(2615) Proposal to conserve the name *Lorinseria* C. Presl (*Blechnaceae*) against *Lorinsera* Opiz (*Apiaceae*)

André Luís de Gasper,¹ Richard K. Rabeler² & Alan R. Smith³

1 Universidade Regional de Blumenau, Rua Antônio da Veiga, 140 – Itoupava Seca, 89030-903, Blumenau, SC, Brasil

2 University of Michigan Herbarium – EEB, 3600 Varsity Drive, Ann Arbor, Michigan 48108-2228, U.S.A.

3 University Herbarium, University of California, Berkeley, California 94720-2465, U.S.A.

Author for correspondence: André Luís de Gasper, algasper@furb.br

DOI https://doi.org/10.12705/673.20

- (2615) Lorinseria C. Presl [Epimel. Bot.: 72] in Abh. Königl. Böhm. Ges. Wiss., ser. 5, 6: 432. Oct 1851, nom. cons. prop. Typus: L. areolata (L.) C. Presl (Acrostichum areolatum L.).
- (H) Lorinsera Opiz in Berchtold & al., Oekon.-Techn. Fl. Böhmens 2(2): 28. 1839 [Angiosp.: Umbell.], nom. rej. prop. Typus: non designatus.

The need for this proposal arises because there exist two similar names for different genera: Lorinsera Opiz (in Berchtold & al., Oekon.-Techn. Fl. Böhmens 2(2): 28. 1839), Apiaceae, a flowering plant from Europe, and Lorinseria C. Presl (in Abh. Königl. Böhm. Ges. Wiss., ser. 5, 6: 432. 1851, reprinted in Epimel. Bot.: 72. 1851), Blechnaceae, a fern of eastern North America. This possible homonymic issue was also raised by several authors (Cranfill in Fl. N. Amer. 2: 226-227. 1993; Haines in Fl. Novae Angliae: 53. 2011; and PPG 1 in J. Syst. Evol. 54: 583. 2016), but remained unresolved until now. Although three pairs of generic names differing only in the termination -a or -ia have been ruled as not likely to be confused and therefore not to be treated as homonyms, twice that number have been ruled to be confusable and therefore to be treated as homonyms (http://botany.si.edu/references/codes/props/index.cfm). In addition the voted example in the Code (Art. 53 *Ex. 8, McNeill & al. in Regnum Veg. 154. 2012) of names treated as homonyms includes Eschweilera DC. and Eschweileria Boerl.; the Code also includes

(Art. 53 Ex. 13) as an example of a name conserved against an earlier name being treated as a homonym, *Columellia* Ruiz & Pav. conserved against *Columella* Lour. For these reasons and because *Lorinsera* and *Lorinseria* have the same derivation and both apply to vascular plants we consider that they are sufficiently alike to be confused and should be treated as homonyms without need for a formal request for a binding decision under Art. 53.5. Both names commemorate Gustav Lorinser (1811–1863), Bohemian physician and botanist (Burkhardt, Verzeichnis Eponym. Pflanzennam.: L-54. 2016).

Lorinsera was published by Opiz (l.c.), without making a species combination or designating a type, but validly published according to Art. 38.2 of the *ICN*, because it is published as a genus of *Apiaceae* in a key to genera. We have found only two references to *Lorinsera* Opiz in the literature. One, by Dostál & al. (in Taxon 7: 276. 1958), was merely a suggested example included in a proposal to amend the *Code* to make clearer that a generic name published without an included species might still be validly published and read: "Examples: The genus *Lorinsera* Opiz (in Berchtold et Opiz, Oekonom.-techn. Fl. Böhmens 2/2: 28. 1839) was validly published in a generic key without mention of any species." The other reference citing *Lorinsera* was by Pouzar (in Preslia 36: 337–342. 1964), also recognizing that *Lorinsera* was a validly published name because it appeared in a key. To our knowledge, no one has ever typified the name or adopted it in a flora or monographic revision since its original description, e.g., Index Nominum Genericorum (http://botany.si.edu/ing/) has "T: non designatus".

Lorinseria areolata (L.) C. Presl (l.c.), designated as type of the generic name by J. Smith (Hist. Fil.: 310. 1875), is a species in the fern family *Blechnaceae*, and now considered the sole species in the genus. A few authors have evidently confused *Lorinseria* with *Lorinsera*, misspelling the Presl genus as *Lorinsera* (Engler & Prantl, Nat. Pflanzenfam. Gesamtregister I: 132. 1909) or the species as *Lorinsera areolata* (Clute in Fern Bull. 14: 127. 1906; http://www. theplantlist.org/tpll.1/record/tro-1701522).

Lorinseria C. Presl was often adopted in older floristic accounts (Underwood in Torreya 3: 19. 1903; Britton, Man. Fl. N. States, ed. 2: 10. 1905; Britton & Brown, Ill. Fl. N. U.S., ed. 2, 1: 24–25. 1913; Small, Fl. S.E. U.S.: 14. 1903, ed. 2: 18. 1913, Ferns Vicin. New York: 52. 1935, & Ferns S.E. States: 144. 1938; Wherry, Guide E. Ferns: 110–111. 1948 & Fern Guide: 146. 1961; Cranfill, Ferns & Fern Allies Kentucky: 214. 1980; Thieret, Louisiana Ferns & Fern Allies: 74. 1980) and an occasional ecological study (Cousens & al. in Amer. J. Bot. 75: 797–807. 1988). Two forms of *L. areolata* (not recognized in recent reviews) have been described: f. *obtusilobata* (Waters) M. Broun (Index N. Amer. Ferns: 104. 1938) (*Woodwardia angustifolia* f. *obtusilobata* Waters, Ferns: 128. 1903) and f. *onocleoides* J.E. Benedict (in Amer. Fern J. 40: 174, t. 13. 1950).

More recent treatments often include *L. areolata*, along with the monotypic *Anchistea* C. Presl, in the genus *Woodwardia* Sm. (Lellinger, Field Man. Ferns & Fern Allies U.S. Canada: 301. 1988; Cranfill, l.c. 1993; Nelson, Ferns Florida: 47. 2000; Diggs & Lipscomb, Ferns Lycoph. Texas: 120. 2014; Wunderlin & al., Atlas Florida Pl. 2018, http://florida.plantatlas.usf.edu/). Recent molecular work (Gasper & al. in Cladistics 33: 429-446. 2017) has shown that both Lorinseria and Anchistea should indeed be segregated from Woodwardia, a concept being followed in a recent reclassification of Blechnaceae (Gasper & al. in Phytotaxa 275: 191-227. 2016), but also in a community-derived pteridophyte classification (PPG 1, l.c. 2016), several recent floras (Keener & al., Alabama Pl. Atlas. 2018, http://www.floraofalabama. org/Default.aspx; Weakley, Fl. S. Mid-Atlantic States. 2015, http:// www.herbarium.unc.edu/FloraArchives/WeakleyFlora 2015-05-29. pdf; Weldy & al., New York Fl. Atlas. 2018, http://newyork.plantatlas. usf.edu; Werier in Mem. Torrey Bot. Club 27: 1-542. 2017), and several sequences submitted to GenBank (e.g., https://www.ncbi.nlm.nih. gov/nuccore/AB040596.1). Characters unique to the genus include the long-creeping rhizomes and the deeply pinnatifid sterile blades. The desirability of recognizing Lorinseria C. Presl in order to avoid having to coin another name for it causes us to propose conservation of the name of this segregate genus.

Acknowledgements

We thank John McNeill for his helpful comments on an early draft of this manuscript.