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## Systematics and biogeography of the *Dissochaeta* alliance (Melastomataceae)

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# ***REFERENCES***

## References

- APG III. 2009. An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG III. *Botanical Journal of the Linnean Society* 161: 105–121. <https://doi.org/10.1111/j.1095-8339.2009.00996.x>
- Atkins H.J., Bramley G.L.C., Johnson M.A., Kartonegoro A., Nishii K., Kokubugata G., Möller M. & Hughes M. 2020. A molecular phylogeny of Southeast Asian *Cyrtandra* (Gesneriaceae) supports an emerging paradigm for Malesian plant biogeography. *Frontiers of Biogeography* 12: e44814. <https://doi.org/10.21425/F5FBG44814>
- Baas P. & Hovenkamp P.H. 2018a. In memoriam Jan-Frits Veldkamp (31 March 1941 – 12 November 2017). *Blumea* 63: 1–10.
- Baas P. & Hovenkamp P.H. 2018b. Obituary: Jan Frits Veldkamp (1941–2017). *Sibbaldia* 16: 5–6.
- Bacci L.F., Michelangeli F.A. & Goldenberg R. 2019. Revisiting the classification of Melastomataceae: implications for habit and fruit evolution. *Botanical Journal of the Linnean Society* 190(1): 1–24. <https://doi.org/10.1093/botlinnean/boz006>
- Backer C.A. 1936. *Verklarend woordenboek van wetenschappelijke plantennamen*. Noordhoff NV., Groningen.
- Baillon H. 1877. *Histoire de plantes*. Vol. 7. Librairie Hachette & C., Paris.
- Baker E.G. 1923. Polypetalae. In: Rendle A.B., et al., Dr H.O. Forbes's New Guinea plants. *Journal of Botany, London* 61 (Suppl.): 1–64.
- Baker E.G. 1924. Melastomataceae. In: Rendle A.B., Forbes's Malayan plants. *Journal of Botany, London* 62 (Suppl.): 39–42.
- Baker W.J. & Couvreur T.L. 2012. Biogeography and distribution patterns of Southeast Asian palms. In: Gower D., Johnson K., Richardson J., Rosen B., Ruber L. & Williams S. (Eds.) *Biotic evolution and environmental change in Southeast Asia. Systematics Association Special Volume Series*. Cambridge University Press, New York. pp. 164–190.
- Bakhuizen van den Brink Jr. R.C. 1943. *A contribution to the knowledge of the Melastomataceae occurring in the Malay Archipelago, especially in the Netherlands East Indies*. PhD Thesis, Universiteit Utrecht, pp. 1–391. [Reprinted in: *Recueil des Travaux Botaniques Néerlandais* 40: 1–391. 1946; *Mededeelingen van het Botanisch Museum en Herbarium van de Rijks Universiteit te Utrecht* 91: 1–391. 1947].
- Bakhuizen van den Brink Jr. R.C. 1964. Melastomataceae. In: Backer C.A. & Bakhuizen van den Brink Jr R.C. (Eds.), *Flora of Java*. Vol. 1. NV.P. Noordhoff, Groningen, pp. 354–374.
- Bakhuizen van den Brink Jr R.C. & Koster J.T. 1963. Notes on the Flora of Java VIII. *Blumea* 12: 61–69.
- Barker N.P., Weston P.H., Rutschmann F. & Sauquet H. 2007. Molecular dating of the “Gondwanan” plant family Proteaceae is only partially congruent with the timing of the break-up of Gondwana. *Journal of Biogeography* 34: 2012–2027. <https://doi.org/10.1111/j.1365-2699.2007.01749.x>
- Bentham G. 1849. Melastomataceae. in: Hooker W.J. (Ed.), *Niger flora*. Hippolyte Baillièrè, London, pp. 344–358. <https://doi.org/10.5962/bhl.title.594>
- Bentham G. & Hooker J.D. 1867. *Genera Plantarum*. Vol. 1. L. Reeve & Co., London.
- Berger B.A., Kriebel R., Spalink D. & Sytsma K.J. 2016. Divergence times, historical biogeography, and shifts in speciation rates of Myrtales. *Molecular Phylogenetics and Evolution* 95: 116–136. <https://doi.org/10.1016/j.ympev.2015.10.001>
- Blume C.L. 1823. *Catalogus van eenige der merkwaardigste zoo in- als uit-heemsche gewassen te vinden in 's Lands Plantentuin te Buitenzorg*. Lands Drukkerij, Batavia.
- Blume C.L. 1826. Melastomeae. *Bijdragen tot de flora van Nederlandsch Indië*. Vol. 17. Lands Drukkerij, Batavia, pp. 1067–1080.
- Blume C.L. 1831a. Ueber einige Ostindische und besonders Javanische Melastomaceen. *Flora* 14: 465–528.
- Blume C.L. 1831b. Over eenige Oostindische, bijzonder Javaansche Melastomaceen. *Bijdragen tot de Natuurkundige Wetenschappen* 6: 211–268 (234–242).
- Blume C.L. 1849. *Museum botanicum Lugduno-Batavum*. Vol. 1. E.J. Brill, Leiden.
- Bochorny T., Michelangeli F.A., Almada F. & Goldenberg R. 2019. Phylogenetics, morphology and circumscription of Cambessedesieae: a new Neotropical tribe of Melastomataceae. *Botanical Journal of the Linnean Society* 190: 281–302. <https://doi.org/10.1093/botlinnean/boz018>
- Bouckaert R., Heled J., Kühnert D., Vaughan T., Wu C.H., Xie D., Suchard M.A., Rambaut A. & Drummond A.J. 2014. BEAST 2: A Software Platform for Bayesian Evolutionary Analysis. *PLoS Computational Biology* 10: e1003537. <https://doi.org/10.1371/journal.pcbi.1003537>
- Bouckaert R., Vaughan T.G., Barido-Sottani J., Duchêne S., Fourment M., Gavryushkina A., Heled J., Jones G., Kühnert D., De Maio N., Matschiner M., Mendes F.K., Müller N.F., Ogilvie H.A., du Plessis L., Poppinga A., Rambaut A., Rasmussen D., Siveroni I., Suchard M.A., Wu C.H., Xie D., Zhang C., Stadler T. & Drummond A.J. 2019. BEAST 2.5: An advanced software platform for Bayesian evolutionary analysis. *PLoS Computational Biology* 15: e1006650. <https://doi.org/10.1371/journal.pcbi.1006650>

