



Catalogue of the bryophytes of Sulawesi. Supplement 1: new species records

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Key words

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Abstract We report 177 bryophyte species (61 mosses, 115 liverworts, 1 hornwort) new to Sulawesi, raising the total number of bryophytes species recorded from the island to 653. The new combination *Chiloscyphus morobeanus* (Piippo) Gradst. comb. nov. is made.

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INTRODUCTION

Gradstein et al. (2005) published a first catalogue of the bryophytes of Sulawesi and listed 476 species, including 340 mosses (*Bryophyta* s.str.), 134 liverworts (*Marchantiophyta*) and 2 hornworts (*Anthocerotophyta*). These numbers were significantly lower than those recorded from other major Malasian islands and suggested that Sulawesi is less well collected than the other islands.

Since the appearance of the catalogue, considerable additional collecting was done in Central Sulawesi, in Lore Lindu National Park and surrounding areas in the framework of the 'STORMA' project of the universities of Palu (Sulawesi), Bogor (Java) and Göttingen (Germany) funded by the German Research Foundation (e.g., Tschardt et al. 2007; www.storma.de). Some new liverwort records based on these collections were published by Ariyanti & Gradstein (2007). In addition, new bryophyte reports for Sulawesi were published by Eggers (2006).

In this paper we present a synthesis of the species of bryophytes recorded as new to Sulawesi since the appearance of the catalogue. The list (Appendix) includes 177 species (61 mosses, 115 liverworts, 1 hornwort), raising the total number of bryophyte species recorded from Sulawesi to 653. Especially noteworthy is the large number of liverworts new to Sulawesi, which almost doubles the total number of liverwort species recorded (from 134 to 249). Vouchers of the new records are kept in BIOT, BO, CEB and/or GOET unless otherwise indicated.

The new figures indicate that Sulawesi has about half the number of bryophyte species recorded from the Philippines and Borneo, and about 1/3 that of New Guinea. Only five bryophyte species or less than 1 % of the total bryophyte flora are endemic to Sulawesi (Gradstein et al. 2005) but the island has a relatively high concentration of eastern Malasian liverwort species, about seven times more than western ones. The high number of eastern Malasian taxa is in support of the Wallace Line (Ariyanti & Gradstein 2007).

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Appendix List of bryophyte species newly recorded from Sulawesi since 2005.**ANTHOCEROTOPHYTA** (hornworts)

Nothothylas sp. – Toro: 850–900 m, *Ariyanti* 227

MARCHANTIOPHYTA (liverworts)

Acrolejeunea arcuata (Nees) Grolle & Gradst. – Mt Rorekatimbu: 1900 m, *Gradstein* 12053

Acrolejeunea pycnoclada (Taylor) Schifffn. – Toro: 800–1100 m, *Ariyanti* 96

Acromastigum divaricatum (Gottsche, Lindenb. & Nees) A. Evans – Bariri: 1400 m, *Gradstein* 12022

Anastrophyllum bidens (Reinw., Blume & Nees) Steph. – Mt Rorekatimbu: 2000 m, *Gradstein* 12067

Aneura maxima (Schifffn.) Steph. – Bariri: 1300 m, *Gradstein* 2003 – Mt Rorekatimbu: 1700–2300 m, *Gradstein* 12045, *Angelika* 15 – Toro: *Ariyanti* 181

Anomacaulis flaccidus (Steph.) Grolle – Kalimpa: 1600 m, *Ariyanti* 442 – Mt Nokilalaki: 2200–2350 m, *Gradstein* 11025, *Ariyanti* 747

Bazzania intermedia (Lindenb. & Gottsche) Trevis. – Bariri: 1300–1400 m, *Gradstein* 12093

Calypogeia arguta Mont. & Nees – Toro: 1000 m, *Ariyanti* 231

Chandonanthus hirtellus (F. Weber) Mitt. – Bariri: 1400 m, *Gradstein* 12068 – Mt Nokilalaki: 2350 m, *Gradstein* 11025

Chandonanthus piliferus Steph. – Kalimpa: 1600 m, *Ariyanti* 448 – Mt Nokilalaki: 2000–2350 m, *Gradstein* 11015, 1102, *Ariyanti* 738

Cheilolejeunea ceylanica (Gottsche) R.M. Schust. & Kachroo – Bariri: 1400 m, *Gradstein* 12027, 12095 – Toro: 900–1100 m, *Ariyanti* 101, *Sporn* s.n.

