

A LA TERCERA SE GANA: THE VALIDATION OF *BENZINGIA* (ORCHIDACEAE: ZYGOPETALINAE)

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ABSTRACT. When *Benzingia* was first proposed in 1989, the protologue included two species (*Benzingia hirtzii* sp. nov. and *B. estradae* comb. nov.), which required two separate Latin descriptions or diagnoses (generic and specific) for *Benzingia* and *B. hirtzii*. The author, however, provided only a *descriptio generico-specifica*. Therefore, the generic name, the new species, and the proposed combination were not validly published. An attempt to validate the genus and the two species was made by Dodson and Romero in 1995, but it also failed because it did not include separate Latin descriptions for the genus and the proposed type species. Seven species names referred to *Benzingia* in the meantime are also invalid. All the ten relevant names are here validated (the generic name, the new species, and eight new combinations).

RESUMEN. Cuando se propuso *Benzingia* por primera vez en 1989, el protólogo incluía dos especies (*Benzingia hirtzii* sp. nov. y *B. estradae* comb. nov.), lo que requería descripciones o diagnósis en latín separadas para el género y para la especie nueva. Sin embargo, el autor sólo publicó una *descriptio generico-specifica*. Por consiguiente, *Benzingia*, la especie nueva y la nueva combinación no fueron publicadas válidamente. Se trató de validar el género en 1995, pero el esfuerzo falló porque no se incluyeron las descripciones separadas en latín del género y de la especie tipo. Mientras tanto, los nombres de las siete especies adicionales que hasta el momento se han referido a *Benzingia* también son inválidos. Aquí se validan los diez nombres relevantes (el nombre genérico, la especie nueva y ocho nuevas combinaciones).

KEY WORDS: *Benzingia*, Orchidaceae, validation, Zygopetalinae

Introduction. The genus *Benzingia* Dodson was first proposed in 1989. A *descriptio generico-specifica* was provided for the generic name and for a new species, *B. hirtzii* Dodson. In the protologue, however, Dodson (1989) also proposed a new combination, transferred from *Chondrorhyncha* Lindl. According to article 42.1 of the International Code of Botanical Nomenclature (McNeill et al., 2006), *Benzingia*, the new species, and the proposed combination were not validly published (see Art. 42.1, Ex. 1), because two separate Latin descriptions or diagnoses were required for the generic name and the new species.

Dodson and Romero (1995) attempted to validate the genus but failed to provide the required separate Latin descriptions for the genus and the type species: the names included therein were again not validly published. In the meantime, seven additional new combinations have been proposed in *Benzingia*

(Dressler in Whitten *et al.*, 2005; Harding, 2008: 32). Since the generic name had not been validly published, however, these names are considered invalid.

Benzingia and *B. hirtzii* are validly described here, for which we provide separate Latin diagnoses, and eight relevant names at the rank of species are validated. In personal communications, both R. L. Dressler and P. A. Harding consented to have their new combinations republished here.

***Benzingia* Dodson, gen. nov.**

Synonyms: *Ackermania* Dodson & R. Escobar, *Orquideología* 18: 202. 1993, non *Ackermania* Pat. (1902).

Benzingia Dodson, *Icon. Pl. Trop. Ser. 2, 5: t. 406. 1989, nom. invalid.*

Benzingia Dodson, *Lindleyana* 10: 74. 1995, *nom. invalid.*

TYPE: *Benzingia hirtzii* Dodson

Habitus *Steniae* Lindl. similis sed labello spatulato non profunde saccato, et habitus *Chondrorhynchae* Lindl. similis sed sepalis patentibus nec retrorsis neque falcatis distinguitur.

Benzingia caudata (Ackerman) Dressler, *comb. nov.*

Basionym: *Chondrorhyncha caudata* Ackerman, Selbyana 5: 299. 1981.

Synonym: *Benzingia caudata* Dressler, Lankesteriana 5: 93. 2005, *nom. invalid.*

Benzingia cornuta (Garay) Dressler, *comb. nov.*

Basionym: *Chondrorhyncha cornuta* Garay Orquideologia 5: 20. 1970.

Synonym: *Benzingia cornuta* Dressler, Lankesteriana 5: 93. 2005, *nom. invalid.*

Benzingia estradae (Dodson) Dodson, *comb. nov.*

Basionym: *Chondrorhyncha estradae* Dodson, Icon. Pl. Trop. t. 22 (as “*Chondroryncha*”). 1980.

Synonym: *Benzingia estradae* Dodson, Lindleyana 10: 74. 1995, *nom. invalid.*

Benzingia hajekii (D.E.Benn. & Christenson) Dressler, *comb. nov.*

Basionym: *Ackermania hajekii* D.E.Benn. & Christenson, Icon. Orchid. Peruvianum t. 602. 2001.

