

An updated checklist of liverworts and hornworts of Malaysia

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Abstract

An updated checklist of the liverworts and hornworts of Malaysia accepts 773 species and 31 infraspecific taxa of liverworts, in 120 genera and 40 families, and 7 species of hornworts (6 genera, 3 families). The largest family is Lejeuneaceae with 312 species in 30 genera, accounting for 40% of the total number of species. The largest genera are *Cololejeunea*, *Bazzania* and *Frullania* with 90, 61 and 55 species, respectively. The greatest number of species has been recorded from Sabah with 568 species, followed by Pahang and Sarawak with 338 and 265 species, respectively.

Keywords

Bryophytes, checklist, hornworts, liverworts, Malaysia, species

Introduction

The country of Malaysia consists of two separate regions, Peninsular Malaysia in the West, being part of the Asian mainland, and the states of Sabah and Sarawak on the island of Borneo in the East. Physiogeographically, the two regions are characterized by hills and mountain ranges. On Peninsular Malaysia, mountain ranges cover about

one-third of the total land surface, running parallel to the long axis of the peninsula. They include Titiwangsa Range (the main range), Bintang Range, Nakawan Range, Kedah-Singgora Range, Keledang Range, Benom Range, Tahan Range and Pantai Timur Range. Many of them rise to 2000 m and about 23% of the land lies above 300 m (Wyatt-Smith, 1963; Mohamed and Tan 1988). Mount Tahan (2189 m) in Titiwangsa Range, at the border with Thailand, is the highest peak on the peninsula. The rest of the area consists of coastal plains and alluvial terraces, usually extending 15 to 65 km inland from the coast, as well as riverine flood plains.

Sabah's highlands include Crocker Range, Trus Madi Range, Witti Range, Maitland Range and Brassey Range. Among these, Crocker Range is the longest and highest mountain range, rising to 4095 m on Mt Kinabalu, being the highest mountain of Malaysia and of Southeast Asia. Those of Sarawak are Tama Abu Range, Iran Mountains, Hose Mountains, Kapuas Hulu Range and Kelinkang Range. The physiographies of these two states are somewhat different. Only a small proportion of the land of Sabah consists of lowland, including coastal plains and river valleys. Sarawak, in contrast, has more low-lying, flat lands and swampy coastal areas. Both states, however, have steep undulating hills and mountains in the interior parts, acting as a barrier against inland penetration.

Climate

Malaysia is located near the Equator and experiences a humid tropical climate with constant temperatures, high humidity and copious rainfall. Rainfall distribution is usually seasonal dependent on wind flow patterns and physiogeography (Malaysian Meteorological 2021). Generally, the East Coast states of Peninsular Malaysia receive high rainfall almost throughout the year with June and July being the driest months. The remaining states (except for the southwest coastal region) have two maximum rainfall periods (October-November and April-May) that are separated by drier periods (Malaysian Meteorological 2021). The country is subjected to four monsoonal seasons each year: northeast monsoon, southwest monsoon and two shorter inter-monsoon periods. The northeast monsoon normally occurs from November to March and the southwest monsoon during May or early June to September.

Vegetation and flora

The vegetation of Malaysia can be classified into different types based on climate and soil. Climatic vegetation types include evergreen and semi-evergreen lowland rainforest, lower montane forest and the upper montane forest, while the edaphic types include heath vegetation, limestone forest, beach vegetation, mangrove forest, brackish water vegetation, peat swamp forest, freshwater swamp forest and riparian vegetation (Symington 2004). In lowland and hill areas, dipterocarp forests are the most prominent forest type (Ashton 1995; Saw 2010). Malaysia has a very rich flora that is made up of Sundaic and mainland Asiatic floristic elements in Peninsular Malaysia and of Sundaic elements with many local endemics on the island of Borneo (Saw and Chung 2015).

The Malaysian rainforests stand out by their very high species diversity (e.g., Austin et al. 1973; Baillie and Ashton 1983; Baillie et al. 1987; Saw and Chung 2015), as well as by intricate stratification and regeneration dynamics patterns that have been the subject of numerous major studies by specialists from all over the world (e.g., Burgess 1961, 1975; Denslow 1987; Ashton and Hall 1992; Manokaran et al. 1992; Saiful and Latiff 2017).

