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Volume 23  
Number 2  
2014

NOVON



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Nomenclatural Notes for *Fritillaria pyrenaica* (Liliaceae) in the Iberian Peninsula

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**ABSTRACT.** The nomenclature of the new combination *Fritillaria pyrenaica* L. subsp. *falcata* (E. Rico) R. Alonso, de Paz & M. E. García (Liliaceae) is presented. The taxon, endemic to the Iberian Peninsula, was initially described under the illegitimate later homonym *F. falcata* Caball. Herein, we correct the authorities of the basionym *F. lusitanica* Wikstr. f. *falcata* (Caball.) E. Rico and the replaced synonym *F. nervosa* Willd. subsp. *falcata* (Caball.) Fern.-Arias & Devesa.

**Key words:** *Fritillaria*, Liliaceae, Spain.

In 1947, Caballero described the species *Fritillaria falcata* Caball. (Liliaceae) on the basis of specimens with falcate and longitudinally folded leaves from the Peña de Francia mountainous area in the province of Salamanca in the center of Spain (Caballero, 1947). According to Article 53.1 of the International Code of Botanical Nomenclature (ICBN; McNeill et al., 2006), this is an illegitimate name because it is a later homonym of *F. falcata* (Jeps.) D. E. Beetle. Beetle's name was based on *F. atropurpurea* Nutt. var. *falcata* Jeps. (Jepson, 1922; Beetle,

1944) and included specimens from western California in the United States. The name *F. falcata* Caball. was later transferred first at the rank of form and later at the rank of subspecies. Rico Hernández (1985) treated this taxon as *F. lusitanica* Wikstr. f. *falcata* (Caball.) E. Rico, noting that the diagnostic characteristics of the species given by Caballero were quite variable.

Later, in a monograph on the genus *Fritillaria* L., Fernández-Arias González and Devesa (1990a) published the intended new combination, *F. nervosa* Willd. subsp. *falcata* (Caball.) Fern.-Arias & Devesa, based on the morphology of the nectary, which is considered taxonomically significant in the genus. Nectaries of *F. lusitanica* are oblong, while in *F. nervosa* these are rounded, just as they are in the taxon here considered. In both combinations, no account was taken in regard to the illegitimate status of the basionym of the form and variety. Hence, although the epithet *falcata* is available for use at the ranks of form and variety in these two species, the authorship to Caballero is incorrect. According to Article 58.1 of the ICBN (McNeill et al., 2006), the

name for the form is to be treated as a new name with the same type as *F. falcata* Caball. but with priority from the date of publication of the new name. *Fritillaria lusitanica* f. *falcata* was published as an intended new combination based on *F. falcata* but is in fact a replacement name for Caballero's illegitimate *F. falcata*. Fernández-Arias González and Devesa (1990a) cited the illegitimate *F. falcata* as the basionym of their new combination, but under ICBN Article 33.7 (c) (McNeill et al., 2006; see also Ex. 22), this is an error to be corrected, and the name is validly published as a new combination with the basionym *F. lusitanica* f. *falcata* E. Rico. Thus, the correct authorities for these names would be *F. lusitanica* f. *falcata* E. Rico and *F. nervosa* subsp. *falcata* (E. Rico) Fern.-Arias & Devesa, respectively.

Peruzzi and Jarvis (2009) provided a lectotype for the Linnaean name *Fritillaria pyrenaica* L. using material from the Burser Herbarium at UPS and proposed its use to designate an endemic plant from the north of Spain and the south of France. This name had been considered a nomen confusum by other authors, since the sheet initially included by Linnaeus in the Linnaean Herbarium at LINN is not identifiable with the present-day concept of *F. pyrenaica* (López González, 1986). Hence, Fernández-Arias González and Devesa (1990a) proposed the use of *F. nervosa* and added the epithet *falcata* applied at the subspecies rank under this name, providing a lectotype from material in the Bouché Herbarium at W for *F. nervosa*. Rix (1980) in *Flora Europaea* treats the taxon as *F. pyrenaica* at the rank of species without any subspecies.