Cheilolejeunea falsinervis (Sande Lac.) R.M. Schust. & Kachroo – Toro: 1000–1100 m, *Ariyanti* 102

Cheilolejeunea longiloba (Steph. ex G. Hoffm.) J.J. Engel & B.C. Tan – Mt Rorekatimbu: 1900–2000 m, *Gradstein* 12054, 12057

Cheilolejeunea meyeniana (Gottsche, Lindenb. & Nees) R.M. Schust. & Kachroo – Toro: 800–1100 m, *Ariyanti* 104

Cheilolejeunea orientalis (Gottsche) Mizut. – Kalimpa: 1600 m, *Ariyanti* 445 – Toro: 800–1100 m, *Ariyanti* 105

Cheilolejeunea vittata (Steph. ex G. Hoffm.) R.M. Schust. & Kachroo – Toro: 800–1200 m, *Ariyanti* 107, *Sporn* s.n.

Chiloscyphus costatus (Nees) J.J. Engel & R.M. Schust. (= *Lophocolea costata* (Nees) Gottsche) – Mt Nokilalaki: 2350 m, *Ariyanti* 730

Recent molecular-phylogenetic studies have shown that the genus *Lophocolea* (Dumort.) Dumort. should be merged with *Chiloscyphus* Corda (He-Nygrén & Piippo 2003, Hentschel et al. 2006). The latter generic name is the oldest of the two.

Chiloscyphus morobeanus (Piippo) Gradst., comb. nov. (= *Lophocolea morobeanus* Piippo, Acta Bot. Fenn. 131: 160, 1985) – Toro: 1000 m, *Ariyanti* 182

For the transfer of this and other species of *Lophocolea* to *Chiloscyphus* see under *C. costatus*. This species is very close to *Chiloscyphus kurzii* (Sande Lac.) J.J. Engel & R.M. Schust. but differs by the presence of trigones (lacking in *L. kurzii*). *Chiloscyphus morobeanus* is only known from the type from Papua New Guinea whereas *C. kurzii* is a western Malesian species, being recorded from Java, India and Sri Lanka. Moreover, *C. kurzii* is a lowland plant, from below 1000 m, whereas *C. morobeanus* occurs at 1500–1700 m (Piippo 1985).

Chiloscyphus muricatus (Lehm.) J.J. Engel & R.M. Schust. (= *Lophocolea muricata* (Lehm.) Nees) – Bariri: 1400 m, *Gradstein* 12025 – Toro: 1000–1200 m, *Ariyanti* 140

Cololejeunea dozyana (Sande Lac.) Schifffn. – Mt Rorekatimbu: 1950 m, Eggers (2006)

Cololejeunea equialbi Tixier – Mt Rorekatimbu: 1950 m, Eggers (2006)

Cololejeunea gottschei (Steph.) Mizut. – Kamarora: 700 m, Eggers (2006)

Cololejeunea infectens (Mitt.) Benedix – Mt Rorekatimbu: 1700–1900 m, Eggers (2006)

Cololejeunea lanciloba Steph. – Kamarora: 700 m, Eggers (2006) – Toro: 800–1100 m, *Sporn* s.n.