- Brikiatis L. 2014.** The De Geer, Thulean and Beringia routes: key concepts for understanding early Cenozoic biogeography. *Journal of Biogeography* 41: 1036–1054. <https://doi.org/10.1111/jbi.12310>
- Brooks A.T.M., Mittermeier R.A., da Fonseca G.A.B., Gerlach J., Hoffmann M., Lamoreux J.F., Mittermeier C.G., Pilgrim J.D. & Rodrigues A.S.L. 2006.** Global biodiversity conservation priorities. *Science* 313: 58–61. <https://doi.org/doi:10.1126/science.1127609>
- Buerki S., Gallaheer T., Booth T., Brewer G., Forest F., Pereira J.T. & Callmander M.W. 2016.** Biogeography and evolution of the screw-pine genus *Benstonea* Callm. & Buerki (Pandanales). *Candollea* 71: 217–229. <http://dx.doi.org/10.15553/c2016v712a8>
- Bygrave P.C. & Davis A.P. 1996.** Melastomataceae. In: Coode M.J.E., Dransfield J., Forman L.L., Kirkup D.W. & Said I.M. (Eds.) *A checklist of the flowering plants & gymnosperms of Brunei Darussalam*. Darusima Trading & Printing Co., Bandar Sri Begawan, pp. 184–199.
- Cámara-Leret R., Ridder-Numan J.W.A. & Veldkamp J.F. 2013.** Revision of *Heteroblemma* gen. nov. (*Dissochaeteae* – *Melastomataceae*) from Malesia and Vietnam. *Blumea* 58: 229–240. <https://doi.org/10.3767/000651913X674945>
- Cannon C.H. 2012.** Quaternary dynamics of Sundaland forests. In: Gower D., Johnson K., Richardson J., Rosen B., Ruber L. & Williams S. (Eds.) *Biotic evolution and environmental change in Southeast Asia. Systematics Association Special Volume Series*. Cambridge University Press, New York. pp. 115–137.
- Cannon C.H., Morley R.J. & Bush A.B.G. 2009.** The current refugial rainforests of Sundaland are unrepresentative of their biogeographic past and highly vulnerable to disturbance. *Proceedings of the National Academy of Sciences of the United States of America* 106: 11188–11193. <https://doi.org/10.1073/pnas.0809865106>
- Cellinese N. 1999.** *Systematics of the Asian Sonerileae (Melastomataceae)*. PhD Thesis, University Reading, United Kingdom. Pp 1–323.
- Cellinese N. 2004.** Melastomataceae. In: Beaman J.H. & Anderson C. (Eds.) *The plants of Mount Kinabalu. Vol. 5, Dicotyledon families Magnoliaceae to Winteraceae*. Natural History Publications, Kota Kinabalu, pp. 92–118.
- Chen C. 1983.** On *Medinilla* Gaud. of China in relation to the drift of the Indian Plate. *Acta Phytotaxonomy Sinica* 21(4): 416–422.
- Chen C. 1984.** *Medinilla*. In: Chen C. (Ed.) *The Flora Reipublicae Popularis Sinicae*. Vol. 1. Science Press, Beijing, pp. 268–280.
- Chen C. & Renner S.S. 2007.** Melastomataceae. In: Wu Z.Y., Raven P.H. & Hong D.Y. (Eds.), *Flora of China*. Vol. 13. Science Press, Beijing, pp. 360–399.
- Chen J.H., Thomas D.C. & Saunders R.M.K. 2019.** Geographic range and habitat reconstruction shed light on palaeotropical intercontinental disjunction and regional diversification patterns in *Artabotrys* (Annonaceae). *Journal of Biogeography* 46: 2690–2705. <https://doi.org/10.1111/jbi.13703>
- Cho S.H., Kim B.Y., Lee J.H. & Phourin, C. 2016.** Two newly recorded species of the genus *Medinilla* from Cambodia. *Korean Journal of Plant Taxonomy* 46(3): 301–305
- Christenhusz M.J.M. & Byng J.W. 2016.** The number of known plants species in the world and its annual increase. *Phytotaxa* 261: 201–217. <https://doi.org/10.11646/phytotaxa.261.3.1>
- Clarke C.B. 1879.** Melastomataceae. In: Hooker J.D. (Ed.), *Flora British India*. Vol. 2. L. Reeve & Co., London, pp. 512–565.
- Clarke C.B. 1890.** On the plants of Kohima and Muneypore. *Journal of the Linnean Society, London, Botany* 25: 1–106.
- Clausing G. 1999.** *Die Systematik der Dissochaeteae und ihre Stellung innerhalb der Melastomataceae*. PhD Dissertation. Johannes-Gutenberg Universität, Mainz, pp. 1–218.
- Clausing G. 2000.** Revision of *Pachycentria* (Melastomataceae). *Blumea* 45: 341–375.
- Clausing G. & Renner S.S. 2001a.** Evolution of growth form in epiphytic Dissochaeteae (Melastomataceae). *Organisms, Diversity & Evolution* 1(1): 45–60. <https://doi.org/10.1078/1439-6092-00004>
- Clausing G. & Renner S.S. 2001b.** Molecular phylogenetics of Melastomataceae and Memecylaceae: implications for character evolution. *American Journal of Botany* 88(3): 486–498. <https://doi.org/10.2307/2657114>
- Clausing G., Meyer K. & Renner S.S. 2000.** Correlations among fruit traits and evolution of different fruits within Melastomataceae. *Botanical Journal of the Linnean Society* 133: 303–326.
- Cogniaux C.A. 1889.** Melastomataceae. In: Schumann K. & Hollrung U.M. (Eds.) *Die flora von Kaiser Wilhelms Land*. Asher & Co., Berlin, pp. 86–88.
- Cogniaux C.A. 1890.** Melastomataceae. In: Boerlage J.G. (Ed.), *Handleiding tot de kennis der flora van Nederlandsch Indië*. Vol. 2. EJ Brill, Leiden, pp. 500–538.
- Cogniaux C.A. 1891.** Melastomataceae. In: de Candolle A. & de Candolle C. (Eds.) *Monographiae Phanerogamarum*. Vol. 7. Masson, Paris, pp. 1–1256.
- Collinson M.E. & Pingen M. 1992.** Seeds of the Melastomataceae from the Miocene of Central Europe. In: Kovar-Eder J. (Ed.) *Palaeovegetational development in Europe*. Museum of Natural History, Vienna. pp. 129–139.
- Craib W.G. 1913.** Contributions to the flora of Siam. Additamentum III. *Bulletin of Miscellaneous Information Kew* 1913: 65–72.

