

New nomenclatural combinations in vascular plants

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Abstract

In this paper the following new nomenclatural combinations are proposed: *Descurainia suffruticosa* (Coste & Soulié) Aymerich & L. Sáez, *Linum suffruticosum* subsp. *castroviejoii* (Mart. Labarga, Pedrol & Muñoz Garm.) L. Sáez & P. Aymerich, *Oeosporangium acrosticum* (Balb.) L. Sáez & P. Aymerich, *Oeosporangium ×kochianus* (Rasbach, Reichst. & Schneller) L. Sáez & P. Aymerich and *Valeriana tarraconensis* (Pau) L. Sáez & Aymerich.

Keywords: nomenclature; taxonomy

Resum. Noves combinacions en plantes vasculars

En aquesta aportació es proposen les següents noves combinacions nomenclaturals: *Descurainia suffruticosa* (Coste & Soulié) Aymerich & L. Sáez, *Linum suffruticosum* subsp. *castroviejoii* (Mart. Labarga, Pedrol & Muñoz Garm.) L. Sáez & P. Aymerich, *Oeosporangium acrosticum* (Balb.) L. Sáez & P. Aymerich, *Oeosporangium ×kochianus* (Rasbach, Reichst. & Schneller) L. Sáez & P. Aymerich i *Valeriana tarraconensis* (Pau) L. Sáez & Aymerich.

Paraules clau: nomenclatura, taxonomia

Introduction

In the course of preparing the catalogue of vascular plants of Catalonia (northeastern Iberian Peninsula) (see Aymerich & Sáez, 2015) we find five taxa needing nomenclatural updates. The new combinations are provided below.

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Results

The following taxonomic treatments are proposed:

Descurainia suffruticosa (Coste & Soulié) Aymerich & L. Sáez, **comb. nova**
Basionym: *Sisymbrium tanacetifolium* L. var. *suffruticosum* Coste & Soulié in Bull. Soc. Bot. France 59: 739 (1912)
≡ *Descurainia tanacetifolia* (L.) Prantl subsp. *suffruticosa* (Coste & Soulié) Jauzein in Biocosme Mésogéen 27(4): 116 (2010); ≡ *Hugueninia tanacetifolia* (L.) Rchb. subsp. *suffruticosa* (Coste & Soulié) P.W. Ball in Feddes Repert. Spec. Nov. Regni Veg. 68: 194 (1963)

Descurainia tanacetifolia (L.) Prantl. is considered a species distributed through mountain areas in southern Europe, which includes two disjunct subspecies: subsp. *tanacetifolia* distributed in the Western Alps and subsp. *suffruticosa* (Coste & Soulié) Jauzein from the Pyrenean-Cantabrian range (Goodson et al., 2011; Tison & Foucault, 2014). This species was formerly constituted the unispecific genus *Hugueninia* Rchb., but molecular evidence (Goodson et al., 2006) clearly supports its inclusion within *Descurainia* Webb & Berthel.

Several morphological characters (i.e. stems and abaxial leaves surface always hairy, lower leaves shape, longer fruiting pedicels and woodier stem base) supported the taxonomic recognition of the Pyrenean-Cantabrian plant (Ortiz, 1993; Tison & Foucault, 2014). Goodson et al. (2011) provide additional knowledge for this plant, based on molecular data: *D. tanacetifolia* subsp. *suffruticosa* is more closely related to Canary Islands species of *Descurainia* than to subsp. *tanacetifolia*. The available morphological, molecular and biogeographic data allow a new taxonomic reinterpretation.

Linum suffruticosum subsp. ***castroviejoii*** (Mart. Labarga, Pedrol & Muñoz Garm.) L. Sáez & Aymerich, **comb. nova**
Basionym: *Linum castroviejoii* Mart. Labarga, Pedrol & Muñoz Garm. in Castrov. & al. Flora iberica 9: 507 (2015)

This is a recently described small shrub closely related to *Linum suffruticosum* L. which occurs in gypsum soils. It is endemic to the Barbastro-Balaguer anticline, an area located in the northern edge of the river Ebro basin (Huesca and Lleida provinces, northeastern Iberian Peninsula) (Martínez Labarga & Muñoz Garmendia, 2015). According to Martínez Labarga & Muñoz Garmendia (l.c.) the separation between *Linum castroviejoii* and *L. suffruticosum* is based on vegetative characters. However, Martínez Labarga & Muñoz Garmendia (2015: 215) admit that there are intermediate forms between *Linum castroviejoii* and *L. suffruticosum*. Since the morphological differences between *Linum castroviejoii* and *L. suffruticosum* are not entirely clear in some geographic areas, and the diagnostic characters used for their separation are of the same nature as those invoked by Martínez Labarga & Muñoz Garmendia (2015) to separate subspecies within the

latter species, it seems advisable to recognize *Linum castroviejoi* at subspecies rank within *L. suffruticosum*.

