

ORTHOGRAPHY OF SOME EPITHETS HONORING BERTERO IN THE  
VASCULAR FLORA OF THE JUAN FERNANDEZ ISLANDS AND  
CONTINENTAL CHILE

ORTOGRAFIA DE ALGUNOS EPITETOS EN HONOR A BERTERO EN  
LA FLORA VASCULAR DE LAS ISLAS DE JUAN FERNANDEZ Y  
CHILE CONTINENTAL

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ABSTRACT

The orthography of specific epithets commemorating Carlo Giuseppe Bertero in the vascular flora of Chile is discussed, and a list is provided of accepted names.

RESUMEN

Se discute la ortografía de epítetos específicos creados en conmemoración a Carlo Giuseppe Bertero en la flora vascular de Chile, y se presenta una lista de nombres aceptados.

Because Carlo Giuseppe Bertero collected one of the earliest series of plants from the Juan Fernández Islands (Skottsberg, 1922), and another important collection from Central Chile, his name is commemorated by several epithets of plants in these floras. Commemorating a collector would seem to be a routine nomenclatural exercise, except that in this case six different epithets have been used in the Chilean flora: *berteri*, *berterianus*, *berterii*,

*berteroanus*, *berteroi*, and *berteronianus*. These different usages have caused confusion. This paper attempts to reduce the confusion by (1) discussing the various latinizations that have been used to commemorate Bertero (2), recommending which forms are in best accord with the International Code of Botanical Nomenclature (ICBN; Greuter et al., 1988), and (3) providing a list of accepted names for the vascular plants of the Chilean flora.

The name, Bertero, can be latinized in four different ways: Bertero (without change from the original), Berterius (noble form), Berterus (plebian form), and Berterous (a non-Roman "latinization"). The ICBN allows specific epithets commemorating people to be either substantives in the genitive case or adjectival forms which yields eight total possible epithet forms (Table 1).

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TABLE 1. Latinization of the name "Bertero" in the formation of epithets, showing accepted forms (boldface).

Ways of Latinization of Original Name	Forms of Epithets	
	Substantive, Genitive Case	Adjective
<i>Bertero</i>	<i>berteronis</i>	<i>berteronianus</i>
<i>Berterius</i>	<i>berterii</i>	<i>berterianus</i>
<i>Berterous</i>	<b><i>berteroi</i></b>	<b><i>berteroanus</i></b>
<i>Berterus</i>	<i>berteri</i>	<i>berteranus</i>

The genitive of *Bertero* is *berteronis*, and as an adjective *berteronianus*. These formations treat Bertero as a Third Declension noun, which is recommended against by the ICBN (Rec. 73C.2). *Berterius* becomes *berterii* in the genitive and *berterianus* as an adjective, both of which are not supported by the ICBN (Rec. 73C.3) because they change the stem vowel element and original spelling of the personal name from "o" to "i". *Berterus* becomes *berteri* in the genitive and *berteranus* as an adjective, both of which are also recommended against by the ICBN for the same reasons. The only acceptable epithets derive from *Berterous*, and these become *berteroi* in the genitive and *berteroanus* as an adjective. These are specifically listed as acceptable forms by the ICBN [Rec. 73C.1(c)]. Therefore, we view all the epithets *berteri*, *berterii*, *berteronis*, *berteranus*, *berterianus* and *berteronianus* as unacceptable forms to be corrected to *berteroi* or *berteroanus*, —a, —um without change of authorship.

Following is a list with comments of the specific names of vascular plants commemorating Bertero currently accepted in the flora of the Juan Fernández Islands and continental Chile (from Marticorena & Quezada, 1985) showing the cases in which the epithets are herein corrected:

*Aphanes berteroana* Rothm.

*Aphanes berteroana* Rothm., Bull. Misc. Inform. 1938: 269. 1938.

*Argythamnia berteroana* (Schldl.) Muell. Arg.