- Craib W.G. 1930.** Contributions to the flora of Siam. Additamentum XXIX. *Bulletin of Miscellaneous Information Kew* 1930: 320.
- Craib W.G. 1931.** Melastomaceae. *Flora Siamensis enumeration; A list of the plants known from Siam*. Vol. 10. Bangkok Times Press Ltd., Bangkok, pp. 674–715.
- Crayn D.M., Costion C. & Harrington M.G. 2015.** The Sahul-Sunda floristic exchange: Dated molecular phylogenies document Cenozoic intercontinental dispersal dynamics. *Journal of Biogeography* 42: 11–24. <https://doi.org/10.1111/jbi.12405>
- Darriba D., Taboada G.L., Doallo R. & Posada D. 2012.** jModelTest 2: More models, new heuristics and parallel computing. *Nature Methods* 9(8): 772. <https://doi.org/10.1038/nmeth.2109>
- De Bruyn M., Stelbrink B., Morley R.J., Hall R., Carvalho G.R., Cannon C.H. & von Rintelen T. 2014.** Borneo and Indochina are major evolutionary hotspots for Southeast Asian biodiversity. *Systematic Biology* 63: 879–901
- De Candolle A.P. 1828.** *Prodromus systematis naturalis regni vegetabilis*. Vol. 3. Sumtibus Sociorum Treuttel & Würtz, Paris.
- De Groot G.A., During H.J., Maas J.W., Schneider H., Vogel J.C. & Erkens R.H. 2011.** Use of *rbcL* and *trnL-F* as a two-locus DNA barcode for identification of NW-European ferns: an ecological perspective. *PLoS One* 6(1): e 16371. <https://doi.org/10.1371/journal.pone.0016371>
- Dickerson R.E. 1928.** Distribution of life in the Philippines. Bureau of Printing, Manila.
- Don G. 1832.** *General history of the dichlamydeous plants*. Vol. 2. JG & F Rivington, London, pp. 728–806.
- Doyle J.J. & Doyle J.L. 1987.** A rapid DNA isolation procedure for small quantities of fresh leaf tissue. *Phytochemistry Bulletin* 19: 11–15.
- Drummond A.J. & Rambaut A. 2007.** BEAST: Bayesian evolutionary analysis by sampling trees. *BMC Evolutionary Biology* 7: 214. <https://doi.org/10.1186/1471-2148-7-214>
- Drummond A.J., Ho S.Y.W., Phillips M.J. & Rambaut A. 2006.** Relaxed phylogenetics and dating with confidence. *PLoS Biology* 4: 699–710. <https://doi.org/10.1371/journal.pbio.0040088>
- Drummond A.J., Suchard M.A., Xie D. & Rambaut A. 2012.** Bayesian phylogenetics with BEAUti and the BEAST 1.7. *Molecular Biology and Evolution* 29: 1969–1973. <https://doi.org/10.1093/molbev/mss075>
- Duan L., Harris A.J., Su C., Ye W., Deng S.W., Fu L., Wen J. & Chen H.F. 2020.** A fossil-calibrated phylogeny reveals the biogeographic history of the *Cladrastis* clade, an amph-Pacific early-branching group in papilionoid legumes. *Molecular Phylogenetics and Evolution* 143: 106673. <https://doi.org/10.1016/j.ympev.2019.106673>
- Elmer A.D.E. 1911.** New Melastomataceae. *Leaflets of Philippine Botany* 4: 1191–1230.
- Elmer A.D.E. 1915.** Two hundred twenty-six new species – II. *Leaflets of Philippine Botany* 8: 2719–2883.
- Elmer A.D.E. 1939.** Irosin Melastomataceae. *Leaflets of Philippine Botany* 10: 3649–3672.
- Endlicher S. 1836–1840.** *Genera plantarum secundum ordines naturales*. Fr. Beck Universitatis, Vindobonae, pp. 1205–1223.
- Felsenstein J. 1985.** Confidence limits on phylogenies: An approach using the bootstrap. *Evolution* 39: 783–791. <https://doi.org/10.2307/2408678>
- Fritsch P.W., Almeida F., Renner S.S., Martins A.B. & Cruz B.C. 2004.** Phylogeny and circumscription of the near-endemic Brazilian tribe Microlicieae (Melastomataceae). *American Journal of Botany* 91(7): 1105–1114. <https://doi.org/10.3732/ajb.91.7.1105>
- Furtado C.X. 1963.** Notes on some Malaysian Melastomaceae. *Gardens' Bulletin Singapore* 20: 105–122.
- Geddes E. 1928.** *Anplectrum patens* Geddes. Contribution to the Flora of Siam. Additamentum XXIV. *Bulletin of Miscellaneous Information Kew* 1928: 62–72. <https://doi.org/10.2307/4107648>
- Geddes E. 1928.** *Anplectrum stellulatum* Geddes. Contribution to the Flora of Siam. Additamentum XXV. *Bulletin of Miscellaneous Information Kew* 1928: 234–247. <https://doi.org/10.2307/4107694>
- Gernhard T. 2008.** The conditioned reconstructed process. *Journal of Theoretical Biology* 253: 769–778. <https://doi.org/10.1016/j.jtbi.2008.04.005>
- Gilg E. 1898.** *Monographieen afrikanischer Pflanzen-Familien und -Gattungen, Vol. 2, Melastomataceae*. Engelmann, Leipzig. <https://doi.org/10.5962/bhl.title.53505>
- Goldenberg R., Teixeira S.P. & Martins A.B. 2003.** Anther dehiscence and circumscription of *Miconia* sect. *Hypoxanthus* (Melastomataceae). *Kew Bulletin* 58: 195–203. <https://doi.org/10.2307/4119362>
- Goldenberg R., Penneys D.S., Almeida F., Judd W.S. & Michelangeli F.A. 2008.** Phylogeny of *Miconia* (Melastomataceae): Patterns of stamen diversification in a megadiverse neotropical genus. *International Journal of Plant Sciences* 169: 963–979. <https://doi.org/10.1086/589697>
- Goldenberg R., de Fraga C.N., Fontana A.P., Nicolas A.N. & Michelangeli F.A. 2012.** Taxonomy and phylogeny of *Merianthera* (Melastomataceae). *Taxon* 61(5): 1040–1056. <https://doi.org/10.1002/tax.615010>
- Gray A. 1854.** Botany phanerogamia. Part 1. In: Wilkes C. (Ed.) *United States exploring expedition during the years 1838, 1839, 1840, 1841, 1842*. C. Sherman, Philadelphia.
- Grudinski M., Wanntorp L., Panell C.M., Muellner-Riehl A.N. 2014.** West to east dispersal in a widespread animal-dispersed woody angiosperm genus (*Aglaiia*, Meliaceae) across the Indo-Australian Archipelago. *Journal of Biogeography* 41: 1149–1159. <https://doi.org/10.1111/jbi.12280>

- Guillaumin M.A. 1913.** Contribution à l'étude des Mélastomacées d'Extrême-Orient, IV–V. *Bulletin de la Société Botanique de France* 60: 341–342.
- Guillaumin M.A. 1921a.** Contribution à l'étude des Mélastomacées d'Extrême-Orient, Supplément. *Bulletin de la Société Botanique de France* 68: 2–11.
- Guillaumin M.A. 1921b.** Mélastomacées. In: Lecomte, P.H. (Ed.) *Flore Générale de l'Indo-Chine*. Volume 2. Masson & Cie, Paris, pp. 864–938.
- Hall R. 2002.** Cenozoic geological and plate tectonic evolution of SE Asia and the SW Pacific: computer-based reconstructions, model and animations. *Journal of Asian Earth Sciences* 20: 353–431. [https://doi.org/10.1016/S1367-9120\(01\)00069-4](https://doi.org/10.1016/S1367-9120(01)00069-4)
- Hall R. 2009.** Southeast Asia's changing palaeogeography. *Blumea* 54: 148–161. <https://doi.org/10.3767/000651909X475941>
- Hall R. 2012.** Sundaland and Wallacea: geology, plate tectonics and palaeogeography. In: Gower D., Johnson K., Richardson J., Rosen B., Ruber L. & Williams S. (Eds.) *Biotic evolution and environmental change in Southeast Asia. Systematics Association Special Volume Series*. Cambridge University Press, New York. pp. 32–78.
- Hansen C. 1984.** Melastomataceae of Gunung Mulu National Park. In: Jermy A.C. (Ed.), *Studies on the flora of Gunung Mulu National Park Sarawak*. Sarawak Forest Department, Kuching, pp. 105–135.
- Hansen C. 1990a.** New species of *Pseudodissochaeta* Nayar and *Sonerila* Roxb. (Melastomataceae) from Indo-China. *Bulletin du Muséum National d'Histoire Naturelle. Section B, Adansonia: Botanique Phytochimie, Sér. 4*, 11: 279–286.
- Hansen C. 1990b.** New species and combinations in *Allomporphia*, *Phyllagathis*, and *Sporoxeia* (Melastomataceae) in Indo-China. *Bulletin du Muséum National d'Histoire Naturelle. Section B, Adansonia: Botanique Phytochimie, Sér. 4*, 12(1): 37–41.
- Hansen C. & Wickens G.E. 1981.** A revision of *Ochthocharis* (Melastomataceae), including *Phaeoneuron* of Africa. *Kew Bulletin* 36(1): 13–29.
- Heine H. 1953.** Diagnoses novae plantarum in Borneo septentrionali a J. et M.S. Clemens lectarum. *Mitteilungen (aus) der Botanischen Staatssammlung München* 1: 214–215.
- Hickey J.L. 1977.** Stratigraphy and paleobotany of the Golden Valley Formation (Early Tertiary) of Western North Dakota. Geological Society of America, Colorado.
- Hochreutiner B.P.G. 1925.** Plantae Hochreutineranae. *Candollea* 2: 317–513.
- Hô P.H. 1992.** *An illustrated Flora of Vietnam*. Vol. 2. Mekong Printing, Hanoi.
- IUCN. 2010.** *Guidelines for using the IUCN Red List Categories and Criteria. Version 8.1*. Prepared by the Standards and Petitions Subcommittee in March 2010. Downloadable from <http://intranet.iucn.org/webfiles/doc/SSC/RedList/RedListGuidelines.pdf>.
- Jack W. 1823.** On the Malayan species of *Melastoma*. *Transaction of the Linnean Society London* 14(1): 1–22. <https://doi.org/10.1111/j.1095-8339.1823.tb00077.x>
- Jacques-Félix H. 1977.** Synonymes nouveaux de Mélastomacées d'Afrique et de Madagascar. *Adansonia sér. 2*, 17: 77–78.
- Jacques-Félix H. 1983.** Mélastomacées. In: Satabié B. & Leroy J.-F. (Eds.), *Flore du Cameroun*, Vol. 24. Délégation Générale à la Recherche Scientifique et Technique, Yaounde.
- Jacques-Félix H. 1995.** Histoire des Melastomataceae d'Afrique. *Bulletin du Muséum National d'Histoire Naturelle. Section B, Adansonia: Botanique Phytochimie, Sér. 4*, 16: 235–311.
- Jordan W.C., Courtney M.W. & Neigel J.E. 1996.** Low levels of intraspecific genetic variation at a rapidly evolving chloroplast DNA locus in North American duckweeds (Lemnaceae). *American Journal of Botany* 83(4): 430–439. <https://doi.org/10.2307/2446212>
- Kadereit G. 2005.** Revision of *Plethiandra* Hook.f.: a polystaminate, East Asian genus of Melastomataceae. *Edinburgh Journal of Botany* 62(3): 127–144. <https://doi.org/10.1017/S0960428606000175>
- Kadereit G. 2006.** A new species of *Dissochaeta* Blume (Melastomataceae) from Kalimantan (Borneo, Indonesia). *Edinburgh Journal of Botany* 63(1): 3–8. <https://doi.org/10.1017/S0960428606000382>
- Kanjilal U.N., Kanjilal P.C. & Das A. 1938.** *Flora of Assam. Volume 2, Connaraceae to Cornaceae*. Prabasi Press, Calcutta.
- Kartonegoro A. 2018.** *Diplectria maxwellii* (Melastomataceae), a new species from Sarawak, Borneo. *Kew Bulletin* 73-23: 1–3. <https://doi.org/10.1007/s12225-018-9741-x>
- Kartonegoro A. & Veldkamp J.F. 2010.** Revision of *Dissochaeta* (Melastomataceae) in Java, Indonesia. *Reinwardtia* 13(2): 125–145. <https://doi.org/10.14203/reinwardtia.v13i2.2133>
- Kartonegoro A. & Veldkamp J.F. 2013.** Revision of *Creochiton* (Melastomataceae). *Blumea* 58(3): 217–227. <https://doi.org/10.3767/000651913X674134>
- Kartonegoro A., Veldkamp J.F., Hovenkamp P. & Van Welzen P.C. 2018.** A Revision of *Dissochaeta* (Melastomataceae, Dissochaeteae). *PhytoKeys* 107: 1–178.
- Kartonegoro A., Hovenkamp P. & van Welzen P. 2019.** A taxonomic revision of *Macrolenes* (Melastomataceae). *Gardens' Bulletin Singapore* 71(1): 185–241. doi: 10.26492/gbs71(1).2019-12