Cololejeunea metzgeriopsis (K.I. Goebel) Gradst., Wilson, Ilkiu-Borges & Heinrichs (= *Metzgeriopsis pusilla* K.I. Goebel) – Mt Rorekatimbu: 1950 m, Eggers (2006)

Cololejeunea planissima (Mitt.) Abeyw. – Toro: 1000 m, *Ariyanti* 108

Cololejeunea schmidtii Steph. – Mt Rorekatimbu: 1950 m, Eggers (2006)

Cololejeunea spinosa (Horik.) Pandé & R.N. Misra – Toro: 800–1200 m, *Ariyanti* 109

Colura ari (Steph.) Steph. – Kamarora: 700 m, Eggers (2006)

Colura cf. *meyeri* Jovet-Ast – Mt Rorekatimbu: 1700 m, Eggers (2006)

Colura tenuicornis (A. Evans) Steph. – Mt Rorekatimbu: 1700 m, Eggers (2006)

Dendrolejeunea fruticosa (Lindenb. & Gottsche) Lacout. – Toro: 1000–1100 m, *Ariyanti* 110

Diplasiolejeunea cavifolia (Steph.) Steph. – Toro: 800 m, *Sporn* s.n.

Drepanolejeunea ternatensis (Gottsche) Steph. – Mt Nokilalaki: 2000 m, *Gradstein* 11033 – Toro: 800–1200 m, *Ariyanti* 112, *Sporn* s.n.

Dumortiera hirsuta (Sw.) Nees – Bariri: 1300 m, *Gradstein* s.n. – Toro: 1000 m, *Ariyanti* 277

Frullania eymae S. Hatt. – Toro: 800–1200 m, *Ariyanti* 114, *Sporn* s.n.

Frullania hampeana Nees – Toro: 840–1200 m, *Ariyanti* 118

Frullania intermedia (Reinw., Blume & Nees) Gottsche, Lindenb. & Nees – Toro: 840–1000 m, *Ariyanti* 119

Frullania neosheana S. Hatt. – Mt Nokilalaki: 2250 m, *Ariyanti* 737 – Toro: 1000 m, *Ariyanti* 120

Frullania reflexistipula Sande Lac. – Toro: 800–1000 m, *Ariyanti* 122

Herbertus pilifer Schifffn. – Bariri: 1400 m, *Gradstein* s.n. – Mt Nokilalaki: 1900–2300 m, *Gradstein* 11010, 11011 – Mt Rorekatimbu: 1800–2000 m, *Gradstein* s.n.

Heteroscyphus argutus (Reinw., Blume & Nees) Schifffn. – Bariri: 1400 m, *Gradstein* s.n. – Mt Nokilalaki: 1000 m, *Gradstein* s.n. – Toro: 800–1200 m, *Ariyanti* 123

Heteroscyphus aselliformis (Reinw., Blume & Nees) Schifffn. – Kalimpa: 1600 m, *Ariyanti* 441 – Mt Nokilalaki: 1650–2350 m, *Gradstein* 11003, 11026, *Ariyanti* 718, 740

Heteroscyphus succulentus (Gottsche) Schifffn. – Mt Rorekatimbu: 1700–2000 m, *Gradstein* 12038 – Toro: 1000 m, *Ariyanti* 125

Heteroscyphus wettsteinii (Schifffn.) Schifffn. – Mt Nokilalaki 1600 m, *Ariyanti* 702

Heteroscyphus zollingeri (Gottsche) Schifffn. – Bariri: 1400 m, *Gradstein* 12019 – Mt Nokilalaki: 1600 m, *Ariyanti* 701 – Toro: 1000–1200 m, *Ariyanti* 126

Jungermannia hasskarliana (Nees) Mitt. – Mt Rorekatimbu: 2300 m, *Angelika* 73

Jungermannia tetragona Lindenb. – Toro: 1000 m, *Ariyanti* 229

Lejeunea discreta Lindenb. – Bariri: 1400 m, *Gradstein* 12032 – Toro: 800–1030 m, *Ariyanti* 128

Lejeunea eifrigii Mizut. – Toro: 1000 m, *Ariyanti* 129

Lejeunea exilis (Reinw., Blume & Nees) Grolle – Toro: 800–1000 m, *Ariyanti* 130, *Sporn* s.n.

