

(2597) Proposal to reject the name *Potamogeton nerviger* (*Potamogetonaceae*)**Zdenek Kaplan^{1,2} & Joanna Zalewska-Gałosz³**¹ *The Czech Academy of Sciences, Institute of Botany, Zámek 1, 252 43 Průhonice, Czech Republic*² *Department of Botany, Faculty of Science, Charles University, Benátská 2, 128 01 Prague, Czech Republic*³ *Institute of Botany, Jagiellonian University, Kopernika 27, 31-501 Kraków, Poland*Author for correspondence: *Zdenek Kaplan, kaplan@ibot.cas.cz*DOI <https://doi.org/10.12705/672.19>

(2597) *Potamogeton nerviger* Wlfg. in Schultes & Schultes, Mant. 3: 359. Jul–Dec 1827 [Angiosp.: *Potamogeton*.], nom. utique rej. prop.

Lectotypus (vide Kaplan & Zalewska-Gałosz in Taxon 53: 1036. 2004): Lithuania, *Wolfgang* (LE; isolectotypi: BM, K, LE, UPS, W, ZT).

Potamogeton nerviger was described by J.F. Wolfgang (l.c.) as a species growing “In fluvio Wierzchnia circa Lelany Lithuaniae”, which is now the Verknė River near Lielionys, Lithuania. Duplicates of the original collection were widely distributed (Kaplan & Zalewska-Gałosz, l.c.) and studied by several *Potamogeton* experts, who interpreted its identity in various ways. Earlier authors had regarded *P. nerviger* as conspecific with *P. alpinus* Balb. (Bennett in J. Bot. 27: 243. 1889), sometimes recognizing it as infraspecific taxon *P. rufescens* subsp. *nerviger* (Wlfg.) K. Richt. (Pl. Eur. 1: 12. 1890), *P. alpinus* var. *purpurascens* subvar. *nerviger* (Wlfg.) Asch. & Graebn. (Syn. Mitteleur. Fl. 1: 311. 1897; Graebner in Engler, Pflanzenr. IV. 11 (Heft 31): 73. 1907) or *P. alpinus* var. *nerviger* (Wlfg.) G. Fisch. (in Mitt. Bayer. Bot. Ges. 4: 153. 1930). Fischer (in Ber. Bayer. Bot. Ges. 11: 46. 1907) suggested that it might be a hybrid between *P. alpinus* and *P. lucens*. The important monographer of *Potamogeton*, Hagström (in Kongl. Svenska Vetensk. Acad. Handl., ser. 2, 55(5): 149. 1916), carefully examined the original plants and considered them to be identical with the British hybrid *P. ×griffithii* A. Benn. (in J. Bot. 21: 65. 1883), which he considered to be *P. alpinus* × *P. praelongus*, an opinion in which he was followed by Dandy & Taylor (in J. Bot. 77: 282. 1939) and by Preston (Pondweeds Gr. Brit. Ireland: 266. 1995) in so far as the origin of *P. ×griffithii* was concerned. Dandy (List Brit. Vasc. Pl.: 134. 1958; in Stace, Hybrid. Fl. Brit. Isl.: 453. 1975) and Dandy & Taylor (in Watsonia 6: 315–316. 1967) followed Fischer’s view on the identity of *P. ×nerviger* regarding it as applying to a hybrid between *P. alpinus* and *P. lucens*, that had been discovered in western Ireland. This identity was widely adopted in later taxonomic publications and currently is almost universally accepted (e.g., Stace, New Fl. Brit. Isles: 909. 1991; Czerepanov, Sosud. Rast. Rossii Sopred. Gosud.: 805. 1995; Preston, l.c.: 260; Wiegleb & Kaplan in Folia Geobot. 33: 264. 1998; Trei & al. in Kuusk & al., Fl. Baltic Countries 3: 206. 2003; Kaplan & Zalewska-Gałosz, l.c.; Wiegleb & al. in Feddes Repert. 119: 439. 2008; Preston in Stace & al., Hybrid Fl. Brit. Isles: 325. 2015; Uotila, Euro+Med Plantbase, <http://www.emplantbase.org>, accessed 5 Nov 2017). However, Galinis (in Natkevičaitė-Ivanauskienė, Lietuvos TSR Flora 2: 63. 1963) interpreted *P. ×nerviger* as a hybrid between *P. alpinus* and *P. gramineus* (as “*P. heterophyllus*”). Sequencing of plants from Germany recorded as “*P. ×nerviger*” by Wiegleb & al. (l.c.) showed that these actually represented a slender form of *P. ×salicifolius*, i.e., the hybrid *P. lucens* × *P. perfoliatus* (Kaplan & Fehrer in Taxon 60: 763. 2011). *Potamogeton ×nerviger* was claimed to occur also in Russia by Papchenkov (Gibridy Maloziv. Vidy Vodn. Rast.: 40–41. 2007) but the actual identity of these plants is unclear.