- Kartonegoro A., Liu Y., Mota de Oliveira S. & Van Welzen P. 2020.** A taxonomic revision of *Pseudodissochaeta* (Melastomataceae, Dissochaetaeae). *Phytotaxa* 468(2): 159–174. <https://doi.org/10.11646/phytotaxa.468.2.1>
- Kartonegoro A., Veranso-Libalah M.C., Kadereit G., Frenger A., Penneys D.S., Mota de Oliveira S. & Van Welzen P.C. 2021.** Molecular phylogenetics of the *Dissochaeta* alliance (Melastomataceae): Redefining tribe Dissochaetaeae. *Taxon* 70(4): 793–825. <https://doi.org/10.1002/tax.12508>
- Katoh K. & Standley D.M. 2013.** MAFFT multiple sequence alignment software version 7: improvements in performance and usability. *Molecular Biology and Evolution* 30(4): 772–780. <https://doi.org/10.1093/molbev/mst010>
- Kelchner S.A. & Clark L.G. 1997.** Molecular evolution and phylogenetic utility of the chloroplast *rpl16* intron in *Chusquea* and the Bambusoideae (Poaceae). *Molecular Phylogenetics and Evolution* 8(3): 385–397. <https://doi.org/10.1006/mpev.1997.0432>
- King G. 1900.** Materials for a flora of the Malayan Peninsula 1. *Journal of the Asiatic Society of Bengal*. Part 2. Natural History 69: 1–87.
- Koorders S.H. 1912.** *Exkursionsflora von Java*. Vol. 2. Fischer, Jena.
- Koorders S.H. 1923.** *Flora von Tjibodas*. Vol. 2. Visser & Co., Batavia.
- Korthals P.W. 1842–1844.** Bijdrage tot de kennis der Indische Melastomataceae. In: Temminck C.J. (Ed.), *Verhandelingen over De natuurlijke geschiedenis der Nederlandsche overzeesche bezittingen, Botanie*. Natuurkundige Commissie, Leiden, pp. 236–243.
- Kränzlin F.W.L. 1931.** Beiträge zur Kenntnis der Melastomataceae. *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich* 76(3): 147–159.
- Krasser F. 1893.** Melastomataceae. In: Engler A. & Prantl K. (Eds.), *Die natürlichen Pflanzenfamilien*. Teil 3, Abt. 7. Engelmann, Leipzig, pp. 130–199.
- Kriebel R. & Zumbado M.A. 2014.** New reports of generalist insect visitation to flowers of species of *Miconia* (Miconiaceae: Melastomataceae) and their evolutionary implications. *Brittonia* 66: 396–404. <https://doi.org/10.1007/s12228-014-9337-1>
- Kuntze O. 1891.** *Revisio genera plantarum*. Vol. 1. Arthur Felix, Leipzig.
- Kurz S. 1877.** *Forest flora of British Burma*. Vol. 1. (*Ranunculaceae* to *Cornaceae*). Government Printing, Calcutta.
- Li H.L. 1944.** Studies in the Melastomataceae of China. *Journal of the Arnold Arboretum* 25: 1–42.
- Li P.S., Thomas D.C. & Saunders R.M.K. 2017.** Historical biogeography and ecological niche modelling of the *Asimina-Disepalum* clade (Annonaceae): Role of ecological differentiation in Neotropical-Asian disjunctions and diversification in Asia. *BMC Evolutionary Biology* 17: 188. <https://doi.org/10.1186/s12862-017-1038-4>
- Lohman D.J., De Bruyn M., Page T., von Rintelen K., Hal R., Ng P.K.L., Shih H.T., Carvalho G.R. & von Rintelen T. 2011.** Biogeography of the Indo-Australian archipelago. *Annual Review of Ecology, Evolution, and Systematics* 42: 205–226
- Mansfeld R. 1924.** Melastomataceae. *Nova Guinea* 14: 199–207.
- Mansfeld R. 1925.** Die Melastomaceen von Papuasien. In: Lauterbach C. (Ed.), Beiträge zur Flora von Papuasien. XIII. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 60: 105–143.
- Maxwell J.F. 1980a.** *Taxonomic revision of Diplectrinae Maxw. and Dissochaetinae Naud. (Dissochaetaeae) Melastomataceae*. PhD Thesis, University of Singapore, pp. 1–568.
- Maxwell J.F. 1980b.** Taxonomic notes on the tribe Dissochaetaeae (Naudin) Triana (Melastomataceae). *Gardens' Bulletin Singapore* 33: 312–327.
- Maxwell J.F. 1982.** Woody climbing melastomes in the Malay Peninsula. *Malayan Nature Journal* 35: 149–163.
- Maxwell J.F. 1983.** Taxonomic and nomenclatural notes on *Oxyspora* DC., *Anerincleistus* Korth., *Poikilogyne* Baker f., and *Allomorpha* Bl. (Melastomataceae, tribe Oxysporeae). *Gardens' Bulletin Singapore* 35(2): 209–226.
- Maxwell J.F. 1984.** Taxonomic studies of the Melastomataceae (Part 1). A revision of subtribes Dissochaetinae Maxw. and Dissochaetinae Naudin (genera *Diplectria* (Bl.) Reichb., *Dissochaeta* Bl., *Macrolenes* Naudin, *Creochiton* Bl., and *Pseudodissochaeta* Nayar). *Federation Museums Journal* 29: 45–117.
- Merrill E.D. 1905.** New or noteworthy Philippine plants III. *Publications of the Bureau of Science Government Laboratories* 29: 5–50.
- Merrill E.D. 1916.** Reliquiae Robinsonianae. *The Philippine Journal of Science, C. Botany* 11(5): 243–319.
- Merrill E.D. 1917.** Contribution to our knowledge of the Flora of Borneo. *Journal of the Straits Branch of the Royal Asiatic Society* 76: 74–117.
- Merrill E.D. 1922.** New or noteworthy Bornean plants II. *Journal of the Straits Branch of the Royal Asiatic Society* 86: 312–342.
- Merrill E.D. 1923.** *An enumeration of Philippine flowering plants*. Vol. 3. Bureau of Printing, Manila.
- Merrill E.D. 1926.** Additions to our knowledge of the Philippine Flora, III. *The Philippine Journal of Science, C. Botany* 30(4): 389–430.
- Merrill E.D. 1929.** Plantae Elmerianae Borneenses. *University of California Publications in Botany* 15: 1–316.