Malaysian liverwort and hornwort flora

The first checklist of liverworts and hornworts of Malaysia, recognizing 727 species and 37 infraspecific taxa in 127 genera and 39 families, was published by Chuah-Petiot (2011). Lee et al. (2018) presented a review of the history of liverwort exploration in Malaysia and the more recent papers on Malaysian liverworts, and further additions to the liverwort flora were published by Pócs et al. (2020), Pesiu et al. (2021) and Sarimi et al. (2021). A manual of the genera of liverworts and hornworts of Malaysia has been prepared by Lee and Gradstein (2021). The present paper provides an updated checklist of liverworts and hornworts of Malaysia based on a compilation of the published literature and a critical revision of the nomenclature of the taxa and new synonymy, resulting from taxonomic revisions. The updated checklist accepts 773 species and 31 infraspecific taxa in 120 genera in 40 families of liverworts, and 7 species (3 families, 6 genera) of hornworts. The largest family is Lejeuneaceae with 312 species in 30 genera, accounting for 40% of the total number of liverwort species. The largest genera are *Cololejeunea*, *Bazzania* and *Frullania* with 90, 61 and 55 species, respectively. Genera with more than ten species include *Lejeunea* (40), *Plagiochila* (35), *Radula* (34), *Colura* (27), *Drepanolejeunea* (26), *Cheilolejeunea* (24), *Riccardia* (19), *Lepidozia* (18), *Acromastigum* (16), *Leptolejeunea* (16), *Thysananthus* (16), *Solenostoma* (15), *Lopholejeunea* (12), *Heteroscyphus* (13) and *Anastrophyllum* (10). Forty eight genera have fewer than 10 species (e.g., *Acrolejeunea*, *Andrewsianthus*, *Cephalozia*, *Ceratolejeunea*, *Diplasialejeunea*, *Kurzia*, *Marchantia*, *Microlejeunea*, *Metzgeria*, *Odontoschisma*, *Schistochila*, *Syzygiella*, *Trichocolea* and *Tricholepidozia*) and 54 are represented only by a single species, such as *Acroscyphella*, *Balantiopsis*, *Conoscyphus*, *Eotrichocolea*, *Haplomitrium*, *Jubula*, *Kymatocalyx*, *Mastigopelma*, *Metalejeunea*, *Mesoptygia*, *Nardia*, *Pictolejeunea*, *Soella*, *Southbya*, *Treubia*, *Triandrophlyllum*, *Tritomaria* and the five genera of hornworts. Sabah has the largest number of species with 568 recorded species, followed by Pahang and Sarawak with 338, 265, respectively (Table 1).

An updated checklist of liverworts and hornworts of Malaysia

The nomenclature follows Söderström et al. (2016) with updates. For explanation of some of the new nomenclature, see Lee and Gradstein (2021). In taxon authorities, only the name of the validating author is cited and “ex” authors are omitted for brevity and because their citation is not obligatory. Reports from Malaysia that are only based on secondary information (= papers dealing with liverworts of other regions

(not Malaysia) and citing ‘Malaya’, ‘Malaysia’, ‘Malay Peninsular’, ‘Malacca’ etc. in the section on species distribution) and are not supported by direct evidence, are omitted. Similarly, records based on doubtful identifications (“cf.”, “aff.”) are not taken into account. Furthermore, we have omitted all reports citing only “Borneo” unless there is evidence that the record was from Malaysia (Sarawak, Sabah). For example, species reported by Stephani from Borneo based on material collected by Everett (e.g., *Bazzania fleischeri* (Steph.) Abeyw., *B. inaequitexta* Steph., *Plagiochila borneensis* Steph., *P. kuhliana* Sande Lac.) are included in the checklist because these Everett collections are presumably from Sarawak (Menzel 1988).

Table 1. The number of recorded species of liverworts and hornworts per state in Malaysia.

State	Number of species		
	Liverworts	Hornworts	Total
Sabah	565	3	568
Pahang	334	4	338
Sarawak	263	2	265
Penang	95	—	95
Perak	82	1	83
Johor	81	—	81
Terengganu	62	—	62
Kedah including Langkawi	59	1	60
Selangor	48	—	48
Negeri Sembilan	44	—	44
Kelantan	35	—	35
Malacca	11	—	11
Perlis	5	—	5

Liverworts (Marchantiophyta)

Acrobolbus ciliatus (Mitt.) Schiffn. – Kodama and Narita (1974). Sabah.