*Chiropetalum berterianum* Schldl., Linnaea 26: 637. 1855. *Argythamnia berteroana* (Schldl.) Muell. Arg., Linnaea 34: 151. 1865.

*Astragalus berteroi* Colla ex Savi

*Astragalus berterii* Colla ex Savi, Nuovo Gior. Lett., Sci. 24: 147. 1832.

*Astragalus berteroanus* (Moris) Reiche

*Phaca berteriana* Moris, Mem. Reale Accad. Sci. Torino 37: 105. 1834.

*Astragalus berterianus* (Moris) Reiche, Anales Univ. Chile 97: 555. 1897.

*Beilschmidia berteroana* (Gay) Kosterm.

*Cryptocarya* [as "*Cryptocaria*"] *berteroana* Gay, Fl. Chil. 5: 301. 1851.

*Beilschmidia berteroana* (Gay) Kosterm., Recueil Trav. Bot. Neerl. 35: 858. 1938.

*Bromus berteroanus* Colla

*Bromus berterianus* Colla, Mem. Reale Accad. Sci. Torino 39: 25. 1837.

*Calandrinia berteroana* Philippi

*Calandrinia berteroana* Philippi, Linnaea 28: 643. 1857.

*Carex berteroana* Steudel

*Carex berteroniana* Steudel, Flora 25(2): 604. 1842.

*Dendroseris berteroana* (Decne.) Hook. & Arn.

*Rea berteriana* Decne., Arch. Bot (Paris) 1: 513. 1833. *Dendroseris berteriana* (Decne.) Hook & Arn., Companion Bot. Mag. 1: 32. 1835.

*Deschampsia berteroana* (Kunth) Trin.

*Trisetum berteroanum* Kunth, Rev. Gramin. 457. 1831. *Deschampsia berteroana* (Kunth) Trin., Bull. Sci. Acad. Imp. Saint-Pétersbourg 1: 66. 1836.

***Dicksonia berteroana*** (Colla) Hook.

*Davallia berteriana* Colla, Mem. Reale Accad. Sci. Torino 39: 37. 1837 [Jan-Apr 1837, preprint; Stafleu and Cowan, 1976].

*Dicksonia berteroana* (Colla) Hook., Sp. Fil. 1: 67. 1844. Hooker (1844) incorrectly based his combination [*Dicksonia berteroana* (Kunze) Hook.] upon *Ballantium berteroanum* Kunze published 27 Aug-2 Sep 1837 (Stafleu and Cowan, 1979) rather than *Davallia berteriana* Colla published earlier in 1837. Both names apparently were based upon the same specimen of Bertero. The correct author of the basionym of the combination, Colla, is herein reinstated.

***Gamochaeta berteroana*** (DC.) Cabrera

*Gnaphalium berterianum* DC., Prodr. 6: 233. 1837. *Gamochaeta berteriana* (DC.) Cabrera, Bol. Soc. Argent. Bot 9: 367. 1961.

***Geranium berteroanum*** Colla ex Savi

*Geranium berteroanum* Colla ex Savi, Nuovo Giorn. Lett., Sci. 24: 143. 1832.

***Greigia berteroi*** Skottsbo

*Greigia berteroi* Skottsbo., Nat. Hist. Juan Fernández & Easter Is. 2: 109. 1921.

***Hippeastrum berteroanum*** (Philippi) Baker

*Habranthus berteroanus* Philippi, Linnaea 29: 66. 1858. *Hippeastrum berteroanum* (Philippi) Baker, J. Bot. 16: 83. 1878.

***Lathyrus berteroanus*** Colla ex Savi

*Lathyrus berterianus* Colla ex Savi, Nuovo Giorn. Lett., Sci. 24: 147. 1832.

***Megalachne berteroana*** Steudel

*Megalachne berteroniana* Steudel, Syn. Pl. Glumac. 1: 237. 1854.

***Oxalis berteroana*** Barnéoud in Gay

*Oxalis berteroana* Barnéoud in Gay, Fl. Chil. 1: 437. 1846.