Lejeunea flava (Sw.) Nees – Mt Nokilalaki: 2000–2100 m, *Ariyanti* 733 – Mt Rorekatimbu: 1600–1950 m, Eggers (2006), *Gradstein* 12037 – Toro: 800–1100 m, *Ariyanti* 131, *Sporn* s.n.

Lejeunea lumbricoides (Nees) Nees – Mt Nokilalaki: 1900–2350 m, *Gradstein* 11028, 11053, *Ariyanti* 729, 756

Lejeunea obscura Mitt. – Bariri: 1400 m, *Gradstein* 12101 – Toro: 800–1200 m, *Ariyanti* 132

Lejeunea punctiformis Taylor – Toro: 1000–1100 m, *Ariyanti* 133

Lejeunea sordida (Nees) Nees – Bariri: 1400 m, *Gradstein* s.n. – Toro: 800–1200 m, *Ariyanti* 134, *Sporn* s.n.

Lepidojeunea bidentula (Steph.) R.M. Schust. – Bariri: 1400 m, *Gradstein* 12036 – Kalimpa: 1600 m, *Ariyanti* 456 – Toro: 1000–1200 m, *Ariyanti* 135, *Sporn* s.n.

Lepidozia borneensis Steph. – Mt Nokilalaki: 2350 m, *Gradstein* 11004

Lepidozia cladorrhiza (Reinw., Blume & Nees) Nees – Mt Nokilalaki: 2200 m, *Gradstein* 11039, *Ariyanti* 725, 749

Lepidozia fernandi-muelleri Steph. – Mt Nokilalaki: 2000–2350 m, *Ariyanti* 758

Lepidozia grandifolia Steph. – Mt Nokilalaki: 1600 m, *Ariyanti* 449

Lepidozia hampeana Lindenb. – Mt Nokilalaki: 1600 m, *Ariyanti* 455

Lepidozia lacerifolia Steph. – Mt Nokilalaki: 2100–2350 m, *Ariyanti* 732, 744

Lepidozia trichodes (Reinw., Blume & Nees) Nees – Mt Nokilalaki: 2000–2300 m, *Gradstein* 11005, 11019, *Ariyanti* 731 – Mt Rorekatimbu: 2450 m, *Angelika* 50

Lepidozia wallichiana Gottsche – Kalimpa: 1600 m, *Ariyanti* 450 – Mt Nokilalaki: 2000 m, *Gradstein* 11009, *Ariyanti* 703, 716 – Mt Rorekatimbu: 2470 m, *Angelika* 47 – Toro: 1000 m, *Ariyanti* 136

Leptolejeunea balansae Steph. – Kamarora: 700 m, Eggers (2006)

Leptolejeunea elliptica (Lehm. & Lindenb.) Schifffn. – Mt Rorekatimbu: 1900 m, Eggers (2006)

Leptolejeunea epiphylla (Mitt.) Steph. – Kamarora: 700 m, Eggers (2006) – Toro: 800–1100 m, *Ariyanti* 137, *Sporn* s.n.

Leptolejeunea maculata (Mitt.) Schifffn. – Kamarora: 700 m, Eggers (2006) – Mt Rorekatimbu: 1900 m, Eggers (2006) – Toro: 800–1100 m, *Ariyanti* 138

Leptolejeunea vitrea (Nees) Schifffn. – Mt Rorekatimbu: 1900 m, Eggers (2006)

Lopholejeunea borneensis (Steph.) Verd. – Toro: 1000–1200 m, *Ariyanti* 141

Lopholejeunea eulopha (Taylor) Schifffn. – Toro: 800–1200 m, *Ariyanti* 142, *Sporn* s.n.

Mastigolejeunea virens (Ångstr.) Steph. – Toro: 800–1100 m, *Ariyanti* 148, *Sporn* s.n.