Various authors of chorology and taxonomic works have recognized the name *Fritillaria nervosa* subsp. *falcata* (Fernández-Arias González & Devesa, 1990b; Sardinero, 2004; Paz et al., 2011). Additionally, this name appears in official listings for the protection of threatened Spanish flora. The rarity and restricted distribution of this plant have led to considerable interest in its conservation. In the *Atlas and Red Book of Spanish Vascular Flora* [*Atlas y Libro Rojo de la Flora Vascular Española*] by Bañares et al. (2004) as well as in the *Red List of Spanish Vascular Flora* [*Lista Roja de la Flora Vascular Española*] by Moreno (2008), the taxon is considered as Vulnerable (VU). At the regional level, in the *Catalogue of Protected Flora for Castile and Leon* [*Catálogo de Flora Protegida de Castilla y León*] (Anonymous, 2007), it appears in appendix III, which lists species rated as requiring preferential treatment [De Atención Preferente].

Recently, a nomenclatural proposal has been published in which *Fritillaria nervosa* subsp. *falcata*

is designated as *F. caballeroi* F. M. Vázquez (Vázquez, 2009). This restored the original species-level recognition for the taxon; however, the author did not offer any justification for rejecting the subspecific rank most generally used in the past (e.g., Rico Hernández, 1985; Fernández-Arias González & Devesa, 1990a). *Fritillaria caballeroi* is a legitimate replacement name at species rank, and the taxon has appeared under this name in the addenda of the recent checklist for endangered plant species from Spain (Bañares et al., 2010) and was assessed under the category of Vulnerable (VU).

The affinity of *Fritillaria caballeroi* [= *F. nervosa* subsp. *falcata*] to *F. pyrenaica*, a taxon from which it is distinguished by the smaller flowering scapes and the longitudinally folded, falcate leaves, justify the treatment of this taxon at the subspecific level, as seen appropriately by Fernández-Arias González and Devesa (1990a). Because *F. pyrenaica* L. (1753) has priority of publication over *F. nervosa* Willd. (1809), the combination below is proposed to designate this taxon.

**1. *Fritillaria pyrenaica* L., Sp. Pl. 304. 1753. TYPE:**

Basileae in horto Eckenstenii. Habitat in Pyrenaeis, s.d. Herb. Burser III: 62 (lectotype, designated by Peruzzi & Jarvis [2009: 1360], UPS).

**1a. *Fritillaria pyrenaica* subsp. *falcata* (E. Rico) R.**

Alonso, de Paz & M. E. García, comb. et stat. nov. Basionym: *Fritillaria lusitanica* Wikstr. f. *falcata* E. Rico, *Anales Jard. Bot. Madrid* 41(2): 417. 1984 [1985], replacement name for *F. falcata* Caball., *Anales Jard. Bot. Madrid* 7: 650–651. 1948, nom. illeg., non *F. falcata* (Jeps.) D. E. Beetle, *Madroño* 7(5): 148. 1944. *Fritillaria nervosa* Willd. subsp. *falcata* (E. Rico) Fern.-Arias & Devesa, *Stud. Bot. Univ. Salamanca* 9: 62–63. 1990 [1991]. *Fritillaria caballeroi* F. M. Vázquez, *Folia Bot. Extremadur.* 4: 122. 2009, replacement name for *F. falcata* Caball. TYPE: Spain. Salamanca: en la Peña de Francia, La Alberca, en tierra humosa, suelta, en las oquedades de las rocas de la cima, con *Gagea foliosa* Schult. L., 23 May 1947. A. Caballero s.n. (lectotype, designated by Fernández-Arias González & Devesa [1990a: 58], MA-21354).

This taxon is endemic and exclusively occurs in the center and north of Spain. *Fritillaria pyrenaica* subsp. *falcata* has been collected in the provinces of Salamanca, Ávila, and Cáceres, and more recently recorded in the province of León (Paz et al., 2011).

KEY TO *Fritillaria* PYRENAICA IN SPAIN

- 1a. Lanceolate, falcate, and longitudinally folded leaves; scapes 13–24 cm .....  
..... *F. pyrenaica* subsp. *falcata*  
1b. Lanceolate or linear-lanceolate, straight and flat leaves; scapes 15–55 cm .....  
..... *F. pyrenaica* subsp. *pyrenaica*

*Acknowledgments.* We wish to acknowledge Dr. John McNeill for his suggestions and comments. We are also grateful to Francisco M. Vázquez Pardo, Tatyana Shulkin, and Roy Gereau for reviewing the manuscript and to Sara Fuentes and Victoria C. Hollowell for their careful editorial work.

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