



Universiteit
Leiden
The Netherlands

Systematics and biogeography of the Dissochaeta alliance (Melastomataceae)

Kartonegoro, A.

Citation

Kartonegoro, A. (2021, October 14). *Systematics and biogeography of the Dissochaeta alliance (Melastomataceae)*. Retrieved from <https://hdl.handle.net/1887/3217085>

Version: Publisher's Version

[Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3217085>

Note: To cite this publication please use the final published version (if applicable).

Systematics and Biogeography of the *Dissochaeta* alliance (Melastomataceae)

Abdulrokhman Kartonegoro

Naturalis Biodiversity Center
Leiden University
2021

Kartonegoro, Abdulrokhman. 2021. Systematics and Biogeography of the *Dissochaeta* alliance (Melastomataceae).

Dissertation at Naturalis Biodiversity Center and Leiden University, The Netherlands

ISBN:978-94-6423-378-0

Cover: *Dissochaeta vacillans* (Blume) Blume [Photo by A. Kartonegoro]

Design and lay out by A. Kartonegoro

All illustrations drawing by W. Santoso, A. Kusumawati, E. Winkel and D. Franke

Printing: ProefschriftMaken | www.proefschriftmaken.nl

Chapter 2: Reprinted from *Blumea* 58(3): 217–227. Kartonegoro A, Veldkamp JF. Revision of *Creochiton* (Melastomataceae), © 2013, with permission from Naturalis Biodiversity Center.

Chapter 3: Reprinted from *PhytoKeys* 107: 1–178. Kartonegoro A, Veldkamp JF, Hovenkamp P, van Welzen P. A revision of *Dissochaeta* (Melastomataceae, Dissochaeteae), © 2018, with permission from Pensoft Publisher.

Chapter 4: Reprinted from *Gardens' Bulletin Singapore* 71(1): 185–241. Kartonegoro A, Hovenkamp P, van Welzen PC. A taxonomic revision of *Macrolenes* (Melastomataceae), © 2019, with permission from Singapore Botanic Gardens.

Chapter 5: Reprinted from *Phytotaxa* 468(2): 159–174. Kartonegoro A, Liu Y, Mota de Oliveira S, van Welzen P. A taxonomic revision of *Pseudodissochaeta* (Melastomataceae, Dissochaeteae), © 2020, with permission from Magnolia Press Publisher.

Chapter 6: Reprinted from *Taxon* 70(4): 793–825. Kartonegoro A, Verano-Libalah MC, Kadereit G, Frenger A, Penneys DS, Mota de Oliveira S, van Welzen PC. Molecular phylogenetics of the *Dissochaeta* alliance (Melastomataceae): Redefining tribe Dissochaeteae, © 2021, with permission from International Association for Plant Taxonomy.

Chapter 7: Reprinted from *Journal of Systematics and Evolution* (Early Online Version). Kartonegoro A, Mota de Oliveira S, van Welzen PC. Historical biogeography of the Southeast Asian and Malesian tribe Dissochaeteae (Melastomataceae), © 2021, with permission from Institute of Botany, Chinese Academy of Sciences.

Reminder of this thesis: © 2021, Abdulrokhman Kartonegoro. No part of this dissertation may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the prior written permission of the copyright holder.

The separated chapters may differ from the original publications. This dissertation is not to be considered as effectively published in the sense of Turland NJ et al. (eds.) 2018, International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code), adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. Article 30. Regnum Vegetabile 159.

This PhD project was financially supported by:

*The Ministry of the Research and Technology, National Research and Innovation Agency, Republic of Indonesia
Leids Universiteits Fond, Leiden University, The Netherlands
Alberta Mennega Foundation, The Netherlands*

Systematics and Biogeography of the *Dissochaeta* alliance (Melastomataceae)

Proefschrift

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van rector magnificus prof.dr.ir. H. Bijl,
volgens besluit van het college voor promoties
te verdedigen op donderdag 14 oktober 2021

klokke 11.15 uur

door

Abdulrokhman Kartonegoro
geboren te Jakarta, Indonesië
in 1980

PROMOTIECOMMISIE

Promotor: **Prof.dr. Peter C. van Welzen**
Naturalis Biodiversity Center & Universiteit Leiden

Co-Promotor: **Dr. Sylvia Mota de Oliveira**
Naturalis Biodiversity Center & Universiteit Leiden

Promotiecommissie: **Prof.dr. Gilles P. van Wezel (voorzitter)**
Universiteit Leiden, The Netherlands

Prof.dr. Erik F. Smets (secretaris)
Naturalis Biodiversity Center; Universiteit Leiden & KU Leuven, Belgium

Prof.dr. Tinde R. van Andel
Naturalis Biodiversity Center & Universiteit Leiden

Prof.dr. Hans ter Steege
Naturalis Biodiversity Center; Universiteit Leiden & Vrije Universiteit Amsterdam

Prof. Dr. Gudrun Kadereit
Botanischer Garten München-Nymphenburg & Ludwig-Maximilians-Universität München, Germany

Dr. Helena Duistermaat
Naturalis Biodiversity Center & Universiteit Leiden

Dr. Darin S. Penneys
University of North Carolina Wilmington, U.S.A.

TABLE OF CONTENTS

Chapter 1	General Introduction	1
Chapter 2	Revision of <i>Creochiton</i> (Melastomataceae)	13
Chapter 3	A revision of <i>Dissochaeta</i> (Melastomataceae, Dissochaeteae)	35
Chapter 4	A taxonomic revision of <i>Macrolenes</i> (Melastomataceae)	167
Chapter 5	A taxonomic revision of <i>Pseudodissochaeta</i> (Melastomataceae, Dissochaeteae)	213
Chapter 6	Molecular phylogenetics of <i>Dissochaeta</i> alliance (Melastomataceae): Redefining of Dissochaeteae	233
Chapter 7	Historical biogeography of the Southeast Asian and Malesian tribe Dissochaeteae (Melastomataceae)	281
Summary and Conclusions		307
Sammenvatting en Conclusies (Dutch Summary)		317
Ringkasan dan Simpulan (Indonesian Summary)		327
References		337
Curriculum Vitae		349
List of Publications		350
Acknowledgements		351