Metalejeunea cucullata (Reinw., Blume & Nees) Grolle – Bariri: 1400 m, *Gradstein* s.n. – Toro: 800–1100 m, *Ariyanti* 149, *Sporn* s.n.

Notoscyphus lutescens (Lehm. & Lindenb.) Mitt. – Mt Rorekatimbu: 1700–2000 m, *Gradstein* 12066

Pallavicinia lyellii (Hook.) Carruth. – Bariri: 1300–1400 m, *Gradstein* 11092 – Toro: 800–1100 m, *Ariyanti* 235

Plagiochila dendroides (Nees) Lindenb. – Bariri: 1400 m, *Gradstein* s.n. – Kalimpa: 1600 m, *Ariyanti* 451

Plagiochila hampeana Gottsche – Mt Nokilalaki: 1600 m, *Gradstein* 11035 (det. J. Heinrichs)

Plagiochila longispica Mitt. – Toro: 800–1000 m, *Ariyanti* 157

Plagiochila mastigophoroides Inoue – Kalimpa: 1600 m, *Ariyanti* 444

Plagiochila obtusa Lindenb. – Toro: 800–1100 m, *Ariyanti* 158 (det. J. Heinrichs)

Appendix (cont.)

- Plagiochila parvifolia* Lindenb. – Toro: 800–1000 m, *Ariyanti 159* (det. J. Heinrichs)
- Plagiochilium braunianum* (Nees) S.Hatt. – Mt Nokilalaki: 2350 m, *Gradstein 11020*, *Ariyanti 743*
- Porella geheebii* (Steph.) S.Hatt. – Kalimpaa: 1600 m, *Ariyanti 457*
- Porella javanica* (Gottsche ex Steph.) Inoue – Toro: 1000–1200 m, *Ariyanti 155*
- Porella oblongifolia* S.Hatt. – Kalimpaa: 1600 m, *Ariyanti 458* – Toro: 1100 m, *Ariyanti 159*
- Porella perrottetiana* (Mont.) Trevis. – Bariri: 1400 m, *Gradstein 12033* – Toro: 1000 m, *Ariyanti 166*
- Psiloclada clandestina* Mitt. – Bariri: 1400 m, *Gradstein 12020* – Mt Nokilalaki: 2000 m, *Gradstein 11008*
- Pycnolejeunea contigua* (Nees) Grolle – Toro: 1030 m, *Ariyanti 168*
- Radula acutiloba* Steph. – Toro: 1000 m, *Ariyanti 169*
- Radula anceps* Sande Lac. – Toro: 1100 m, *Ariyanti 191*
- Radula falcata* Steph. – Toro: 1000 m, *Sporn s.n.*
- Radula gedena* Gottsche ex Steph. – Toro: 800–1000 m, *Ariyanti 170*
- Radula javanica* Gottsche – Toro: 1000–1200 m, *Ariyanti 171*, *Sporn s.n.*
- Radula madagascarensis* Steph. – Toro: 1000–1030 m, *Ariyanti 172*
- Radula multiflora* Gottsche ex Schiffn. – Toro: 800–1200 m, *Ariyanti 173*
- Radula pinnulata* Mitt. – Toro: 830 m, *Ariyanti 174*
- Radula retroflexa* Taylor – Toro: 800–1100 m, *Ariyanti 175*
- Radula van-zantenii* Yamada – Toro: 830 m, *Ariyanti 176*, *Sporn s.n.*
- Riccardia* sp. 1 – Mt Rorekatimbu: 2470 m, *Angelika 46*
- Riccardia* sp. 2 – Mt Rorekatimbu: 2530 m, *Angelika 38*
- Riccardia* sp. 3 – Mt Rorekatimbu: 1700–1900 m, *Gradstein 12039*, *12040*
- Riccardia* sp. 4 – Bariri: 1400 m, *Gradstein 12043*
- Riccardia* sp. 5 – Bariri: 1400 m, *Gradstein 12044*
