

Collection “Faune et flore tropicales”

Now with more than 50 titles in French or English, this series publishes books on plants, fungi and animals, both vertebrates and invertebrates, from tropical regions. Initially issued by the *Institut de Recherche pour le Développement* (IRD), since 2002 it has been published jointly by IRD and the *Muséum national d'Histoire naturelle* (MNHN). The editorial policy favours works that concern countries with branches of IRD, those based on the collections held in the MNHN, or both. The series aims to disseminate the most recent knowledge on systematics and distribution, with volumes ranging from those with a taxonomic focus to complete illustrated faunas and floras. Volumes typically include many line drawings, especially those dealing largely with taxonomy, but for some groups, the format is that of a large volume illustrated entirely in colour.

“Flora of Cambodia, Laos and Vietnam”

This series was first published in 1907 under the title *Flore générale de l'Indochine* and was relaunched under its new title in 1960 by the *Muséum national d'Histoire naturelle* (MNHN) in Paris. Thirty-seven parts have now been published on families of angiosperms and one group of gymnosperms, the Gnetaceae. Following on from the account of the Convolvulaceae, the current volume is the second to be issued as part of the series Faune et flore tropicales, published jointly by the MNHN and the Institut de recherche pour le développement (IRD).

Each volume provides keys for the identification of the genera and species that occur in a particular family in these three countries. The account for each species includes a morphological description accompanied by line drawings and colour photographs, a map of the geographical distribution, and information on biology and ecology. Each family account is based on the classification recognized at the time of publication and special attention is given to taxonomic status and nomenclature.

Publication directors:

Gilles Bloch, President, MNHN

Valérie Verdier, President and CEO, IRD

Managing editor and lay-out: Thomas Guyomard, copy editor, MNHN

Sophie Houzé de l'Aulnoit, copy editor, MNHN

Editor in chief:

Odile Poncy, MNHN

Germinal Rouhan, MNHN

Authors' addresses:

1. Naturalis Biodiversity Center, section Botany, P.O. Box 9517, 2300 RA Leiden, The Netherlands.
2. Royal University of Phnom Penh (RUPP), Russian Federation Boulevard, Touk Kork, Phnom Penh, Cambodia.
3. Muséum national d'Histoire naturelle, Département de Systématique et Évolution, UMR 7205 ISYEB (Institut de Systématique, Évolution, Biodiversité), Herbarium (P), Case postale 39, 57 rue Cuvier 75231 Paris cedex 05, France.
4. Botanical Gardens, Osaka Metropolitan University, Katano, Osaka 576-0004, Japan.
5. Department of Botany, National Museum of Nature and Science, Tsukuba 305-0005, Japan.

Contents

1. Lythraceae J.St.-Hil.	9
1.1. Ammannia L.	13
1.1.1. <i>Ammannia auriculata</i> Willd.	15
1.1.2. <i>Ammannia baccifera</i> L.	18
1.2. Cuphea P. Browne	22
1.2.1. <i>Cuphea carthagenensis</i> (Jacq.) J.F.Macbr.	24
1.2.2. <i>Cuphea hyssopifolia</i> Kunth.....	26
1.2.3. <i>Cuphea procumbens</i> Ortega.....	27
1.3. Duabanga Buch.-Ham.	29
1.3.1. <i>Duabanga grandiflora</i> (Rxb. ex DC.) Walpers.....	30
1.4. Lagerstroemia L.	33
1.4.1. <i>Lagerstroemia anisoptera</i> Koehne.....	42
1.4.2. <i>Lagerstroemia calyculata</i> Kurz.....	44
1.4.3. <i>Lagerstroemia cochinchinensis</i> Pierre ex Laness.	49
1.4.4. <i>Lagerstroemia crispa</i> Pierre ex Laness.	52
1.4.5. <i>Lagerstroemia densiflora</i> W.J.de Wilde & Duyfjes.....	54
1.4.6. <i>Lagerstroemia duperreana</i> Pierre ex Gagnep.	56
1.4.7. <i>Lagerstroemia floribunda</i> Jack.....	60
1.4.8. <i>Lagerstroemia indica</i> L.	64
1.4.9. <i>Lagerstroemia lecomtei</i> Gagnep.	66
1.4.10. <i>Lagerstroemia loudonii</i> Teijsm. & Binn.	68
1.4.11. <i>Lagerstroemia macrocarpa</i> Kurz.....	70
1.4.12. <i>Lagerstroemia noi</i> Craib.....	74
1.4.13. <i>Lagerstroemia ovalifolia</i> Teijsm. & Binn.	76
1.4.14. <i>Lagerstroemia petiolaris</i> Pierre ex Laness.	80
1.4.15. <i>Lagerstroemia poilanei</i> W.J.de Wilde & Duyfjes.....	83
1.4.15a. <i>Lagerstroemia poilanei</i> var. <i>poilanei</i> W.J.de Wilde & Duyfjes.....	83
1.4.15b. <i>Lagerstroemia poilanei</i> var. <i>grandis</i> W.J.de Wilde & Duyfjes.....	85
1.4.16. <i>Lagerstroemia ruffordii</i> T.T.Pham & Tagane.....	86
1.4.17. <i>Lagerstroemia speciosa</i> (L.) Pers.	88
1.4.18. <i>Lagerstroemia spireana</i> Gagnep.	91
1.4.19. <i>Lagerstroemia subcostata</i> Koehne.....	94

