

Huberantha, a replacement name for *Hubera* (Annonaceae: Malmeoideae: Miliuseae)

Tanawat Chaowasku¹, David M. Johnson², Raymond W. J. M. van der Ham³ & Lars W. Chatrou⁴

Summary. A replacement generic name, *Huberantha* Chaowasku, is proposed for the recently described genus *Hubera* Chaowasku segregated from *Polyalthia* Blume because the name *Hubera* has been recommended to be treated as a later homonym of *Huberia* DC. (Melastomataceae) by the nomenclature committee for vascular plants. Consequently, new combinations of twenty-seven species presently recognised are made under *Huberantha*.

Key Words. New combination, nomenclature, *Polyalthia*.

Introduction

The genus *Hubera* Chaowasku is a member of tribe Miliuseae of subfamily Malmeoideae of the pantropical family Annonaceae (Chaowasku *et al.* 2014). It was recently established and characterised using a combination of molecular phylogenetic and morphological evidence to accommodate a clade of *Polyalthia* Blume species distantly related to *Polyalthia* s.s. and allied to *Miliusa* Lesch. ex A. DC. (Chaowasku *et al.* 2012). The genus is widely distributed, ranging from East Africa and Madagascar through southern and southeastern Asia to Malesia and the southwestern Pacific, and is morphologically circumscribed by the presence of reticulate tertiary venation of leaves, axillary inflorescences, a single ovule/seed per ovary/monocarp, seeds with a flat to slightly raised raphe, spiniform(-flattened peg) endosperm ruminations and pollen with a finely and densely granular infratectum (Chaowasku *et al.* 2012).

According to the recommendation of the nomenclature committee for vascular plants to treat *Hubera* as a later homonym of *Huberia* DC. (Melastomataceae) (Applequist 2014; see also relevant literature: McNeill *et al.* 2012 [Art. 53.3 of International Code of Nomenclature for Algae, Fungi, and Plants] and Chaowasku 2013), the

generic name *Huberantha* Chaowasku is proposed as a replacement name for *Hubera*. The new combinations of twenty-seven species presently recognised are accordingly made under *Huberantha*; for other relevant information about the genus, including homotypic synonym(s) of each species (if any), consult Chaowasku *et al.* (2012).

***Huberantha* Chaowasku, nom. nov.** Type: *Huberantha cerasoides* (Roxb.) Chaowasku.

<http://www.ipni.org/urn:lsid:ipni.org:names:77146143-1>

Replacement name for *Hubera* Chaowasku, in Chaowasku *et al.*, *Phytotaxa* 69: 46 (2012), **nom. illegit.**, non *Huberia* DC.

ETYMOLOGY. The replacement name *Huberantha* means “Huber’s flowers”. Similar to *Hubera* (see Chaowasku *et al.* 2012: 47), it is also named in honour of Prof. Herbert Huber (1931 – 2005), but *Huberantha* highlights the importance of flowers (and structures associated with flowers [pollen] or derived from flowers [seeds]) as features to distinguish this genus from several morphologically similar genera in tribe Miliuseae, i.e. *Marsyppetalum* Scheff., *Monoon* Miq.,

Accepted for publication 15 April 2015.

¹ Herbarium, Department of Biology, Faculty of Science, Chiang Mai University, 239 Huay Kaew Rd., Chiang Mai 50200, Thailand. e-mail: craibella@hotmail.com

² Department of Botany-Microbiology, Ohio Wesleyan University, Delaware, Ohio 43015, USA.

³ Naturalis Biodiversity Center (Botany Sector), P.O. Box 9517, 2300 RA Leiden, The Netherlands.

⁴ Biosystematics Group, Wageningen University, Droevendaalsesteeg 1, 6708 PB Wageningen, The Netherlands.

Polyalthia s.s., and *Trivalvaria* (Miq.) Miq. (Chaowasku *et al.* 2012; 2014).

New combinations under *Huberantha*

1. *Huberantha amoena* (A. C. Sm.) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146144-1>

Polyalthia amoena A. C. Sm., *J. Arnold Arbor.* 31: 159 (Smith 1950).

2. *Huberantha capillata* (A. C. Sm.) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146146-1>

Polyalthia capillata A. C. Sm., *J. Arnold Arbor.* 31: 158 (Smith 1950).

3. *Huberantha ceramensis* (Boerl.) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146147-1>

Polyalthia ceramensis Boerl., *Icon. Bogor.* 1: t. 65 (Boerlage 1899).

4. *Huberantha cerasoides* (Roxb.) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146148-1>

Uvaria cerasoides Roxb., *Pl. Coromandel* 1: 30 (Roxburgh 1795).

5. *Huberantha decora* (Diels) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146149-1>

Polyalthia decora Diels, *Notizbl. Bot. Gart. Berlin-Dahlem* 9: 342 (1925).