- Schistochila doriae* (De Not.) Trevis. – Mt Nokilalaki: 1300–2350 m, *Gradstein 11002*, *11007*
- Stenolejeunea apiculata* (Sande Lac.) R.M. Schust. – Toro: 800–1200 m, *Ariyanti 178*, *Sporn s.n.*
- Szyziella ovalifolia* Inoue – Mt Nokilalaki: 2200–2350 m, *Gradstein 11012*, *11025*, *Ariyanti 735*, *751*
- Szyziella subintegerrima* (Reinw., Blume & Nees) Spruce – Bariri: 1300 m, *Gradstein 11098* – Mt Nokilalaki: 1800 m, *Gradstein 1143* – Mt Rorekatimbu: 1700–1800 m, Eggers (2006), *Gradstein 12049*, *12050*
- Telaranea major* J.J.Engel & G.L.Sm. – Bariri: 1400 m, *Gradstein 12094* – Mt Nokilalaki: 1650–2350 m, *Ariyanti 719*, *Gradstein 11009*
- Telaranea neesii* (Lindenb.) Fulford – Mt Nokilalaki: 1650–2350 m, *Ariyanti 710*
- Trichocolea tomentella* (Ehrh.) Dumort. – Bariri: 1400 m, *Gradstein s.n.* – Mt Nokilalaki: 1200–2350 m, *Gradstein 11001*, *11037*, *11047*, *Ariyanti 750* – Kalimpaa: 1600 m, *Ariyanti 437* – Toro: 1000 m, *Ariyanti 192*
- Tuyamaella jackii* (Steph.) Tixier – Toro: 1000 m, *Sporn s.n.*
- Tylimanthus saccatus* (Hook.) Mitt. – Mt Nokilalaki: 2000 m, *Gradstein 11044*, *Ariyanti 724*, *746* – Mt Rorekatimbu: 1800 m, *Gradstein 12048*
- Wettsteinia inversa* (Sande Lac.) Schiffn. – Mt Nokilalaki: 2000–2300 m, *Gradstein 11013*, *11014*, *11034*
- Zoopsis liukuensis* Horik. – Bariri: 1300–1400 m, *Gradstein 12000* – Mt Nokilalaki: 1600 m, *Ariyanti 704*
- BRYOPHYTA** (mosses)
- Acroporium macroturgidum* Dixon – Mt Nokilalaki: 2000–2350 m, *Ariyanti 514*, *541*, *553*, *Sporn s.n.*
- Arthrocomus schimperi* Dozy & Molck. – Toro: 800–1100 m, *Ariyanti 9*, *263* – Mt Nokilalaki: 1600 m, *Ariyanti s.n.*
- Barbella trichophora* (Mont.) M.Fleisch. (= *Barbella enervis* (Thwaites & Mitt.) M.Fleisch.) – Toro: 800–1100 m, *Ariyanti 10*, *316* – Kalimpaa: 1600 m, *Ariyanti 371*
- Bryohumbertia walkeri* (Mitt.) Frahm – Mt Nokilalaki: 2300 m, *Ariyanti 538*
- Bryum apiculatum* Schwägr. – Toro: 800–1100 m, *Ariyanti 212*, *213* – Trail to Lindu lake from Sedaunta: 900–1150 m, *Ariyanti 286*
- Caduciella mariei* (Besch.) Enroth (= *Pinnatella microptera* M.Fleisch.) – Toro: 800–1100 m, *Ariyanti 81*
- Callicostella papillata* (Mont.) Mitt. – Toro: 800–1100 m, *Ariyanti 321*
- Calymperes caugiense* Besch. – Toro: 800–1100 m, *Ariyanti 13*
- Calypothecium subcrispulum* Broth. – Toro: 800–1100 m, *Sporn s.n.*
- Chaetomitrium acanthocarpum* Bosch & Sande Lac. – Kalimpaa: 1600 m, *Ariyanti 375*, *392*