1.4.20. <i>Lagerstroemia tomentosa</i> C.Presl.....	95
1.4.21. <i>Lagerstroemia venusta</i> Wall. ex C.B.Clarke.....	98
1.4.22. <i>Lagerstroemia villosa</i> Wall. ex Kurz.....	101
Dubious species	103
<i>Lagerstroemia nervosa</i> Pierre ex Laness.	103
1.5. Lawsonia L.	104
1.5.1. <i>Lawsonia inermis</i> L.	105
1.6. Pemphis J.R.Forst. & G Forst.	108
1.6.1. <i>Pemphis acidula</i> J.R.Forst. & G.Forst.	109
1.7. Punica L.	112
1.7.1. <i>Punica granatum</i> L.....	114
1.8. Rotala L.	117
1.8.1. <i>Rotala cordata</i> Koehne	120
1.8.2 <i>Rotala indica</i> var. <i>indica</i> (Willd.) Koehne	122
1.8.2a. <i>Rotala indica</i> var. <i>indica</i> (Willd.) Koehne.....	122
1.8.2b. <i>Rotala indica</i> var. <i>minima</i> W.J.de Wilde & Duyfjes.....	125
1.8.3. <i>Rotala mexicana</i> Cham. & Schltdl.	126
1.8.4. <i>Rotala protracta</i> W.J.de Wilde & Duyfjes.....	128
1.8.5. <i>Rotala rosea</i> (Poir.) H. Hara	130
1.8.6. <i>Rotala rotundifolia</i> (Buch.-Ham. ex Roxb.) Koehne.....	133
1.8.7. <i>Rotala saxatilis</i> W.J.de Wilde & Duyfjes.....	137
1.8.8. <i>Rotala wallichii</i> (Hook.f.) Koehne.....	138
1.9. Sonneratia L.f.	142
1.9.1. <i>Sonneratia alba</i> Sm.	144
1.9.2. <i>Sonneratia caseolaris</i> (L.) Engl.	146
1.9.3. <i>Sonneratia ovata</i> Backer.....	148
1.10. Trapa L.	150
1.10.1. <i>Trapa incisa</i> Siebold. & Zucc.....	152
1.10.2. <i>Trapa natans</i> L.....	154
1.11. Woodfordia Salisb.	157
1.11.1. <i>Woodfordia fruticosa</i> (L.) Kurz.....	158
Index to specimens	162
References	167
Acknowledgements	172
Index to vernacular names	173
Index to scientific names	175