- Merrill E.D. 1934.** New Sumatran Plants. *Papers of the Michigan Academy of Science, Arts and Letters* 19: 149–203.
- Merrill E.D. 1939.** New Sumatran Plants IV. *Papers of the Michigan Academy of Science, Arts and Letters* 24: 63–92.
- Michelangeli F.A., Penneys D.S., Giza J., Soltis D., Hills M.H. & Skean J.D. 2004.** A preliminary phylogeny of the tribe Miconieae (Melastomataceae) based on nrITS sequence data and its implications on inflorescence position. *Taxon* 53(2): 279–290. <https://doi.org/10.2307/4135608>
- Michelangeli F.A., Nicolas A.N., Morales-Puentes M.E. & David H. 2011.** Phylogenetic relationships of *Allomaieta*, *Alloneuron*, *Cyphostyla*, and *Wurdastom* (Melastomataceae) and the resurrection of the tribe Cyphostyleae. *Int. J. Plant Sci.* 172: 1165–1178. <https://doi.org/10.1086/662032>.
- Michelangeli F.A., Guimaraes P.J.F., Penneys D.S., Almada F. & Kriebel R. 2013.** Phylogenetic relationships and distribution of New World Melastomeae (Melastomataceae). *Botanical Journal of the Linnean Society* 171: 38–60. <https://doi.org/10.1111/j.1095-8339.2012.01295.x>
- Michelangeli F.A., Almada F., Goldenberg R. & Penneys D.S. 2020.** A guide to curating New World Melastomataceae collections with a linear generic sequence to world-wide Melastomataceae. *Preprints* 2020, 2020100203. <https://doi.org/10.20944/preprints202010.0203.v1>
- Miller M.A., Pfeiffer W. & Schwartz T. 2010.** Creating the CIPRES Science Gateway for inference of large phylogenetic trees. In: 2010 gateway computing environments workshop (GCE) 1–8.
- Miquel F.A.W. 1855.** *Flora van Nederlandsch Indië*. Vol. 1. C.G. van der Post, Amsterdam.
- Miquel F.A.W. 1860-1861.** *Flora van Nederlandsch Indië. Eerste Bijvoegsel. Sumatra, zijne plantenwereld en hare voortbrengselen. Prodrum flora Sumatranæ*. C.G. van der Post, Utrecht.
- Mittermeier R.A., Mittermeier C.G., Brooks T.M., Pilgrim J.D., Konstant W.R., da Fonseca G.A.B. & Kormos C. 2003.** Wilderness and biodiversity conservation. *Proceedings of the National Academy of Sciences of the United States of America* 100: 10309–10313. [www.pnas.org/cgi/doi/10.1073/pnas.1732458100](http://www.pnas.org/cgi/doi/10.1073/pnas.1732458100)
- Morley R.J. 2003.** Interplate dispersal paths for megathermal angiosperms. *Perspectives in Plant Ecology Evolution and Systematics* 6: 5–20. <https://doi.org/10.1078/1433-8319-00039>
- Morley R.J. 2012.** A review of the Cenozoic palaeoclimate history of Southeast Asia. In: Gower D., Johnson K., Richardson J., Rosen B., Ruber L. & Williams S. (Eds.) *Biotic evolution and environmental change in Southeast Asia. Systematics Association Special Volume Series*. Cambridge University Press, New York. pp. 79–114.
- Morley R.J. & Dick C.W. 2003.** Missing fossils, molecular clocks, and the origin of the Melastomataceae. *American Journal of Botany* 90: 1638–1644. <https://doi.org/10.3732/ajb.90.11.1638>
- Myers N., Mittermeier R.A., Mittermeier C.G., da Fonseca G.A.B. & Kent J. 2000.** Biodiversity hotspots for conservation priorities. *Nature* 403: 853–858.
- Naudin C. 1851.** Melastomeacearum quae in Museo parisiensi continentur monographicae descriptiones et secundum affinitates distributionis tentamen. *Annales des Sciences Naturelles; Botanique*, sér. 3, 15: 67–79, 277–283.
- Naudin C. 1852.** Melastomeacearum quae in Museo parisiensi continentur monographicae descriptiones et secundum affinitates distributionis tentamen. *Annales des Sciences Naturelles, Botanique*, sér. 3, 18: 141, 153–154.
- Nauheimer L., Boyce P.C. & Renner S.S. 2012.** Giant taro and its relatives: A phylogeny of the large genus *Alocasia* (Araceae) sheds light on Miocene floristic exchange in the Malesian region. *Molecular Phylogenetics and Evolution* 63: 43–51.
- Nayar M.P. 1966.** Contributions to the knowledge of Indo-Malaysian and other Asiatic Melastomataceae. *Kew Bulletin* 20(1): 155–161. <https://doi.org/10.2307/4107906>
- Nayar M.P. 1969a.** *Pseudodissochaeta*: A new genus of Melastomataceae. *Journal of the Bombay Natural History Society* 65(3): 557–568.
- Nayar M.P. 1969b.** *Dissochaeta alstonii* sp. nov. (Melastomataceae). *Bulletin of the Botanical Survey of India* 11: 188–189.
- Nayar M.P. 1969c.** A new species of *Neodissochaeta* Bakh.f. (Melastomataceae). *Bulletin of the Botanical Survey of India* 11: 195–196.
- Nayar M.P. 1970.** A synopsis of the genus *Eisocreocheiton* Quisumb. & Merr. (Melastomataceae). *Journal of the Bombay Natural History Society* 67: 87–90.
- Nayar M.P. 1980.** Notes on Asian Melastomataceae (3): New species and notes on the genus *Macrolenes* Naud. *The Journal of Japanese Botany* 55(2): 45–52.
- Nayar M.P. 1982.** Revision of the genus *Catanthera* F.v.Muell. (Melastomataceae). *Reinwardtia* 10(1): 35–61.
- Nees von Esenbeck T.F.L. 1825.** Catalogus van eenige der merkwaardigste zoo in- als uithetseme gewassen te vinden in 's Lands Plantentuin te Buitenzorg opgemaakt door C.L. Blume. *Flora* 8: 97–160.
- Nuttall T. 1818.** *The genera of the North American plants and a catalogue of the species to the year 1817*. D. Heartt, Philadelphia.
- Ohwi J. 1943.** The Kanehira-Hatusima 1940 collection of New Guinea plants. XVI. *Botanical Magazine Tokyo* 57: 1–19. <https://doi.org/10.15281/jplantres1887.57.1>