- Chaetomitrium lanceolatum* Bosch & Sande Lac. – Toro: 800–1100 m, *Ariyanti 19*, *Sporn s.n.*
- Chaetomitrium leptopoma* (Schwägr.) Bosch & Sande Lac. – Toro: 800–1100 m, *Ariyanti 20*, *Sporn s.n.*
- Chaetomitrium mayartii* H.Akiyama & M. Suleiman – Toro: 800–1100 m, *Ariyanti 21* – Kalimpaa: 1600 m, *Ariyanti 376*
- Chaetomitrium papillifolium* Bosch & Sande Lac. – Toro: 800–1100 m, *Ariyanti 23*, *Sporn s.n.*
- Chaetomitrium setosum* Broth. ex Dixon – Toro: 800–1100 m, *Ariyanti 24*, *Sporn s.n.*
- Clastobryum epiphyllum* (Renauld & Cardot) B.C.Tan & Touw (= *Clastobryum papillosum* Williams) – Toro: 800–1100 m, *Ariyanti 25*, *Sporn s.n.* – Kalimpaa: 1600 m, *Ariyanti 397*
- Cryptogonium phyllogonioides* (Sull.) Isov. – Toro: 800–1100 m, *Ariyanti 26* – Wera water fall: 150 m, *Ariyanti 429*
- Cyclodictyon blumeanum* (Müll.Hal.) Kuntze – Kalimpaa: 1600 m, *Ariyanti 377*, *396*
- Dicranella setifera* (Mitt.) A.Jaeger – Toro: 800–1100 m, *Ariyanti 214*, *215* – Trail to Lindu lake from Sedaunta: 900–1150 m, *Ariyanti 290*
- Distichophyllum osterwaldii* M.Fleisch. – Mt Nokilalaki: 1650–2350 m, *Ariyanti 535*
- Distichophyllum spathulatum* (Dozy & Molck.) Dozy & Molck. – Mt Nokilalaki: 1650–2350 m, *Ariyanti 539* – Bariri: 1300 m, *Gradstein 12001*
- Distichophyllum tortile* Dozy & Molck. ex Bosch & Sande Lac. – Mt Nokilalaki: 1650 m, *Ariyanti 539*
- Ectropothecium dealbatum* (Hornsch. & Reinw.) A.Jaeger – Toro: 800–1100 m, *Ariyanti 29*, *341*, *344*
- Ephemeropsis tijbodensis* K.I.Goebel – Mt Rorekatimbu: 1950 m, Eggers (2006)
- Eurhynchium asperisetum* E.B.Bartram – Kalimpaa: 1600 m, *Ariyanti 378*, *393* – Mt Nokilalaki: 1650 m, *Ariyanti 536*
- Fissidens crassinervis* Sande Lac. – Toro: 800–1100 m, *Ariyanti 35*, *210*, *255*
- Fissidens gedehensis* M.Fleisch. – Toro 850–900 m, *Ariyanti 207*
- Fissidens papillosus* Sande Lac. – Toro: 800–1100 m, *Ariyanti 37*
- Floribundaria pseudofloribunda* M.Fleisch. – Toro: 800–1100 m, *Ariyanti 40*
- Floribundaria thuidioides* M.Fleisch. – Toro: 800–1100 m, *Ariyanti 41*
- Garckea comosa* (Dozy & Molck.) Wijk & Margad. – Toro: 800–1100 m, *Ariyanti 219*, *202*
- Garovaglia luzonensis* Williams – Toro: 800–1100 m, *Sporn s.n.*
- Hyophila involuta* (Hook.) A.Jaeger – Wera waterfalls: 250 m, *Ariyanti 427*
- Hypnodendron vitiense* Mitt. – Kalimpaa: 1600 m, *Ariyanti 404* – Mt Nokilalaki: 1650–2350 m, *Ariyanti 573*
- Hypopterygium aristatum* Bosch & Sande Lac. – Toro: 800–1100 m, *Ariyanti 49*