2. Podostemaceae Rich. ex Kunth	177
2.1. <i>Cladopus</i> H. Möller	186
2.1.1. <i>Cladopus fallax</i> C. Cusset.....	187
2.1.2. <i>Cladopus pierrei</i> (Lecomte) C. Cusset.....	190
2.1.3. <i>Cladopus taiensis</i> C. Cusset	194
2.2. <i>Ctenobryum</i> Koi & M. Kato.....	196
2.2.1. <i>Ctenobryum mangkonense</i> Koi & M. Kato	197
2.3. <i>Hydrobryum</i> Endl.	200
2.3.1. <i>Hydrobryum austrolaoticum</i> Koi & M. Kato	203
2.3.2. <i>Hydrobryum clandestinum</i> Koi & M. Kato	206
2.3.3. <i>Hydrobryum hapteron</i> Koi & M. Kato.....	208
2.3.4. <i>Hydrobryum japonicum</i> Imamura.....	211
2.3.5. <i>Hydrobryum luangnamtaense</i> Koi & M. Kato	213
2.3.6. <i>Hydrobryum minutale</i> (C. Cusset) Koi & M. Kato	215
2.3.7. <i>Hydrobryum nakaiense</i> Koi & M. Kato.....	217
2.3.8. <i>Hydrobryum puncticulatum</i> Koidz.....	219
2.3.9. <i>Hydrobryum ramosum</i> (C. Cusset) Koi & M. Kato.....	221
2.3.10. <i>Hydrobryum stellatum</i> Koi & M. Kato.....	224
2.3.11. <i>Hydrobryum subcrustaceum</i> Koi & M. Kato.....	226
2.3.12. <i>Hydrobryum subcylindricoides</i> Koi & M. Kato.....	228
2.3.13. <i>Hydrobryum subcylindricum</i> Koi & M. Kato.....	230
2.3.14. <i>Hydrobryum taeniatum</i> Koi & M. Kato	232
2.3.15. <i>Hydrobryum takakioides</i> Koi & M. Kato.....	234
2.3.16. <i>Hydrobryum tardhuangense</i> M. Kato.....	237
2.3.17. <i>Hydrobryum verrucosum</i> Koi & M. Kato.....	239
2.3.18. <i>Hydrobryum vientianense</i> (M. Kato & Fukuoka) Koi & M. Kato	242
2.4. <i>Hydrodiscus</i> Koi & M. Kato.....	244
2.4.1. <i>Hydrodiscus koyamae</i> (M. Kato & Fukuoka) Koi & M. Kato	245
2.5. <i>Laosia</i> Koi, Won & M. Kato	248
2.5.1. <i>Laosia ramosa</i> Koi, Won & M. Kato.....	249
2.6. <i>Paracladopus</i> M. Kato	253
2.6.1. <i>Paracladopus chanthaburiensis</i> Koi & M. Kato.....	254
2.6.2. <i>Paracladopus chiangmaiensis</i> M. Kato.....	256
2.7. <i>Polypleurum</i> (Taylor ex Tul.) Warm.....	260
2.7.1. <i>Polypleurum longistylosum</i> M. Kato.....	262

2.7.2. <i>Polypleurum pluricostatum</i> Koi & M. Kato	265
2.7.3. <i>Polypleurum schmidtianum</i> Warm	268
2.7.4. <i>Polypleurum wallichii</i> (R. Br. ex Griff.) Warm.....	271
2.7.5. <i>Polypleurum wongprasertii</i> M. Kato.....	274
2.8. <i>Thawatchaia</i> M. Kato, Koi & Y. Kita	277
2.8.1. <i>Thawatchaia laotica</i> Koi & M. Kato.....	278
2.9. <i>Cussetia</i> M. Kato	281
2.9.1. <i>Cussetia carinata</i> (Lecomte) M. Kato.....	282
2.10. <i>Dalzellia</i> Wight	284
2.10.1. <i>Dalzellia angustissima</i> M. Kato.....	286
2.10.2. <i>Dalzellia attapeuensis</i> Koi & M. Kato	289
2.10.3. <i>Dalzellia kailarsenii</i> M. Kato	291
2.10.4. <i>Dalzellia microphylla</i> Koi & M. Kato.....	293
2.10.5. <i>Dalzellia pseudoangustissima</i> Koi & M. Kato.....	294
2.10.6. <i>Dalzellia ubonensis</i> M. Kato.....	296
2.11. <i>Terniopsis</i> H. C. Chao	298
2.11.1. <i>Terniopsis brevis</i> M. Kato.....	300
2.11.2. <i>Terniopsis chanthaburiensis</i> M. Kato & Koi.....	303
2.11.3. <i>Terniopsis filiformis</i> Werukamkul, Ampornpan, Koi & M. Kato.....	306
2.11.4. <i>Terniopsis heterostaminata</i> Werukamkul, Ampornpan, Koi & M. Kato.....	309
2.11.5. <i>Terniopsis microstigma</i> Koi & M. Kato	312
2.11.6. <i>Terniopsis minor</i> M. Kato & Koi.....	314
2.11.7. <i>Terniopsis savannaketensis</i> Koi & M. Kato.....	316
2.11.8. <i>Terniopsis vapyensis</i> Koi & M. Kato.....	318
Excluded species	320
<i>Cussetia diversifolia</i> (Lecomte) M. Kato	320
Index to specimens.....	321
References.....	323
Acknowledgments.....	329
Illustrations Credits	330
Index to scientific names	331