

FURTHER NOMENCLATURAL CHANGES REGARDING PERUVIAN ENDEMIC

EDUARDO ANTONIO MOLINARI-NOVOA

Abstract. The nomenclature of eight species of Peruvian endemic plants from six genera (*Arenaria* L., *Calceolaria* L., *Erigeron* L., *Pycnophyllum* J. Rémy, *Pycnophyllopsis* Skottsb., *Schizotrichia* Benth.) is reviewed, and the corresponding changes are proposed. Additionally, lectotypes for *Pycnophyllum peruvianum* Muschl. and *P. macrophyllum* Muschl. are selected, and conservation assessments are provided for all species.

Key words: *Arenaria*, *Calceolaria*, *Erigeron*, new combination, new name, nomenclature, *Pycnophyllum*, *Pycnophyllopsis*, *Schizotrichia*

Eduardo Antonio Molinari-Novoa, Herbario (MOL), Departamento Académico de Biología, Universidad Nacional Agraria La Molina, Avenida La Universidad, Apartado 456, Lima 12, Peru; e-mail: 20090095@lamolina.edu.pe

INTRODUCTION

During the course of bibliographic research done as preparation for the ‘Actualization Process for the Categorization of Threatened Wild Flora Species in Peru’, I noted nineteen nomenclatural issues awaiting solution. After our previous instalment (Molinari-Novoa 2015), some few of these were left aside. Here I present the remaining names with the pertinent changes, accompanied by brief comments when needed.

RESULTS AND DISCUSSION

Four new names and six combinations are needed for the endemic flora of Peru. Additionally, lectotypes are selected for two species originally published under *Pycnophyllum* Rémy.

Arenaria pintaudii Molinari, **nom. nov.**

REPLACED NAME: *Alsine rupestris* Muschl., Bot. Jahrb. Syst. **45**(4): 448. 1911 (July 25) *nom. illeg., non Alsine rupestris* Fenzl, Vers. Darstell. Alsineen: 57. 1833, *nec Arenaria rupestris* Labill., Icon. Pl. Syr. **4**: 8. 1812.

NOTES. Cano and Sánchez (2007) evaluated this species as Critically Endangered, and suggested it could be misplaced, referring it to *Arenaria* L. After reviewing the detailed description of

Muschler (1911) and contrasting it with the keys of Bittrich (1993), I agree with this arrangement and therefore propose a new name. Another homonym of this species is *Alsine rupestris* (Kindb.) Druce, published in 1906, on page 221 (Druce 1906).

This new species is named to honor the late Jean-Christophe Pintaud (1970–2015), a distinguished French botanist and one of my professors, whose untimely death left grief and sorrow.

The following three species were considered to belong to *Arenaria* L. by Mattfeld (1922), who examined the now destroyed types, by Macbride (1937) in his treatment for the *Flora of Peru*, and more recently by Timaná (2005) and Cano and Sánchez (2007), due to their dehiscent fruit which excludes them from *Pycnophyllum* (Bittrich 1993). I agree with this criterion and therefore propose the three needed combinations.

Arenaria horizontalis (Muschl.) Molinari, **comb. nov.**

BASIONYM: *Pycnophyllum horizontale* Muschl., Bot. Jahrb. Syst. **45**(4): 454. 1911 (July 25).

Arenaria carinata (Muschl.) Molinari, **comb. nov.**

BASIONYM: *Pycnophyllum carinatum* Muschl., Bot. Jahrb. Syst. **45**(4): 457. 1911 (July 25).

Arenaria peruviana* (Muschl.) Molinari, *comb. nov.

BAISIONYM: *Pycnophyllum peruvianum* Muschl., Bot. Jahrb. Syst. **45**(4): 457. 1911 (July 25).

TYPE: PERÚ. JUNÍN. La Oroya, 4300 m asl, February 1903. *Weberbauer 2597* (HOLOTYPE: B, destroyed; LECTOTYPE, here designated, MOL).

NOTES. '*Arenaria peruviana*' is a binomial attributed to Eduard F. Poeppig (1798–1868) by Rohrbach (1872). He cited it as a synonym of *Arenaria lanuginosa* (Michx.) Rohrb. and stated it was a manuscript indication on a herbarium sheet. Therefore it has no nomenclatural standing and does not prevent the combination here effected.

During my investigation I found an isotype of *A. peruviana* (*Weberbauer 2597*) in MOL. Since the holotype at B is lost (Timaná 2005) and the material available at the Peruvian herbarium is complete, I select it as a lectotype.