A recent combined molecular, morphological and anatomical investigation (Zalewska-Gałosz & al. in Preslia 90: 135–149. 2018) has shown that the type collection of *P. ×nerviger* is not *P. alpinus* × *P. lucens*, as is widely believed, but another hybrid, *P. nodosus* × *P. perfoliatus*, which had already been named *P. ×assidens* Z. Kaplan & al. (Zalewska-Gałosz & al. in Taxon 59: 562. 2010) and which is now known from several countries of Europe and Africa (Zalewska-Gałosz & al., l.c. 2010; Kaplan & al. in Preslia 85: 447–448. 2013). As we have now shown (Zalewska-Gałosz & al., l.c. 2018) that the type of *P. ×assidens* and that of *P. ×nerviger* belong to the same nothospecies (arising from *P. nodosus* × *P. perfoliatus*), under the priority rule of the *International Code of Nomenclature (ICN)*; McNeill & al. in Regnum Veg. 154. 2012), *P. ×nerviger*, as the earlier validly published and legitimate name, should now replace *P. ×assidens*. However, the name *P. ×nerviger*, although published 190 years ago and well established in the literature, has never been interpreted in this sense. Consequently, this nomenclatural change would cause considerable confusion and usage of this name would be inevitably associated with ambiguity as to the actual parentage of the taxon to which it refers.

It should be noted that due to their high diversity, frequent occurrence, persistence and occasional dominance in aquatic communities, *Potamogeton* hybrids are mostly referred by their binomials. Although hybrids may also be denoted by hybrid formulas, many *Potamogeton* hybrids are morphologically so well defined that they were first recognized as morphologically distinct entities and described as species without any suggestion of hybrid origin. There are also practical reasons, such as that hybrid binomials are easier to handle in databases than are formulae and encouraging the use of binomials may prevent botanists reporting hybrids that do not actually exist (see Danihelka & al. in Preslia 84: 655. 2012 for discussion on this topic). Some morphologically well-defined hybrids can even be distinguished and are known under their binomials although their exact parentages are unclear or uncertain (Kaplan & Fehrer, l.c.: 760). That is why *Potamogeton* hybrids are recorded under their binomials in the taxonomic literature rather than under their hybrid formulae.

Replacing the taxonomically clear name *P. ×assidens* by the controversial name *P. ×nerviger* in a completely different interpretation from any accepted previously and would constitute an undesirable and disadvantageous nomenclatural change for purely formal reasons. We therefore propose rejection of the name *P. nerviger* under Art. 56 of the *ICN*.

Acknowledgements

We thank herbarium curators for assistance and John McNeill for helpful comments on the manuscript. The research was supported by grant no. 17-06825S from the Czech Science Foundation and the long-term research development project no. RVO 67985939 of the Czech Academy of Sciences (to ZK) and by the grant no. N N303 564439 from the Polish Ministry of Science and Higher Education (to JZG).