Acrobolbus saccatus (Hook.) Briscoe – Kitagawa and Kodama (1974 as *Tylimanthus saccatus*). Sabah.

Acrolejeunea arcuata (Nees) Grolle et Gradst. – Kodama and Kitagawa (1974 as *Ptychocoleus coroniformis*), Gradstein (1975), Kürschner (1990), Lee et al. (2013), Renner (2013), Wang et al. (2014b), Cheah (2017). Pahang, Sabah.

Acrolejeunea crassicaulis (Steph.) J.Wang bis et Gradst. – Mizutani (1989 as *Trocholejeunea crassicaulis*), Gradstein et al. (2002 as *T. crassicaulis*), Wang et al. (2014a). Sabah.

Acrolejeunea fertilis (Reinw., Blume et Nees) Schiffn. – Verdoorn (1933 as *Ptychocoleus wichurae*, 1934a as *P. fertilis*), Mizutani (1969 as *P. fertilis*), Gradstein (1975), Lee et al. (2013). Penang, Perak, Pahang, Sabah.

Acrolejeunea pycnoclada (Taylor) Schiffn. – Schiffner (1898), Verdoorn (1933, 1934a both as *Ptychocoleus pycnocladus*), Mizutani (1969 as *P. pycnocladus*), Kitagawa

- (1971 as *P. pycnocladus*), Kamimura (1974 as *P. pycnocladus*), Gradstein (1975), Lee et al. (2013), Wang et al. (2016). Penang, Perak, Malacca, Sarawak, Sabah.
- Acrolejeunea tjibodensis*** (Verd.) Grolle et Gradst. – Kamimura (1974 as *Ptychocoleus tjibodensis*), Gradstein (1975), Lee et al. (2013). Pahang, Sabah.
- Acromastigum aurescens*** A.Evans – Evans (1934). Johor.
- Acromastigum bancanum*** (Sande Lac.) A.Evans – De Notaris (1874 as *Mastigobryum bancanum*), Schiffner (1898 as *Bazzania bancana*), Evans (1934, also as *A. bidenticulatum*), Herzog (1950), Kitagawa and Kodama (1973), Tixier (1974 as *A. bidenticulatum*), Kürschner (1990), Pócs et al. (2020). Kedah, Johor, Sarawak, Sabah.
- Acromastigum bifidum*** (Steph.) A.Evans – Evans (1934 as *A. denticulatum*), Herzog (1950), Grolle (1978). Sarawak.
- Acromastigum brotheri*** (Steph.) A.Evans – Stephani (1909 as *Mastigobryum brotheri*), Evans (1934), Kitagawa and Kodama (1973). Sarawak, Sabah.
- Acromastigum curtilobum*** A.Evans – Kitagawa and Kodama (1973), Kürschner (1990). Sabah.
- Acromastigum divaricatum*** (Nees) Reimers – Evans (1934), Kitagawa and Kodama (1973). Johor, Sabah.
- Acromastigum echinatiforme*** (De Not.) A.Evans – De Notaris (1874 as *Mastigobryum echinatiforme*), Schiffner (1898 as *Bazzania echinatiformis*), Evans (1934), Herzog (1950), Kitagawa and Kodama (1973), Grolle (1978), Kürschner (1990), Cheah (2017). Pahang, Sarawak, Sabah.
- Acromastigum echinatum*** (Gottsche) A.Evans – Evans (1934), Herzog (1950), Kitagawa and Kodama (1973), Tixier (1974). Kedah, Johor, Sarawak, Sabah.
- Acromastigum fimbriatum*** (Steph.) A.Evans – Stephani (1909 as *Mastigobryum fimbriatum*), Evans (1934), Herzog (1950). Sarawak.
- Acromastigum herzogii*** Grolle – Grolle (1964), Kürschner (1990). Sarawak, Sabah.
- Acromastigum inaequilaterum*** (Lehm. et Lindenb.) A.Evans – De Notaris (1874 as *Mastigobryum elegantulum*), Schiffner (1898 as *Bazzania notarisii*), Stephani (1909 as *M. notarisii*), Evans (1934), Herzog (1950), Kitagawa (1969c), Kitagawa and Kodama (1973), Kürschner (1990), Wolseley et al. (1996). Penang, Negeri Sembilan, Johor, Sarawak, Sabah.
- Acromastigum laevigatum*** A.Evans – Evans (1934), Tixier (1974). Kedah, Sarawak.
- Acromastigum leptophyllum*** Herzog – Herzog (1950). Sarawak.
- Acromastigum linganum*** (De Not.) A.Evans – De Notaris (1874 as *Mastigobryum linganum*), Schiffner (1898 as *Bazzania lingana*), Stephani (1909 as *M. linganum*), Evans (1934). Sarawak.
- Acromastigum lobuliferum*** A.Evans – Grolle (1978). Sabah.
- Acromastigum obliquatum*** (Mitt.) A.Evans – Kitagawa and Kodama (1973 as *A. gemmiferum*), Grolle (1978). Sabah.
- Acroscyphella tjiwideiensis*** (Sande Lac.) N.Kitag. et Grolle – Cheah (2017). Pahang.
- Allorgella semperiana*** (Steph.) Bechteler, G.E.Lee, Schäf.-Verw. et Heinrichs – Tixier (1980b as *A. changiana*), Grolle (1985 as *Otolejeunea semperiana*), Zhu and So (2001 as *O. semperiana*), Schäfer-Verwimp (2006 as *O. semperiana*). Kedah, Perak, Pahang.