***Oeosporangium acrosticum* (Balb.) L. Sáez & P. Aymerich, comb. nova**

Basionym: *Pteris acrostica* Balb., Elenco: 98 (1801)

≡*Cheilanthes acrostica* (Balb.) Tod. in Giorn. Sci. Nat. Econ. Palermo 1: 215 (1866); ≡*Cheilanthes pteridioides* subsp. *acrostica* (Balb.) O. Bolòs & al., Fl. Man. Països Catalans: 1213 (1990); ≡*Allosorus acrosticus* (Balb.) Christenh. in Willdenowia 42: 284 (2012); ≡*Oeosporangium pteridioides* subsp. *acrosticum* (Balb.) Fraser-Jenk. & Pariyar, Annot. Checkl. Indian Pteridophytes 1: 259 (2016) [2017, publ. 28 Dec 2016]

Most of the European species previously placed in *Cheilanthes* Sw. (and not belonging to either *Paragymnopteris* K.H. Shing or *Cosentinia* Tod.) and later transferred to *Allosorus* Bernh. by Christenhusz in (Greuter & Raab-Straube, 2012) have been transferred to *Oeosporangium* Vis. (Fraser-Jenkins et al., 2016). As far as we know, there is not any available name at species level within the genus *Oeosporangium* for this plant, which has been widely recognized as a separate species (Muñoz Garmendia, 1986; Jermy & Paul, 1993; Salvo & Ouyahya 1999; Conti et al., 2005; Jeanmonod & Gamisans, 2007; Greuter & Raab-Straube, 2012; Tison & Foucault, 2014; Tison et al., 2014; Dimopoulos et al., 2017).

***Oeosporangium xkochianus* (Rasbach, Reichst. & Schneller) L. Sáez & P. Aymerich, comb. nova**

Basionym: *Cheilanthes xkochiana* Rasbach, Reichst. & Schneller in Webbia 37: 48 (1983)

≡*Allosorus xkochianus* (Rasbach, Reichst. & Schneller), L. Sáez & Aymerich in Orsis 29: 26 (2015)

This is a natural hybrid between *Oeosporangium pteridioides* (Reichard) Fraser-Jenk. & Pariyar and *Oeosporangium tinaei* (Tod.) Fraser-Jenk. It was described on the basis of specimens collected in Cap de Creus Peninsula (Rasbach et al., 1983).

***Valeriana tarraconensis* (Pau) L. Sáez & Aymerich, comb. nova**

Basionym: *Valeriana tripteris* var. *tarraconensis* Pau in Treb. Inst. Catalana Hist. Nat. 1: 31 (1915)

≡*Valeriana tripteris* subsp. *tarraconensis* (Pau) Devesa, López, Vázq. Pardo & R. Gonzalo in Lagasalia 25: 258 (2005)

Pau (in Font Quer, 1915) described a variety of *Valeriana tripteris* from Vall de la Monrela (Ports massif, Tarragona province, northeastern Iberian Peninsula). He considered this taxon taxonomically related to *V. tripteris* L., which is distributed throughout central and southern Europe (Vázquez et al., 2007; Raab-Straube & Henning, 2017). *Valeriana tripteris* var. *tarraconensis* was raised to the subspe-

cies level by Devesa et al. (2005). Bolòs et al. (2005) also accepted the populations from Ports massif at the subspecies level in their broad concept of *V. montana* L. Later, Vázquez et al. (2007) and Raab-Straube & Henning (2017) accepted it in their treatments of the genus *Valeriana* L. for “Flora iberica” and Euro+Med Plantbase, respectively.

Based on observations of both herbarium specimens and living plants we consider that the characters selected by Vázquez et al. (2007) for the morphological discrimination of the taxon described by Pau (in Font Quer, 1915) from typical *V. tripteris*, i.e. middle cauline leaves usually undivided, basal leaves subentire to slightly dentate —rarely tripartite to trisect, with subrombic to suborbicular segments—, longer corollas of hermaphrodite flowers (up to 8.4 mm long) and longer anthers (up to 1.3 mm long), are consistent. On the basis of the morphological features and allopatric distribution, the specific rank better reflects the taxonomic singularity of the populations treated by Vázquez et al. (2007) as *Valeriana tripteris* subsp. *tarraconensis* that, in our opinion, should be segregated from *V. tripteris* as an independent species of its own. *Valeriana tarraconensis* is a locally endemic plant currently known only from Ports massif and adjacent mountains such as Cardó and Colldejou massifs (northeastern Iberian Peninsula). The Ports massif is an area with a high concentration of endemic plants, some of them with restricted patterns of regional occurrence (Sáez et al., 2010; Martinell et al., 2010; Pyke et al., 2016). *Valeriana tarraconensis* grows on limestone cliffs and rocky places at elevations between 450-1420 m above sea level.

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