- Olmstead R.G. & Sweere J.A. 1994. Combining data in phylogenetic systematics: an empirical approach using three molecular data sets in the Solanaceae. *Systematic Biology* 43: 467–481. <https://doi.org/10.1093/sysbio/43.4.467>
- Penneys D.S. & Judd W.S. 2013. Combined molecular and morphological phylogenetic analyses of the Blakeeae (Melastomataceae). *International Journal of Plant Sciences* 174(5): 802–817. <https://doi.org/10.1086/670011>
- Penneys D.S., Michelangeli F.A., Judd W.S. & Almeida F. 2010. Henrietteae (Melastomataceae): A new Neotropical berry-fruited tribe. *Systematic Botany* 35(4): 783–800. <https://doi.org/10.1600/036364410X539862>
- Penneys D.S., Almeida F., Michelangeli F.A., Goldenberg R., Martins A.B. & Fritsch P.W. 2020. Lithobieae and Ericoneae: two new Neotropical tribes of Melastomataceae. *Phytotaxa* 453(3): 157–178. <https://doi.org/10.11646/phytotaxa.453.3.1>
- Quisumbing E. & Merrill E.D. 1928. New Philippine plants. *The Philippine Journal of Science* 37: 177–178.
- Raes N. & van Welzen P.C. 2009. The demarcation and internal division of Flora Malesiana: 1857–present. *Blumea* 54: 6–8. <https://doi.org/10.3767/000651909X475888>
- Raes N., Cannon C.H., Hijmans R.J., Peissens T., Saw L.G., van Welzen P.C. & Slik J.W.F. 2014. Historical distribution of Sundaland's Dipterocarp rainforests at Quaternary glacial maxima. *Proceedings of the National Academy of Sciences of the United States of America* 111: 16790–16795. <https://doi.org/10.1073/pnas.1403053111>
- Raizada M.B. 1968. Some name changes in the Flora of India. *Indian Forester* 94(6): 432–462.
- Rambaut A. 2009. *FigTree*. Online. Available: <http://tree.bio.ed.ac.uk/software/figtree>
- Rambaut A., Drummond A.J., Xie D., Baele G. & Suchard M.A. 2018. Posterior summarisation in Bayesian phylogenetics using Tracer 1.7. *Systematic Biology* 67(5): 901–904. <https://doi.org/10.1093/sysbio/syy032>
- Ree R.H. & Smith S.A. 2008. Maximum likelihood inference of geographic range evolution by dispersal, local extinction, and cladogenesis. *Systematic Biology* 57: 4–14. <https://doi.org/10.1080/10635>
- Regalado J.C. 1990. Revision of *Medinilla* (Melastomataceae) of Borneo. *Blumea* 35: 5–70.
- Regalado J.C. 1995. Revision of Philippine *Medinilla* (Melastomataceae). *Blumea* 40: 113–193.
- Reginato M., Michelangeli F.A. & Goldenberg R. 2010. Phylogeny of *Pleiochiton* (Melastomataceae, Miconieae): total evidence. *Botanical Journal of the Linnean Society* 162(3): 423–434. <https://doi.org/10.1111/j.1095-8339.2009.01022.x>
- Reichenbach H.G.L. 1841. *Der deutsche Botaniker, Erster Band: Das Herbarienbuch, Erklärung des natürlichen Pflanzensystems, systematische Aufzählung, Synonymik und Register der bis jetzt bekannten Pflanzengattungen*. Arnoldischen Buchhandlung, Dresden.
- Reinwardt C.G.C. 1828. *Nova plantarum indicarum genera*. In: Hornschuch C.F. (ed.), *Sylloge Plantarum Novarum Itemque Minus Cognitarum a Praestantissimis Botanicis adhuc Viventibus Collecta et a Societate Regia Botanica Ratisbonensi*, edita 2. C.E. Brenck, Regensburg.
- Renner S.S. 1989. A survey of reproductive biology in Neotropical Melastomataceae and Memecylaceae. *Ann. Mo. Bot. Gard.* 76: 496–518. <https://doi.org/10.2307/2399497>
- Renner S.S. 1993. Phylogeny and classification of the Melastomataceae and Memecylaceae. *Nordic Journal of Botany* 13(5): 519–540. <https://doi.org/10.1111/j.1756-1051.1993.tb00096.x>
- Renner S.S. 2004a. Multiple Miocene Melastomataceae dispersal between Madagascar, Africa and India. *Philosophical Transaction of the Royal Society of London B: Biological Sciences* 359: 1485–1494. <https://doi.org/10.1098/rstb.2004.1530>
- Renner S.S. 2004b. Bayesian analysis of combined chloroplast loci, using multiple calibrations, supports the recent arrival of Melastomataceae in Africa and Madagascar. *American Journal of Botany* 91: 1427–1435. <https://doi.org/10.3732/ajb.91.9.1427>
- Renner S.S., Clausing G. & Meyer K. 2001a. Historical biogeography of Melastomataceae: The roles of Tertiary migration and longdistance dispersal. *American Journal of Botany* 88: 1290–1300. <https://doi.org/10.2307/3558340>
- Renner S.S., Clausing G., Cellinese N. & Meyer K. 2001b. Melastomataceae. In: Santisuk T. & Larsen K. (Eds.), *Flora of Thailand*. Vol. 7, Ser. 3. Prachachon Co. Ltd., Bangkok, pp. 412–497.
- Richardson J.E., Costion C.M. & Muellner A.N. 2012. The Malesian floristic interchange: Plant migration patterns across Wallace's Line. In: Gower D., Johnson K., Richardson J.E., Rosen B., Rüber L. & Williams S. (Eds.) *Biotic evolution and environmental change in Southeast Asia*. Cambridge University Press, New York. pp. 138–163.
- Ridley H.N. 1922. *The flora of the Malay Peninsula*. Vol. 1. L. Reeve & Co., London.
- Ridley H.N. 1925. *The flora of the Malay Peninsula*. Vol. 5. L. Reeve & Co., London.
- Ridley H.N. 1946. Additions to the flora of Borneo and other Malay Islands: XIX. *Kew Bulletin* 1: 31–40. <https://doi.org/10.2307/4109088>
- Rocha M.J.R., Batista J.A.N., Guimarães P.J.F. & Michelangeli F.A. 2016. Phylogenetic relationships in the *Marceña* alliance (Melastomataceae, Melastomataceae) and implications for generic circumscription. *Botanical Journal of the Linnean Society* 181: 585–609. <https://doi.org/10.1111/boj.12429>

- Ronquist F. 1996a.** “DIVA, version 1.1”. Computer program and manual available from ftp.systbot.uu.se and www.systbot.uu.se/staff/f\_ronquist.html. Uppsala University, Uppsala.
- Ronquist F. 1996b.** Reconstructing the history of host-parasite associations using generalised parsimony. *Cladistics* 11: 73–89.
- Ronquist F. 1997.** Dispersal-vicariance analysis: A new approach to the quantification of historical biogeography. *Systematic Biology* 46: 193–201.
- Ronquist F., Teslenko M., van der Mark P., Ayres D.L., Darling A., Höhna S., Larget B., Liu L., Suchard M.A. & Huelsenbeck J.P. 2012.** MrBayes 3.2: efficient Bayesian phylogenetic inference and model choice across a large model space. *Systematic Biology* 61(3): 539–542. <https://doi.org/10.1093/sysbio/sys029>
- Roos M.C. 1993.** State of affairs regarding Flora Malesiana: progress in revision work and publication schedule. *Flora Malesiana Bulletin* 11: 133–142.
- Roxburgh W. 1832.** *Flora Indica: Descriptions of Indian plants*. Vol. 2. W. Thacker & Co, Calcutta.
- Sauquet H. 2013.** A practical guide to molecular dating. *Comptes Rendus Palevol* 12: 355–367. <https://doi.org/10.1016/j.crpv.2013.07.003>
- Schwartz O. 1931.** Melastomataceae. In: Irmischer E. (Ed.), Beiträge zur Kenntnis der Flora von Borneo. *Mitteilungen aus dem Institut für allgemeine Botanik in Hamburg* 7: 237–257.
- Sirichamorn Y., Thomas D.C., Adema F.A.C.B. & van Welzen P.C. 2014.** Historical biogeography of *Aganope*, *Brachypterum* and *Derris* (Fabaceae, tribe Millettieae): insight into the origins of Palaeotropical intercontinental disjunctions and general biogeographical patterns in Southeast Asia. *Journal of Biogeography* 41: 882–893. <https://doi.org/10.1111/jbi.12262>
- Smith W.W. 1911.** Plantarum novarum in Herbario Horti Regii Calcuttensis cognitarum decas. *Journal and Proceedings of the Asiatic Society of Bengal* 7: 69–75.
- Stamatakis A. 2014.** RAxML version 8: a tool for phylogenetic analysis and post-analysis of large phylogenies. *Bioinformatics* 30(9): 1312–1313. <https://doi.org/10.1093/bioinformatics/btu033>
- Stamatakis A., Hoover P. & Rougemont J. 2008.** A rapid bootstrap algorithm for the RAxML web servers. *Systematic Biology* 57(5): 758–771. <https://doi.org/10.1080/10635150802429642>
- Stapf O. & Green M.L. 1913.** *Dissochaeta acmura* Stapf & M.L.Green. Decades Kewenses. Plantarum novarum in Herbario Horti Regii Conservatarum; decades LXX–LXXI. *Bulletin of Miscellaneous Information Kew* 1913: 39–42. <https://doi.org/10.2307/4118407>
- Stapf O. & Green M.L. 1914.** Melastomaceae. In: Gibbs L.S. (ed.), A contribution to the flora and plant formations of Mount Kinabalu and the Highlands of British North Borneo. *Journal of the Linnean Society, Botany* 42: 78–81.
- Stone R.D. 2014.** The species rich, paleotropical genus *Memecylon* (Melastomataceae): Molecular phylogenetics and revised infrageneric classification of the African species. *Taxon* 63(3): 539–561. <https://doi.org/10.12705/633-7788>
- Su Y.C.F. & Saunders R.M.K. 2009.** Evolutionary divergence times in the Annonaceae: Evidence of a late Miocene origin of *Pseuduvaria* in Sundaland with subsequent diversification in New Guinea. *BMC Evolutionary Biology* 9: 153. doi:10.1186/1471-2148-9-153.
- Swofford D.L. 2002.** PAUP\*: *Phylogenetic analysis using parsimony (\*and other methods), version 4.0 Beta*. Sinauer, Sunderland.
- Sytsma K.J., Litt A., Zjhra M.L., Pires J.C., Nepokroeff M. & Conti E. 2004.** Clades, clocks, and continents: historical and biogeographical analysis of Myrtaceae, Vochysiaceae, and relatives in the southern hemisphere. *International Journal of Plant Sciences* 165: 85–105. <https://doi.org/10.1086/421066>
- Thiers B. 2018.** continuously updated. *Index Herbariorum: A global directory of public herbaria and associated staff*. New York Botanical Garden’s Virtual Herbarium. <http://sweetgum.nybg.org/science/ih/> [accessed on 13 February 2018]
- Thomas D.C., Hughes M., Phutthai T., Ardi W.H., Rajbhandary S., Rubite R., Twyford A.D. & Richardson J.E. 2012a.** West to east dispersal and subsequent rapid diversification of the megadiverse genus *Begonia* (Begoniaceae) in the Malaysian archipelago. *Journal of Biogeography* 39: 98–113. <https://doi.org/10.1111/j.1365-2699.2011.02596.x>
- Thomas D.C., Surveswaran S., Xue B., Sankowsky B., Mols J.B., Kessler P.J.A. & Saunders R.M.K. 2012b.** Molecular phylogenetics and historical biogeography of the *Meiogyne-Fitzalania* clade (Annonaceae): Generic paraphyly and late Miocene-Pliocene diversification in Australasia and the Pacific. *Taxon* 61: 559–575. <https://doi.org/10.1002/tax.613006>
- Thomas D.C., Tang C.C. & Saunders R.M.K. 2017.** Historical biogeography of *Goniothalamus* and Annonaceae tribe Annoneae: dispersal-vicariance patterns in tropical Asia and intercontinental tropical disjunctions revisited. *Journal of Biogeography* 44: 2862–2876. <https://doi.org/10.1111/jbi.13086>
- Torrey J. 1826.** *A compendium of the flora of the Northern and Middle States*. J. & J. Harper, New York.
- Triana J.J. 1866.** Dispositio Melastomacearum. *Bulletin of the International Botanical & Horticultural Congress Amsterdam 1865*: 457–461.