6. *Huberantha forbesii* (F. Muell. ex Diels) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146150-1>

Polyalthia forbesii F. Muell. ex Diels, *Bot. Jahrb. Syst.* 49: 131 (1912b).

7. *Huberantha gracilis* (Burck) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146151-1>

Polyalthia gracilis Burck, *Nova Guinea* 8: 430 (1911).

8. *Huberantha henrici* (Diels) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146152-1>

Polyalthia henrici Diels, *Notizbl. Bot. Gart. Berlin-Dahlem* 9: 342 (1925).

9. *Huberantha hirta* (Miq.) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146154-1>

Monoon hirtum Miq., *Ann. Mus. Bot. Lugduno-Batavi* 2: 16 (Miquel 1865).

10. *Huberantha humblotii* (Drake ex Cavaco & Keraudren) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146155-1>

Polyalthia humblotii Drake ex Cavaco & Keraudren, *Bull. Jard. Bot. État Bruxelles* 27: 77 (1957).

11. *Huberantha jenkinsii* (Hook. f. & Thomson) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146156-1>

Guatteria jenkinsii Hook. f. & Thomson, *Fl. Ind.* 1: 141 (Hooker & Thomson 1855).

12. *Huberantha keraudreniae* (Le Thomas & G. E. Schatz) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146157-1>

Polyalthia keraudreniae Le Thomas & G. E. Schatz, in Schatz & Le Thomas, *Bull. Mus. Natl. Hist. Nat., B, Adansonia Sér.* 4 12: 124 (1990) [as '*keraudrenii*'].

13. *Huberantha korinti* (Dunal) Chaowasku, **comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77146158-1>

Guatteria korinti Dunal, *Monogr. Anonac.*: 133 (1817).

- 14. *Huberantha leptopoda*** (Diels) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146160-1>
Polyalthia leptopoda Diels, *Bot. Jahrb. Syst.* 52: 179 (1915).
- 15. *Huberantha loriformis*** (Gillespie) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146161-1>
Polyalthia loriformis Gillespie, *Bull. Bernice P. Bishop Mus.* 83: 4 (1931).
- 16. *Huberantha mossambicensis*** (Vollesen) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146162-1>
Polyalthia mossambicensis Vollesen, *Bot. Not.* 133: 403 (1980a).
- 17. *Huberantha multistamina*** (G. E. Schatz & Le Thomas) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146163-1>
Polyalthia multistamina G. E. Schatz & Le Thomas, *Bull. Mus. Natl. Hist. Nat., B, Adansonia Sér.* 4 12: 126 (1990).
- 18. *Huberantha nitidissima*** (Dunal) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146164-1>
Unona nitidissima Dunal, *Monogr. Anonac.*: 109 (1817).
- 19. *Huberantha pendula*** (Capuron ex G. E. Schatz & Le Thomas) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146165-1>
Polyalthia pendula Capuron ex G. E. Schatz & Le Thomas, *Bull. Mus. Natl. Hist. Nat., B, Adansonia Sér.* 4 12: 128 (1990).
- 20. *Huberantha perrieri*** (Cavaco & Keraudren) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146166-1>
Polyalthia perrieri Cavaco & Keraudren, *Bull. Jard. Bot. État Bruxelles* 27: 75 (1957).
- 21. *Huberantha rumphii*** (Blume ex Hensch.) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146167-1>
Guatteria rumphii Blume ex Hensch., *Vita Rumphii*: 153 (Henschel 1833).
- 22. *Huberantha sambiranensis*** (Capuron ex Le Thomas & G. E. Schatz) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146168-1>
Polyalthia sambiranensis Capuron ex Le Thomas & G. E. Schatz, in Schatz & Le Thomas, *Bull. Mus. Natl. Hist. Nat., B, Adansonia Sér.* 4 12: 116 (1990).
- 23. *Huberantha stuhlmannii*** (Engl.) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146169-1>
Unona stuhlmannii Engl., *Pflanzenw. Ost-Afrikas C*: 179 (Engler 1895).
- 24. *Huberantha tanganyikensis*** (Vollesen) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146170-1>
Polyalthia tanganyikensis Vollesen, *Bot. Not.* 133: 56 (1980b).
- 25. *Huberantha trichoneura*** (Diels) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146171-1>
Polyalthia trichoneura Diels, *Nova Guinea* 8: 871 (1912a).
- 26. *Huberantha verdcourtii*** (Vollesen) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146172-1>
Polyalthia verdcourtii Vollesen, *Bot. Not.* 133: 56 (1980b).
- 27. *Huberantha vitiensis*** (Seem.) *Chaowasku*, **comb. nov.**
<http://www.ipni.org/urn:lsid:ipni.org:names:77146173-1>
Polyalthia vitiensis Seem., *Fl. Vit.*: 4 (Seemann 1865).