***Peperomia berteroana*** Miq.

*Peperomia berteroana* Miq., Syst. Piperac. 114. 1843.

***Pilostyles berteroi*** Guill.

*Pilostyles berteroi* Guill., Ann. Sci. Nat. Bot., Sér. 2, 2: 21. 1834.

***Polygonum berteroi*** Philippi

*Polygonum berteroi* Philippi, Linnaea 29: 38. 1858.

***Potamogeton berteroanus*** Philippi

*Potamogeton berteroanus* Philippi, Linnaea 30: 200. 1859.

***Pteris berteroana*** Agardh

*Pteris berteroana* Agardh, Recens. Spec. Pter. 66. 1839.

***Puya berteroana*** Mez

*Puya berteroniana* Mez, Monogr. Phan. 9: 477. 1896.

***Robinsonia berteroi*** (DC.) Sanders, Stuessy & Marticorena, nov. comb.

*Balbisia berterii* DC., Arch. Bot. 2: 333. 1833. *Vendredia berterii* (DC.) Baillon, Hist. Pl. 8: 264. 1882. *Rhetinodendron berteroi* (DC.) Hemsl., Rep. Challenger, Bot. 1(3): 39. 1884. *Robinsonia berteroi* (DC.) [as "(Hemsl.)"] Sanders, Stuessy & Marticorena in Pacheco et al., Amer. J. Bot. 72: 989. 1985. During studies on the evolution of flavonoids in *Robinsonia* DC. (Compositae) of the Juan Fernández Islands, Chile (Pacheco et al., 1985), a new combination was made to accommodate the transfer of the monotypic *Rhetinodendron* Meisner into *Robinsonia*. The full rationale for this transfer was given in Sanders et al. (1987), but it was based on similarity of flavonoid and morphological data. The basionym author for the new combination, however, was cited incorrectly. The nomenclatural history of *Robinsonia berteroi* begins with de Candolle (1833) describing a new genus, *Balbisia*, of the Compositae from the Juan Fernández Islands with a single species, *B. berterii*, commemorating its collector Bertero. This generic name, however, was a later homonym (*non* Willdenow, 1803, another genus of Compositae, *nec* Cavanilles, 1804, a genus of Ledocarpaceae) and hence illegitimate. *Balbisia* Cav. has

now been conserved against the earliest *Balbisia* Willd. (ICBN, Greuter et al., 1988). De Candolle's protologue (1833) did not provide a specific description but did indicate the specific name *B. berterii* (p. 333); "En donnant a cet arbuste le nom de *Balbisia Berterii* j'unis deux souvenirs chers a la science et a mon coeur". Because the genus was circumscribed by de Candolle as monotypic at that time, the generic description can be taken as a combined *descriptio generico-specifica* (ICBN Article 42.1). The names *Balbisia* and *B. berterii*, therefore, were validly published in 1833 by de Candolle. Decaisne (1834), de Candolle (1838) and Delessert (1840) all used these same generic and specific names. Baillon (1882) transferred *B. berterii* into *Vendredia* as *V. berterii* (DC.) Baillon, and Hemsley (1884), recognizing the problem of homonymy, moved the species into the monotypic genus *Rhetinodendron* Meisner (1839), a legitimate renaming of the later homonym *Balbisia* DC. A transfer of this species into *Robinsonia*, therefore, might retain the de Candolle epithet, *berterii*, but as argued above, *berteroi* is the better choice.

- Rumohra berteriana* (Colla) R. Rodríguez  
*Aspidium berterianum* Colla, Mem. Reale Accad. Sci. Torino 39: 42. 1837.  
*Rumohra berteriana* (Colla) R. Rodríguez, Bol. Soc. Biol. Concepción 45: 150. 1972.
- Selkirkia berteroi* (Colla) Hemsley  
*Cynoglossum berteroi* Colla, Mem. Reale Accad. Sci. Torino 38: 132. 1835.  
*Selkirkia berteroi* (Colla) Hemsley, Rep. Challenger, Bot. 1(3): 48. 1884.
- Triptilion berteroi* Philippi  
*Triptilion* [as "Triptilium"] *berteroi* Philippi, Anales Univ. Chile 87: 91. 1894.
- Urtica berteriana* Philippi  
*Urtica berteriana* Philippi, Linnaea 33: 235. 1864.
- Verbena berteroi* (Meisner) Schauer  
*Shuttleworthia berterii* Meisner (nomen). Pl. Vasc. Gen. 2: 198. 1840.