- Isocradiella sulcularis* (Dixon) B.C.Tan & Mohamed – Toro: 800–1100 m, *Ariyanti 51*, *Sporn s.n.*
- Jaegerina luzonensis* Broth. – Toro: 800–1100 m, *Ariyanti 52*
- Leucophanes massartii* Renauld & Cardot – Toro: 800–1100 m, *Ariyanti 57*
- Leucophanes octoblepharoides* Brid. – Toro: 800–1100 m, *Ariyanti 58*, *Sporn s.n.* – Trail to Lindu lake from Sedaunta: 900–1150 m, *Ariyanti 296*
- Macrohymenium strictum* Bosch & Sande Lac. – Mt Nokilalaki: 1650–2100 m, *Ariyanti 561*, *545*
- Macromitrium norrisianum* Vitt – Kalimpaa: 1600 m, *Ariyanti 345*
- Macromitrium semipellucidum* Dozy & Molck. – Toro: 800–1100 m, *Ariyanti 61*
- Microdus miquelianus* (Mont.) Besch. – Toro: 800–1100 m, *Ariyanti 216*
- Octoblepharum albidum* Hedw. – Toro: 800–1100 m, *Ariyanti 72*, *263* – Kalimpaa: 1600 m, *Ariyanti 363*, *367*
- Orthomnion dilatatum* (Mitt.) P.C.Chen – Toro: 800–1100 m, *Ariyanti 73*, *361*, *Sporn s.n.*
- Palamocladium nilgheriense* (Mont.) Müll.Hal. (= *Pleuropus luzonensis* Broth.) – Toro: 800–1100 m, *Sporn s.n.*
- Papillaria flexicaulis* (Williams) A.Jaeger – Trail to Lindu lake from Sedaunta: 900–1150 m, *Ariyanti 392*
- Philonotis mollis* (Dozy & Molck.) Mitt. – Toro: 850–900 m, *Ariyanti 211* – Trail to Lindu lake from Sedaunta: 900–1150 m, *Ariyanti 285*
- Plagiomnium succulentum* (Mitt.) T.J.Kop. – Toro: 800–1100 m, *Ariyanti 342*
- Pogonatum piliferum* (Dozy & Molck.) Touw – Toro: 800–1100 m, *Ariyanti s.n.*
- Pseudotaxiphyllum pohliaecarpum* (Sull. & Lesq.) Z.Iwats. – Mt Nokilalaki: 1600 m, *Ariyanti 527*
- Racopilum schmidii* (Müll.Hal.) Mitt. – Toro: 800–1100 m, *Ariyanti 84* – Trail to Lindu lake from Sedaunta: 900–1150 m, *Ariyanti 288*
- Rhizogonium graffeanum* (Müll.Hal.) A.Jaeger – Mt Nokilalaki: 1650–2350 m, *Ariyanti 629*
- Symphysodontella cylindracea* (Mont.) M.Fleisch. – Bariri: 1400 m, *Gradstein 12016* – Toro: 800–1100 m, *Ariyanti 86*
- Syrhropodon parasiticus* (Brid.) Besch. – Toro: 800–1000 m, *Sporn s.n.*
- Syrhropodon trachyphyllus* Mont. – Toro: 850–900 m, *Ariyanti 266*
- Taxithelium nepalense* (Schwägr.) Broth. – Toro: 800–1100 m, *Ariyanti 90*
- Thuidium assimile* (Mitt.) A.Jaeger – Toro: 800–1100 m, *Ariyanti 91* – Kalimpaa: 1600 m, *Ariyanti 351*
- Trematodon longicollis* Michx. – Toro: 800–1100 m, *Ariyanti 203* – Kalimpaa: 1600 m, *Ariyanti 400*
- Trismegistia calderensis* (Sull.) Broth. – Kalimpaa: 1600 m, *Ariyanti 359*, *405*
- Weissia controversa* Hedw. – Toro: 850–900 m, *Ariyanti 217*, *218*