Synonym: *Benzingia hajekii* Dressler, Lankesteriana 5: 93. 2005, *nom. invalid.*

Benzingia hirtzii Dodson, *sp. nov.*

TYPE: ECUADOR. Imbabura: Santa Rosa de Chaco, 8 km East North of Lita on road Ibarra to Lita, 1150 m, 19 January 1987, C. H. Dodson, A. Hirtz, D. Benzing & C. A. Luer 16893 (holotype, MO; isotypes, QCNE, K, SEL).

Synonym: *Benzingia hirtzii* Dodson, Icon. Pl. Trop. Ser. 2, 5: t. 406. 1989, *nom. invalid.*

Benzingia hirtzii Dodson, Lindleyana 10: 74. 1995, *nom. invalid.*

Species haec *Benzingiae estradae* (Dodson) Dodson similis, sed inflorescentia erecta, labello basi leviter concavo apice rotundo et ovario geniculato distinguitur.

Epiphyte. Plant to 15 cm tall. Rhizome short, stems

erect, very short, without pseudobulbs, surrounded by imbricating, distichous leaf-bearing sheaths. Leaves elliptic-oblong, acuminate at the apex, narrowing to the base and the articulated junction with the sheath, membranaceous, to 12 x 1.6 cm. Inflorescence 1-flowered, erect, usually one inflorescence produced from each leaf sheath. Floral bracts triangular, 3 mm long. Ovary geniculate so that flower is nonresupinate, to 2 cm long, terete. Flower yellow, the sepals and petals spotted with red-brown, the lip yellow with an orange callus, abundantly spotted with red-brown. Sepals spreading, free; dorsal sepal oblong-ovate, 1.7 x 0.5 cm; lateral sepals obliquely oblong-ovate, 1.8 x 0.5 cm. Petals oblong-ovate, spreading, obtuse, 1.7 x 0.5 cm. Lip shallowly concave, scoop-shaped, rotund, not surrounding the column, 2.2 x 2.2 cm, united to the column foot at the base, with a flat callus down the midline. Column arcuate, subterete, slightly winged on each side below the stigma, 1.5 cm long, produced into a terete foot 0.8 cm long. Pollinia in 2 unequal pairs attached to a rectangular stipe, the latter attached to a cordiform viscidium.

Benzingia jarae (D.E.Benn. & Christenson) Dressler, *comb. nov.*

Basionym: *Ackermania jarae* D.E.Benn. & Christenson, Brittonia 47: 182. 1995.

Synonym: *Benzingia jarae* Dressler, Lankesteriana 5: 93. 2005, *nom. invalid.*

Benzingia palorae (Dodson & Hirtz) Dressler, *comb. nov.*

Basionym: *Stenia palorae* Dodson & Hirtz, Icon. Pl. Trop. ser. 2, 6: t. 583. 1989.

Synonym: *Benzingia palorae* Dressler, Lankesteriana 5: 93. 2005, *nom. invalid.*

Benzingia reichenbachiana (Schltr.) Dressler, *comb. nov.*

Basionym: *Chondrorhyncha reichenbachiana* Schltr., Repert. Spec. Nov. Regni Veg. 17: 15. 1921.

Synonym: *Benzingia reichenbachiana* Dressler, Lankesteriana 5: 93. 2005, *nom. invalid.*

Benzingia thienii (Dodson) P.A.Harding, *comb. nov.*

Basionym: *Cochleanthes thienii* Dodson Icon. Pl. Trop. t. 26. 1980.

Synonyms: *Chondrorhyncha thienii* (Dodson)

Dodson Selbyana 7: 354. 1984.
Benzingia thienii P.A.Harding, Huntleyas 32.
2008, *nom. invalid.*

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LITERATURE CITED

- Dodson, C. H. 1989. *Benzingia hirtzii*. Icon. Pl. Trop. Ser 2, 5: t. 406.
- Dodson, C. H. & G. A. Romero 1995. Revalidation of the genus *Benzingia* (Zygopetalinae: Orchidaceae). Lindleyana 10: 74.
- Harding, P. A. 2008. Huntleyas and Related Orchids. Timber Press, Portland, Oregon.
- McNeill, J. et al. 2006. International Code of Botanical Nomenclature (Vienna Code). Regnum Vegetabile 146. A.R.G. Gantner Verlag KG, Ruggell, Liechtenstein.
- Whitten, W. M., N. Williams, R. L. Dressler, G. Gerlach, & F. Pupulin. 2005. Generic relationships of Zygopetalinae (Orchidaceae: Cymbidieae): combined molecular evidence. Lankesteriana 5: 87—107.