



Universiteit
Leiden

The Netherlands

**Phylogenetic and taxonomic studies in *Macaranga*,
Mallotus and other acalyphoid genera (Euphorbiaceae s.s.)**

Kulju, K.K.M.

Citation

Kulju, K. K. M. (2007, October 4). *Phylogenetic and taxonomic studies in Macaranga, Mallotus and other acalyphoid genera (Euphorbiaceae s.s.)*. Nationaal Herbarium Nederland, Leiden University branch. Retrieved from <https://hdl.handle.net/1887/12383>

Version: Corrected Publisher's Version

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

Downloaded from: <https://hdl.handle.net/1887/12383>

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

**Phylogenetic and taxonomic studies in
Macaranga, *Mallotus* and other acalyphoid
genera (Euphorbiaceae s.s.)**

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof.mr. P.F. van der Heijden,
volgens besluit van het College voor Promoties
te verdedigen op donderdag 4 oktober 2007
klokke 16.15 uur

door

KRISTO KAARLO MATIAS KULJU

geboren te Viitasaari, Finland in 1973

PROMOTIECOMMISSIE:

Promotor: Prof. dr. P. Baas

Copromotor: Dr. P.C. van Welzen

Referent: Dr. K.J. Wurdack (Department of Botany, Smithsonian Institution,
Washington, DC)

Overige leden: Dr. F.T. Bakker (Wageningen Universiteit)
Dr. S.G.A. Draisma
Prof. dr. E. Gittenberger
Prof. dr. J.H.A. van Konijnenburg-van Cittert
Prof. dr. E.F. Smets
Prof. dr. M.S.M. Sosef (Wageningen Universiteit)

This PhD project was financially supported by Finnish Cultural Foundation (Suomen Kulttuurirahasto) and Leids Universiteits Fonds.

**Phylogenetic and taxonomic studies in
Macaranga, *Mallotus* and other acalyphoid
genera (Euphorbiaceae s.s.)**

KRISTO KAARLO MATIAS KULJU

NATIONAAL HERBARIUM NEDERLAND, Leiden University branch

2007

Kulju, K.K.M.

Phylogenetic and taxonomic studies in *Macaranga*, *Mallotus* and other acalyphoid genera
(Euphorbiaceae s.s.)

ISBN 978-90-71236-67-9

NUR 941

Printing: PrintPartners Ipskamp, Enschede.

Cover: *Mallotus pleiogynus*, drawing by A. Wallsmit Sachs.

Chapter 2: In press in American Journal of Botany, K.K.M. Kulju, S.E.C. Sierra, S.G.A. Draisma, R. Samuel & P.C. van Welzen, Molecular phylogeny of *Macaranga*, *Mallotus*, and related genera (Euphorbiaceae s.s.): insights from plastid and nuclear DNA sequence data, © 2007, with permission from the Botanical Society of America.

Chapter 3: Reprinted from Blumea 52, K.K.M. Kulju, S.E.C. Sierra & P.C. van Welzen, Re-shaping *Mallotus* [part 2]: Inclusion of *Neotrewia*, *Octospermum* and *Trewia* in *Mallotus* s.s. (Euphorbiaceae s.s.), 115–136, © 2007, with permission from the Nationaal Herbarium Nederland, Leiden University branch.

Chapter 4: Submitted to Taxon.

Chapter 6: Reprinted from Blumea 50, K.K.M. Kulju & P.C. van Welzen, Revision of the genus *Cleidion* (Euphorbiaceae) in Malesia, 197–219, © 2005, with permission from the Nationaal Herbarium Nederland, Leiden University branch.

Chapter 7: In press in Taxon, K.K.M. Kulju, R.W.J.M. van der Ham & F.J. Breteler, Re-discovery and phylogenetic position of the *incertae sedis* genus *Afrotrewia* (Euphorbiaceae): morphological, pollen and molecular evidence, © 2007, with permission from the International Association for Plant Taxonomy.

Remainder of the thesis © 2007, Nationaal Herbarium Nederland, Leiden University branch.

No part of this publication, apart from bibliographic data and brief annotations in critical reviews, may be reproduced, re-recorded or published in any form, including print, photocopy, microform, electronic or electromagnetic record without written permission by the publishers.