. & fr., *P. Ferrer & I. Ferrando 014001* (VAL [VAL 220580!], arrow] (Fig. 3).



Fig. 3. – Epitype of *Arum arisarum* L. (designated by an arrow).
[*P. Ferrer & I. Ferrando 014001*, VAL] [© Herbarium VAL. Reproduced with permission]

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