- Triana J.J. 1872** ["1871"]. Les Mélastomacées. *Transactions of the Linnean Society, London* 28(1): 1–188. <https://doi.org/10.1111/j.1096-3642.1871.tb00222.x>
- Turland N.J., Wiersma J.H., Barrie F.R., Greuter W., Hawksworth D.L., Herendeen P.S., Knapp S., Kusber W.H., Li D.Z., Marhold K., May T.W., McNeill J., Monro A.M., Prado J., Price M.J. & Smith G.F. 2018.** *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code)*. Regnum Vegetabile 159. Koeltz Botanical Books, Glashütten.
- Turner I.M. 2018.** The importance of the plates in the *Verhandelingen over de natuurlijke geschiedenis der Nederlandsche overzeesche bezittingen*, *Botanie* for the nomenclature of South-East Asian plants. *Taxon* 67(3): 621–631.
- Van Steenis C.G.G.J. 1950.** The delimitation of Malaysia and its main plant geographical divisions. *Flora Malesiana*, Ser. I, 1: 70–85.
- Van Steenis C.G.G.J. 1964.** Plant geography of the mountain flora of Mt Kinabalu. *Proceedings of the Royal Society of London Series B, Biological Sciences* 161: 7–38. <https://doi.org/10.1098/rspb.1964.0072>
- Van Steenis-Kruseman M.J. 1950.** Malaysian plant collectors and collections being a cyclopaedia of botanical exploration in Malaysia and a guide to the concerned literature up to the year 1950. In: van Steenis C.G.G.J. (ed.), *Flora Malesiana, Ser. 1, Spermatophyta*. Vol. 1. Noordhoff-Kolff N.V., Jakarta.
- Van Tieghem P. 1891.** Classification anatomique des Mélastomacées. *Bulletin de la Société Botanique de France* 38: 114–124. <https://doi.org/10.1080/00378941.1891.10828542>
- Van Vliet G.J.C.M. 1981.** Wood anatomy of the palaeotropical Melastomataceae. *Blumea* 27: 395–462.
- Van Vliet G.J.C.M., Koek-Noorman J. & Ter Welle B.J.H. 1981.** Wood anatomy, classification and phylogeny of the Melastomataceae. *Blumea* 27: 463–473.
- Van Welzen P.C. & Raes N. 2011.** The floristic position of Java. *Gardens' Bulletin Singapore* 63: 329–339.
- Van Welzen P.C., Slik J.W.F. & Alahuhta J. 2005.** Plant distribution patterns and plate tectonics in Malesia. *Biologiske Skrifter* 55: 199–217.
- Van Welzen P.C., Parnell J.A.N. & Slik J.W.F. 2011.** Wallace's Line and plant distributions: two or three phytogeographical areas and where to group Java? *Biological Journal of the Linnean Society* 103: 531–545. <https://doi.org/10.1111/j.1095-8312.2011.01647.x>
- Van Welzen P.C., Strijk J.S., van Konijnenburg-Van Cittert J.H.A., Nucete M. & Merckx V.S.F.T. 2014.** Dated phylogenies of the sister genera *Macaranga* and *Mallotus* (Euphorbiaceae): Congruence in historical biogeographic patterns? *PLoS ONE* 9: e85713
- Veldkamp J.F. 1979** ["1978"]. Notes on *Creochiton*, *Dissochaeta*, and *Macrolenes* (Melastomataceae). *Blumea* 24: 437–446.
- Veldkamp J.F. & Nayar M.P. 1979** ["1978"]. The synonymy of the species of *Anplectrum* (Melastomataceae). *Blumea* 24: 431–435.
- Veldkamp J.F., Franken N.A.P., Roos M.C. & Nayar M.P. 1979** ["1978"]. A revision of *Diplectria* (Melastomataceae). *Blumea* 24: 405–430.
- Ventenat E.P. 1803.** *Choix de plantes*. L'auteur, Paris.
- Veranso-Libalah M.C., Stone R.D., Fongod A.G., Couvreur T.L. & Kadereit G. 2017.** Phylogeny and systematics of African Melastomateae (Melastomataceae). *Taxon* 66(3): 584–614. <https://doi.org/10.12705/663.5>
- Veranso-Libalah M.C., Kadereit G., Stone R.D. & Couvreur T.L. 2018.** Multiple shifts to open habitats in Melastomateae (Melastomataceae) congruent with the increase of African Neogene climatic aridity. *Journal of Biogeography* 45(6): 1420–1431. <https://doi.org/10.1111/jbi.13210>
- Veranso-Libalah M.C., Stone R.D. & Kadereit G. 2020.** Towards a complete phylogeny of African Melastomateae: Systematics of *Dissotis* and allies (Melastomataceae). *Taxon* 69: 946–991. <https://doi.org/10.1002/tax.12317>
- Voris H.K. 2000.** Maps of Pleistocene sea levels in Southeast Asia: Shorelines, river systems and time durations. *Journal of Biogeography* 27: 1153–1167. <https://doi.org/10.1046/j.1365-2699.2000.00489.x>
- Wallace A.R. 1860.** On the zoological geography of the Malay Archipelago. *Journal of the Proceedings of the Linnean Society: Zoology* 4: 172–184.
- Willdenow C.L. 1799.** *Caroli Linne Species Plantarum*. Tomus II, Pars I. GC Nauk, Berolini.
- Winkler H.J.P. 1913.** Beiträge zur kenntnis der flora und pflanzengeographie von Borneo II. *Botanische Jahrbücher für Systematik* 48: 87–118.
- Wong K.M. 2016.** *The genus Melastoma in Borneo including 31 new species*. Natural History Publication, Kota Kinabalu.
- Woodruff D.S. 2010.** Biogeography and conservation in Southeast Asia: how 2.7 million years of repeated environmental fluctuations affect today's patterns and the future of the remaining refugial-phase biodiversity. *Biodiversity and Conservation* 19: 919–941. <https://doi.org/10.1007/s10531-010-9783-3>
- Wu C.Y. 1979.** *Flora Yunnanica*. Vol. 2. Science Press, Beijing.
- Wurdack J.J. 1986.** Atlas of hairs for Neotropical Melastomataceae. *Smithsonian Contributions to Botany* 63: 1–80.

