

(1666) Proposal to conserve the name *Pseudocrossidium revolutum* (Pottiaceae, Bryophyta) with a conserved type

María J. Cano

Departamento de Biología Vegetal (Área de Botánica), Facultad de Biología, Universidad de Murcia, E-30100 Murcia, Spain. mcano@um.es

(1666) *Pseudocrossidium revolutum* (Schrader, ex Brid.) R. H. Zander, Phytologia 44: 120. 1979 (*Barbula revoluta* Schrad. ex Brid., J. Bot. (Schrader) 1800(1): 299. Apr 1801), *nom. cons. prop.*

Typus: [Germany] “Hessen: Odenwald, an und auf Mauern bei Eberstadt und Bickenbach in der Bergstraße”, 15 Apr 1912, *J. Röhl s.n.* [Musci Eur. Exsic. n.º 893] (MA-Musci 20288), *typ. cons. prop.*

Two of the most widely distributed *Pseudocrossidium* R. S. Williams species in Europe are known as *Ps. hornsuschuchianum* (Schultz) R. H. Zander and *Ps. revolutum* (Schrader, ex Brid.) R. H. Zander. According to the main European floras (Nyholm, Ill. Fl. Nord. Mosses: 102–103. 1989; Cortini-Pedrotti, Flora dei muschi d’Italia. Sphagnopsida, Andreopsida, Bryopsida (I Parte): 362–364. 2001; Smith, Moss Flora of Britain & Ireland, ed. 2: 295. 2004) the differences between the two taxa are found in the shape of the leaf, shape and size of the upper laminal cells, the leaf apex and the presence or absence of gemmae on the adaxial part of the nerve. The former, *Ps. hornsuschuchianum*, includes plants which have lanceolate to triangular leaves, with acuminate apex, upper laminal cells quadrate, 10–14 µm wide, nerve with 2(3) guide cells at midleaf and absence of gemmae and is distributed in Europe, Macaronesia, North Africa, Southwest Asia and has also been recorded in North America, South Africa and Australia. The latter, *Ps. revolutum*, includes plants which have oblong-lanceolate, lingulate or linear-lingulate leaves, with rounded to obtuse apex, upper laminal cells quadrate-rounded, 8–10 µm wide, 4 guide cells and frequently with gemmae and it occurs widely in Europe, Macaronesia, North Africa and Southwest Asia. Although species delimitation in the genus *Pseudocrossidium* is in some cases difficult, the identity of both taxa have never been questioned. Also, they have been consistently accepted and widely used in bryological literature since its inception, e.g., by Schimper (Syn. Musc. Eur., ed. 2: 211–213. 1876), Limpricht (Laubm. Deutschl. 1: 620–623. 1888), Monkemeyer (Laubm. Eur.: 281. 1927), Podpera (Consp. Musc. Eur.: 212. 1954), Demaret & Castagne (Fl. Gén. Belgique, Bryoph. 2(1): 293–296. 1959), Bilewsky (in Nova Hedwigia 9: 368–369. 1965), Agnew & Vondráček (in Feddes Repert. 86: 363–364. 1975), Corley & al. (in J. Bryol. 11: 621. 1981), Zander (in Bull. Soc. Nat. Sci. 32: 1–378. 1993), Frey & al. (in Gams,

Kleine Kryptogamenfl. 4, ed. 6: 202. 1995), Crosby & al. (Checkl. Mosses: 206. 1999).

In preparing the manuscript of the genus *Pseudocrossidium* R. S. Williams for the “Flora Briofítica Ibérica” project, it was found that *Barbula revoluta* Schrad. ex Brid. was not typified. In the protologue, Bridel (in J. Bot. (Schrader) 1800(1): 299. Apr. 1801) accepted this name but did not provide any description or mention of original material. However, the name was validly published, because Bridel indirectly referred to the previously effectively published, but pre-starting date “*Barbula revoluta* Schraderi” (Art. 32.1(c), Greuter & al., Regnum. Veg. 138: 53. 2000). In Schrader (Syst. Samml. Krypt. Gew 1 n.º 54. 1796) the text reads: “54. *T. revoluta*, furculo innovationibus ramoso, foliis lanceolatis carinatis margine revolutis: perichaetialibus acuminatis, capsulis oblongis. Hab. in rupibus, muris, locis siccis”. Schrader’s Exsiccata: Syst. Samml. Krypt. Gew. 1 n.º 54. 1796 is deposited in various herbaria, but only the material deposited in GOET and LE [according to Stafleu & Cowan (Regnum. Veg. 112: 316. 1985), the original herbarium is deposited in the latter herbarium] was loaned for this study. Both specimens have lanceolate leaves, with revolute margins from the apex to the base, acuminate apex, quadrate upper laminal cells and a transverse section of the costa semicircular, with 2(3) guide cells and lack of gemmae. Therefore, the original material is identified as *Ps. hornsuschuchianum*.

On the other hand, the protologue of *Barbula hornsuschuchiana* Schultz (in Syll. Pl. Nov. 1: 35. 1822) includes a diagnosis and reference to the locality: “Germania, in colibus arenosis apricis Duc. Megapol. Stargard”. A search in the herbaria where Schultz specimens are kept (B and ROST) was unsuccessful. Therefore in order to fix the usage of this name, a neotype has to be designated.

Pseudocrossidium hornsuschuchianum (Schultz) R. H. Zander, Phytologia 44: 205. 1979 (*Barbula hornsuschuchiana* Schultz, Syll. pl. nov. 1: 35. 1822) - Neotypus (hic designatus): [Germany] “Pommern, Kr. Naugard”, 22 Jun 1939, *F. Hintze 4898* (B).

If this proposal is declined, lectotypification of the *Barbula revoluta* with the only available element (Syst. Sammlung crypt. Gewäsche fasc. 1 n.º 54. 1796), would result in *Ps. revolutum* becoming the correct name for the species currently known as *Ps. hornsuschuchianum*. In turn, a

new name for the species currently called *Ps. revolutum* would have to be proposed. Such nomenclatural changes for two commonly known plants in Europe would be extremely disruptive and confusing. Consequently, I propose the name *Ps. revolutum* for conservation with a conserved type in order to maintain traditional usage of these well-known names and to preserve nomenclatural stability of both species, in accordance with Art. 14.1. of the *ICBN* (Greuter & al., *Regnum Veg.*: 138. 2000).

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