Acknowledgements

Ian Turner (K) is thanked for notifying us of the report of the nomenclature committee for vascular plants. Comments of two anonymous reviewers improved an earlier draft of this article.

References

- Applequist, W. L. (2014). Report of the nomenclature committee for vascular plants: 66. *Taxon* 63: 1358 – 1371.
- Boerlage, J. G. (1899). *Icones Bogorienses*. Vol. 1 (fasc. 3). Brill, Leiden.
- Burck, W. (1911). Anonaceae [résultats de l'expédition scientifique Néerlandaise à la Nouvelle-Guinée en 1907 et 1909 sous les auspices Dr. H. A. Lorentz, first part, Botanique]. *Nova Guinea* 8: 427 – 433.
- Cavaco, A. & Keraudren, M. (1957). Notes systématiques et biogéographiques sur les Annonacées de Madagascar et des Comores. *Bull. Jard. Bot. État Bruxelles* 27: 59 – 93.
- Chaowasku, T. (2013). (7) Request for a binding decision on whether *Huberia* DC. (Melastomataceae) and *Hubera* Chaowasku (Annonaceae) are sufficiently alike to be confused. *Taxon* 62: 412 – 412.
- _____, Johnson, D. M., van der Ham, R. W. J. M. & Chatrou, L. W. (2012). Characterization of *Hubera* (Annonaceae), a new genus segregated from *Polyalthia* and allied to *Milusa*. *Phytotaxa* 69: 33 – 56.
- _____, Thomas, D. C., van der Ham, R. W. J. M., Smets, E. F., Mols, J. B. & Chatrou, L. W. (2014). A plastid DNA phylogeny of the tribe Miliuseae: insights into relationships and character evolution in one of the most recalcitrant major clades of Annonaceae. *Amer. J. Bot.* 101: 691 – 709.
- Diels, L. (1912a). Anonaceae [résultats de l'expédition scientifique Néerlandaise à la Nouvelle-Guinée en 1907 et 1909 sous les auspices Dr. H. A. Lorentz, Botanique, livraison 4]. *Nova Guinea* 8: 871 – 873.
- _____. (1912b). Die Anonaceen von Papuasien. *Bot. Jahrb. Syst.* 49: 113 – 167.
- _____. (1915). Neue Anonaceen von Papuasien. *Bot. Jahrb. Syst.* 52: 177 – 186.
- _____. (1925). Revisio Anonacearum Madagascariensium. *Notizbl. Bot. Gart. Berlin-Dahlem* 9: 334 – 357.
- Dunal, M. F. (1817). *Monographie de la famille des Anonacées*. Treuttel & Würtz, Paris.
- Engler, A. (1895). *Die Pflanzenwelt Ost-Afrikas und der Nachbargebiete* (theil C). Reimer, Berlin.
- Gillespie, J. W. (1931). New plants from Fiji-II. *Bull. Bernice P. Bishop Mus.* 83: 1 – 72.
- Henschel, A. W. E. T. (1833). *Vita G. E. Rumphii*. Schulzium & Socios, Breslau.
- Hooker, J. D. & Thomson, T. (1855). *Flora Indica*. Vol. 1. Pamplin, London.
- McNeill, J., Barrie, F. R., Buck, W. R., Demoulin, V., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Marhold, K., Prado, J., Prud'homme van Reine, W. F., Smith, G. F., Wiersema, J. H. & Turland, N. J. (2012). *International Code of Nomenclature for algae, fungi, and plants (Melbourne Code)*. Koeltz Scientific Books, Königstein [Regnum Vegetabile 154].
- Miquel, F. A. W. (1865). Anonaceae Archipelagi Indici. *Ann. Mus. Bot. Lugduno-Batavi* 2: 1 – 45.
- Roxburgh, W. (1795). *Plants of the coast of Coromandel*. Vol. 1. Bulmer & Co., London.
- Schatz, G. E. & Le Thomas, A. (1990). The genus *Polyalthia* Blume (Annonaceae) in Madagascar. *Bull. Mus. Natl. Hist. Nat., B, Adansonia, Sér.* 412: 113 – 130.
- Seemann, B. (1865). *Flora Vitiensis: a description of the plants of the Viti or Fiji Islands with an account of their history, uses, and properties*. Reeve & Co., London.
- Smith, A. C. (1950). Studies of Pacific island plants VI. New and noteworthy flowering plants from Fiji. *J. Arnold Arbor.* 31: 137 – 171.
- Vollesen, K. (1980a). A new species of *Polyalthia* (Annonaceae) from Mozambique. *Bot. Not.* 133: 403 – 404.
- _____. (1980b). Notes on Annonaceae from Tanzania. *Bot. Not.* 133: 53 – 62.