- Yu R.Y. & van Welzen P.C. 2020.** Historical biogeography of *Trigonostemon* and *Dimorphocalyx* (Euphorbiaceae). *Botanical Journal of the Linnean Society* 192: 333–349. <https://doi.org/10.1093/botlinnean/boz075>
- Yu Y., Harris A.J. & He X.J. 2010.** S-DIVA (Statistical Dispersal-Vicariance Analysis): A tool for inferring biogeographic histories. *Molecular Phylogenetics and Evolution* 56: 848–850. <https://doi.org/10.1016/j.ympev.2010.04.011>
- Yu Y., Harris A.J., Blair C. & He X. 2015.** RASP (Reconstruct Ancestral State in Phylogenies): A tool for historical biogeography. *Molecular Phylogenetics and Evolution* 87: 46–49. <https://doi.org/10.1016/j.ympev.2015.03.008>
- Yule G.U. 1925.** A mathematical theory of evolution, based on the conclusions of Dr. J. C. Willis, F.R.S. *Philosophical Transactions of the Royal Society London, Series B* 213: 21–87
- Zeng S.J., Zou L.H., Wang P., Hong W.J., Zhang G.Q., Chen L.J. & Zhuang X.Y. 2016.** Preliminary phylogeny of *Fordiophyton* (Melastomataceae), with the description of two new species. *Phytotaxa* 247(1): 45–61. <https://doi.org/10.11646/phytotaxa.247.1.3>
- Zhou Q.J., Lin C.W., Dai J.H., Zhou R.C. & Liu Y. 2019a.** Exploring the generic delimitation of *Phyllagathis* and *Bredia* (Melastomataceae): A combined nuclear and chloroplast DNA analysis. *Journal of Systematics and Evolution* 57(3): 256–267. <https://doi.org/10.1111/jse.12451>
- Zhou Q.J., Lin C.W., Ng W.L., Dai J.H., Denda T., Zhou R.C. & Liu Y. 2019b.** Analyses of plastome sequences improve phylogenetic resolution and provide new insight into the evolutionary history of Asian Sonerileae/Dissochaeteae. *Frontiers in Plant Science* 10: 1477, 1–16.



## Curriculum Vitae

Abdulrokhman Kartonegoro was born on 4 January 1980 in Jakarta, Indonesia. He started to study for his Bachelor degree in Biology in 1999 at the University of Indonesia and graduated in 2005. In 2006 he was appointed as research staff in the Research Center for Biology, Indonesian Institute of Sciences (LIPI). His major task was research on plant diversity, especially the taxonomic and systematic aspects. Logically, he was based in Herbarium Bogoriense (BO) in Bogor, West Java. Once he started his engagement with plants, Melastomataceae was one of his specialities with Malesia as his region of focus. During the early years in Herbarium Bogoriense, he received a scholarship to carry on a study for his Master Degree with the New England Tropical Conservatory (NETC) within the Indonesian Biodiversity Exploration and Taxonomy Project (IBETP) in 2008. The research topic for his Master Degree was the taxonomy of the genus *Rhynchoglossum* Blume (Gesneriaceae) in Malesia under supervision of Prof. Dr. Elizabeth A. Widjaja and Dr. Sri S. Tjitrosoedirdjo. He graduated in 2011. After finishing his Master Degree, Abdulrokhman mostly worked in Herbarium Bogoriense on the families Melastomataceae and Gesneriaceae. In 2016, Abdulrokhman was granted a scholarship from the Indonesian Ministry of Research and Technology within its Research and Innovation in Science and Technology Project (RISET-PRO). He started his PhD study in 2017 at the University of Leiden and he was stationed in Naturalis Biodiversity Center, The Netherlands, under the supervision of Prof.dr. Peter C. van Welzen and the late Dr. Peter Hovenkamp, who was in 2019 replaced by Dr. Sylvia Mota de Oliveira. During his study in Leiden, he assisted several times in the course Tropical Plant Families for MSc and PhD students and gave lectures on the families Piperaceae and Araceae. Besides teaching, Abdulrokhman also undertook field works, during which he collected the Melastomataceae needed for his study. The field work was conducted in various regions of Indonesia (West Sumatra, West Java, West Kalimantan and Riau Archipelago) in 2017 and 2019. Most of the field work activities were funded by the Indonesian Ministry of Research and Technology (Kemenristek-BRIN), Leids Universiteits Fonds of Leiden University (Leiden Univeristy Fund, LUF) and the Alberta Mennega Stichting (Alberta Mennega Foundation) of the Netherlands. He also followed some scientific events, courses and symposia held by the Graduate School for Production Ecology & Resource Conservation (PE&RC) chaired from Wageningen University, The Netherlands. After his graduation he will continue his career as a botanical researcher at his original institution, the Research Center for Biology, Indonesian Institute of Sciences (LIPI), Bogor, Indonesia, of which the Herbarium Bogoriense is a part.

## List of publications

- Kartonegoro A.** 2018. *Diplectria maxwellii* (Melastomataceae), a new species from Sarawak, Borneo. *Kew Bulletin* 73-23: 1–3. <https://doi.org/10.1007/s12225-018-9741-x>
- Kartonegoro A.** & Veldkamp J.F. 2010. Revision of *Dissochaeta* (Melastomataceae) in Java, Indonesia. *Reinwardtia* 13(2): 125–145. <https://doi.org/10.14203/reinwardtia.v13i2.2133>
- Kartonegoro A.** & Veldkamp J.F. 2013. Revision of *Creochiton* (Melastomataceae). *Blumea* 58(3): 217–227. <https://doi.org/10.3767/000651913X674134>
- Kartonegoro A.,** Veldkamp J.F., Hovenkamp P. & van Welzen P.C. 2018. A Revision of *Dissochaeta* (Melastomataceae, Dissochaeteae). *PhytoKeys* 107: 1–178. <https://doi.org/10.3897/phytokeys.107.26548>
- Kartonegoro A.,** Hovenkamp P. & van Welzen P. 2019. A taxonomic revision of *Macrolenes* (Melastomataceae). *Gardens' Bulletin Singapore* 71(1): 185–241. [https://doi.org/10.26492/gbs71\(1\).2019-12](https://doi.org/10.26492/gbs71(1).2019-12)
- Kartonegoro A.,** Liu Y., Mota de Oliveira S. & van Welzen P. 2020. A taxonomic revision of *Pseudodissochaeta* (Melastomataceae, Dissochaeteae). *Phytotaxa* 468(2): 154–179. <https://doi.org/10.11646/phytotaxa.468.2.1>
- Kartonegoro A.,** Veranso-Libalah M.C., Kadereit G., Frenger A., Mota de Oliveira S. & van Welzen P.C. 2021. Molecular phylogenetics of *Dissochaeta* alliance (Melastomataceae): Redefining of tribe Dissochaeteae. *Taxon* 70(4): 793–825. <https://doi.org/10.1002/tax.12508>
- Kartonegoro A.,** Mota de Oliveira S. & van Welzen P.C. 2021. Historical biogeography of the Southeast Asian *Dissochaeta* alliance (Melastomataceae). *Journal of Systematics and Evolution* (Early online Version). <https://doi.org/10.1111/jse.12752>

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