Arenaria horizontalis has been catalogued as Data Deficient, since is known only from the original collection. *Arenaria carinata* and *A. peruviana* were not evaluated until now; they should be catalogued as Data Deficient since are known only from the type collection.

Arenaria reinholdiana* Molinari, *nom. nov.

REPLACED NAME: *Arenaria caespitosa* Muschl., Bot. Jahrb. Syst. **45**(4): 449. 1911 (July 25), *nom. illeg.*, *non Arenaria caespitosa* Salisb., Prodr. Stirp. Chap. Allerton: 299. 1796 (November).

NOTES. The binomial *Arenaria caespitosa* was used at least three times before the creation of this Peruvian concept by Muschler (1911), the oldest use being by Salisb. (1796) as a superfluous replacement name for *A. balearica* L. Therefore a new name is proposed, honoring the original author (Reinhold C. Muschler 1883–1957).

This species was catalogued as Not Evaluated by Cano and Sánchez (2007), but since is known only from type collection, should be considered Data Deficient.

Calceolaria puppoe* Molinari, *nom. nov.

REPLACED NAME: *Calceolaria hirsuta* Molau, Nordic J. Bot. **4**(5): 648. 1984, *nom. illeg.*, *non Calceolaria hirsuta* Rusby, Descr. S. Amer. Pl.: 60. 1920.

NOTES. This species has been catalogued as Data Deficient by Salinas and León (2007), because another probable collection, besides the type, remains unconfirmed. The species is renamed honouring Pamela Puppó, fellow La Molina University botanist and world expert for the genus *Calceolaria* L.

Erigeron quattuordomuum* Molinari, *nom. nov.

REPLACED NAME: *Erigeron minusculus* Cuatrec., Anales Univ. Madrid, Ci. **4**(2): 218. 1935. *non Erigeron minusculus* Greene, Leaflet. Bot. Observ. Crit. **2**: 8. 1909 (February 6).

NOTES. Although accepted by Beltrán *et al.* (2007) and Flann (2015), *Erigeron minusculus* Cuatrec. is a later homonym, and is replaced with the genitive declension of the Latinized surname of José Cuatrecasas (1903–1996). Since it is only known from the type collection, it should be catalogued as Data Deficient.

Pycnophyllopsis cryptantha* (Mattf.) Molinari, *comb. nov.

BAISIONYM: *Plettkea cryptantha* Mattf., Schriften Vereins Naturk. Unterweser n.f. **7**: 15. 1934.

Pycnophyllopsis macrophylla* (Muschl.) Molinari, *comb. nov.

BAISIONYM: *Pycnophyllum macrophyllum* Muschl., Bot. Jahrb. Syst. **45**(4): 458. 1911 (July 25).

TYPE: PERÚ. ÁNCASH. Cordillera Blanca, 4500 m a.s.l., May 14th, 1903. *Weberbauer 2975* (HOLOTYPE: B, destroyed; LECTOTYPE, here designated, MOL)

NOTES. These two species were considered to be part of *Plettkea* Mattf. by Mattfeld (1934) and Bittrich (1993). Macbride (1937) reduced both *Pycnophyllopsis* Skotts. and *Plettkea* under *Pycnophyllum*. However, Timaná (2005) recognized *Pycnophyllopsis s.l.* (including *Plettkea*) as distinct from *Pycnophyllum* J. Rémy on morphological and molecular grounds; however, the proposed combinations remained unpublished. At MOL an isotype of *P. macrophylla* (*Weberbauer 2975*) was found. Since the holotype at B is lost and the cited specimen is in a good state, it was selected as the lectotype by Timaná (2005), but that typification remained unpublished. I validate that decision here.

Pycnophyllopsis cryptantha is catalogued as Vulnerable, and *P. macrophylla* is catalogued as Endangered (Cano & Sánchez 2007).

***Schizotrichia lopez-mirandae* (Cabrera) Molinari, comb. nov.**

BASIONYM: *Dyssodia lopez-mirandae* Cabrera, Notas Mus. La Plata, Bot. **19**(92): 205. 1959.

NOTES. The binomial under *Schizotrichia* Benth. was already accepted by Flann (2015) in the ‘Global Composite Checklist’. However, no combination has been made until now. Strother (1969) excluded it from *Dyssodia* Cav., and proposed its transfer, as Beltrán *et al.* (2007) also suggested. With this combination, the genus *Schizotrichia* includes three species, all Peruvian (Beltrán *et al.* 2007). It is catalogued as Not Evaluated (Beltrán *et al.* 2007).

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