

On the type of *Genista terniflora* (Loteae-Leguminosae)

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Abstract

The name *Genista terniflora* (*Anthyllis terniflora*) is neotypified. A specimen preserved in the herbarium of the Royal Botanical Garden of Madrid (at MA) and collected by Cavanilles in 1792 is selected as the neotype.

Keywords: *Anthyllis terniflora*, Lagasca, nomenclature, typification, Spain, Valencian Community.

Resumen

Sobre el tipo de Genista terniflora (Loteae-Leguminosae)

El nombre *Genista terniflora* (*Anthyllis terniflora*) es neotipificado. Un espécimen conservado en el herbario del Real Jardín Botánico de Madrid (MA) y recolectado por Cavanilles en 1792 es seleccionado como el neotipo.

Palabras clave: *Anthyllis terniflora*, Lagasca, nomenclatura, tipificación, España, Comunidad Valenciana.

Introduction

Anthyllis terniflora (Lag.) Pau (A. subgen. *Terniflora* V.N. Tikhom. & D.D. Sokoloff) was described as *Genista terniflora* by Lagasca (1816: 22), and it was treated as a subspecies of *Anthyllis cytisoides* L. by Sagredo & Malagarriga (Malagarriga, 1976: 626) and Mateo & Figuerola (1987: 368). This species has been mentioned as present in SE Iberian Peninsula and North of Africa (Bolòs & Vigo, 1984; Benedí, 2000). It is the parental species of two hybrids, *A. xmedia* Pau (Pau, 1925: 16) and *A. xfortuita* Guara & P.P. Ferrer (Guara & Ferrer-Gallego, 2006: 171).

Dufour (in Candolle, 1825: 169) published the name *Anthyllis genistae*, but this name was nomenclatural superfluous when published because Dufour cited the legitimate name *Genista terniflora* Lagasca (1816: 22) as a synonym. Furthermore, *Anthyllis genistoides* Dufour (Dufour, 1860: 324) is also an illegitimate name and must be rejected because the author also cites the same name published by Lagasca.

The genus *Anthyllis* has been taxonomically revised for the *Flora iberica* project (Benedí, 1995, 1998, 2009), but the nomenclatural type of *Anthyllis terniflora* has not yet been designated. The purpose of this paper is to fix the application of the name *Anthyllis terniflora* through typification.

Results and discussion

The protologue of *Genista terniflora* (Lagasca, 1816: 22) consists of a brief description “290. GENISTA *terniflora*: racemis axillaribus subtrifloris: caulibus virgatis incanis: foliis simplicibus lanceolatis brevissime petiolatis: fructibus reflexis” followed by a

brief diagnosis “Suffrutex semi-bipedalis, erectus, *Anthyllidis cytisoides* Linn. facie, sed omnibus partibus tenuior”, the provenance “Hab. in montibus aridis in Valentiae et Murciae Regnis”, and the comment “Floret vere”.

Mariano Lagasca y Segura (1776–1839) was a Spanish botanist at the Madrid botanical garden. This author was in exile in England 1822 and in Jersey 1831–1834, and back to Spain 1834–1839. The original herbarium of Lagasca was destroyed during his flight from Madrid to Gibraltar (1822). However, some material is preserved at MA, but also in others herbaria (e.g., BR, BM, C, FI, G, LD, MEXU). Unfortunately, I have not found any original material of *Genista terniflora* in the herbaria consulted (e.g., BR, BM, C, FI, G, K, LD, MA, MPU, P, SE) (acronyms according to Thiers, 2023).

Therefore, as an exhaustive search for original material of *Genista terniflora* failed to locate any extant specimens, a neotype is selected according to Art. 9.8 of the Shenzhen Code (Turland *et al.*, 2018).

In the herbarium MA there is a Cavanillesian specimen of this species which could have been studied by Lagasca himself during his stay at the Royal Botanical Garden in Madrid, the sheet is coded as MA 65182. The specimen, several complete fragments well preserved, with leaves and flowers, is mounted on two sheets (i.e., in more than one preparation), but the parts are clearly labelled as being part of that same specimen. The sheet coded MA 65182-1 bears three handwritten labels, annotated as: “*Genista florida*? / Habitat in montibus Mogen / te, S^o. Felipe et alibi / Maio 1792”, and “Prope Xixonam in collibus / Maio 1792.”. The third label is a transcription of Carlos Vicioso, and the

information that appears on this label was also transcribed and printed on another label that contains the sheet (the fourth). The sheet MA 65182-2 bears the same printed label (Figure 1). All material preserved in the herbarium sheets shows diagnostic characters (e.g., branches woody, erect, straight to flexuous, indumentum finely sericeous, leaves all simple, narrowly elliptical, flowers solitary or in fascicles of 2–3 in the axils of simple, elliptical to ovate bracts, forming a spiciform inflorescence, calyx 3–4.5 mm, corolla yellow, and was collected in

a locality (or localities) that matches with the provenance mentioned by Lagasca in the protologue (“Hab. in montibus aridis in Valentiae...”). This specimen clearly represents the traditional concept (Lagasca, 1816) and current use and application of the name *Anthyllis terniflora* (e.g. Bolòs & Vigo, 1984; Benedí, 2000; Ferrer-Gallego & Guara, 2016).

In conclusion, I designate as the neotype of the name *Anthyllis terniflora* the specimen at MA 65182 (Figure 1).



Figure 1. Neotype of *Anthyllis terniflora* (Lag.) Pau, MA (code MA65182). Image courtesy of Herbarium MA; reproduced with permission.

Figure 1. Neotipo de *Anthyllis terniflora* (Lag.) Pau, MA (código MA65182). Imagen cortesía del herbario MA, reproducido con permiso.

Anthyllis terniflora (Lag.) Pau in Bull. Acad. Int. Géogr. Bot. 16(2): 75. 1906

≡ *Genista terniflora* Lag., Elench. Pl.: [22]. 1816 [basionym] ≡ *A. cytisoides* var. *lagascana* Pau, Not. Bot. Fl. Españ. 1: 26. 1887 ≡ *A. cytisoides* subsp. *terniflora* (Lag.) Sagredo & Malag. in Malag., Sin. Fl. Ibér. 40: 626. 1876 ≡ *A. cytisoides* subsp. *terniflora* (Lag.) Mateo & Figuerola, Fl. Anal. Valenciana: 368. 1987, nom. illeg. ≡ *A. genistae* Dufour in DC., Prodr. 2: 169. 1825, nom. illeg. (Art. 52.1 y Art. 52.2(e) of the ICN, see

Turland *et al.*, 2018) ≡ *A. genistoides* Dufour in Bull. Soc. Bot. France 7: 324. 1860, nom. illeg. (Art. 52.1 y Art. 52.2(e) of the ICN, see Turland *et al.*, 2018).

Neotype (designated here): Spain, Valencia, “Habitat in montibus Mogente, S^o. Felipe et alibi // Prope Xixonam in collibus”, May 1792, *Cavanilles s.n.*, (MA, codes MA-01-02-00065182 [two herbarium sheets]) (Figure 1).

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