*Verbena berterii* (Meisner) Schauer in DC., Prodr. 11: 551. 1847.

*Vicia berteriana* Philippi  
*Vicia berteriana* Philippi, Linnaea 28: 622. 1857.

*Wahlenbergia berteroi* Hook. & Arn.  
*Wahlenbergia berteroi* Hook. & Arn., J. Bot. (Hooker) 1: 279. 1834.

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## LITERATURE CITED

- BAILLON, H.E. 1882. Composées. Histoire des plantes. Vol. 8. Paris.
- CANDOLLE, A.P. de. 1833. Genres nouveaux appartenant à la famille des Composées ou Synanthérées. Arch. Bot. (Paris) 2: 330-334, 514-519.
- 1838. Prodrum systematis naturalis regni vegetabilis. Vol. 6. Paris.
- CAVANILLES, A.J. 1804. Del macrocnemo y de algunas plantas descubiertas por los españoles. Anales Ci. Nat. 7: 55:70.
- DECAISNE, J. 1834. Monographie des genres *Balbisia* et *Robinsonia*, de la famille des Composées. Ann. Sci. Nat. Bot., Sér. 2. 1: 16-30.
- DELESSERT, J.P.B. 1840. Icones selectae plantarum quas in systemate universali ex herbariis Parisiensibus, praesertim ex Lessertiano descripsit Augustin Pyramus de Candolle. Vol. 4. Paris.
- GREUTER, W. et al. 1988. International Code of Botanical Nomenclature. Otto Koelz, Berlin.
- HEMSLEY, W.H. 1884. Report on the botany of Juan Fernández, the south-eastern Moluccas and the Admiralty Islands. Rep. Sci. Results Voyage H.M.S. Challenger, Botany 1(3).
- HOOKE, W.J. 1844. Species filicum. Vol. 1(2). London.
- KUNZE, G. 1837. Analecta pteridographica seu descriptio et illustratio filicum aut novarum, aut minus cognitatum. Leipzig.
- MARTICORENA, C. & M. QUEZADA. 1985. Catálogo de la flora vascular de Chile. Gayana Bot. 42(1-2): 1-157.
- MEISNER, C.F. 1839. Plantarum vascularium genera

secundum ordines naturales digesta eorumque differentiae et affinitates tabulis diagnosticis expositae auctore. Vol. 1. Leipzig.

PACHECO, P., D.J. CRAWFORD, T.F. STUESSY & M. SILVA. 1985. Flavonoid evolution in *Robinsonia* (Compositae) of the Juan Fernández Islands. *Amer. J. Bot.* 72: 989-998.

SANDERS, R.W., T.F. STUESSY, C. MARTICORENA & M. SILVA. 1987. Phylogeography and evolution of *Dendroseris* and *Robinsonia*, tree-Compositae of the

Juan Fernández Islands. *Opera Bot.* 92: 195-215.

SKOTTSBERG, C. 1921. The phanerogams of the Juan Fernandez Islands. *Nat. Hist. Juan Fernandez and Easter Is.* 2: 95-240.

STAFLEU, F.A. and R.S. COWAN. 1976 & 1979. *Taxonomic Literature*. Ed. 2. Vols. 1 and 2. Bohn, Scheltema & Holkema, Utrecht.

WILLDENOW, C.L. 1803. *Caroli a Linné Species Plantarum exhibentes plantas rite cognitas ad genera relatas*. Ed. 4. Vol. 3.

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