- Anastrophyllum assimile*** (Mitt.) Steph. – Kitagawa (1970), Gradstein and Váňa (1987), Váňa and Piippo (1989), Váňa (1991c). Sabah.
- Anastrophyllum auritum*** (Lehm.) Steph. – Kitagawa (1970 as *A. appendiculatum*), Váňa and Piippo (1989), Váňa (1991c). Sabah.
- Anastrophyllum bidens*** (Reinw., Blume et Nees) Steph. – Inoue (1967a, 1968b), Kitagawa (1970), Kitagawa and Kodama (1973), Kürschner (1990), Váňa (1991c). Pahang, Sarawak, Sabah.
- Anastrophyllum bidens*** var. ***aristatum*** N.Kitag. – Herzog (1950), Kitagawa (1970), Kitagawa and Kodama (1973), Kürschner (1990), Váňa (1991c). Sarawak, Sabah.
- Anastrophyllum borneense*** Herzog – Herzog (1950), Inoue (1967a,b, 1968b all as *A. malayense*), Kitagawa (1970), Váňa (1991c). Pahang, Sarawak, Sabah.
- Anastrophyllum fissum*** Steph. – Herzog (1950 as *A. divergens*), Váňa (1991c as *A. divergens*). Sarawak, Sabah.
- Anastrophyllum obtusum*** Herzog – Herzog (1950), Váňa (1991c). Sabah.
- Anastrophyllum piligerum*** (Nees) Steph. – De Notaris (1874 as *Jungermannia piligera* ['*pilifera*']), Schiffner (1898, also as *A. imbricatum*), Herzog (1950, also as *A. imbricatum*), Inoue (1967a), Kitagawa (1969c, 1970), Kitagawa and Kodama (1973), Kürschner (1990), Váňa (1991c), Álvaro-A (2011). Penang, Pahang, Johor ("Mt. Ophir" (Gunung Ledang) was mistakenly listed as in Malacca), Sarawak, Sabah.
- Anastrophyllum prionophyllum*** S.Hatt. – Kitagawa (1970), Váňa (1991c). Sabah.
- Anastrophyllum revolutum*** Steph. – Kitagawa (1970), Váňa (1991c), Cheah (2017). Pahang, Sabah.
- Anastrophyllum squarrosum*** Herzog – Kitagawa (1970), Váňa (1991c), Cheah (2017). Pahang, Sabah.
- Andrewsianthus bidens*** (Steph.) R.M.Schust. – Cheah (2017). Pahang.
- Andrewsianthus chimbuensis*** R.M.Schust. – Kürschner (1990), Váňa (1991c). Sabah.
- Andrewsianthus kinabaluensis*** N.Kitag. – Kitagawa (1970), Váňa (1974, 1991c). Sabah.
- Andrewsianthus mizutanii*** N.Kitag. – Amakawa (1969a as *Jamesoniella minutissima*), Kitagawa (1969d), Váňa (1974, 1991c). Sabah.
- Andrewsianthus papillosum*** N.Kitag. – Kitagawa (1970), Kitagawa and Kodama (1973), Váňa (1974, 1991c). Sabah.
- Andrewsianthus puniceus*** (Nees) Grolle – Kitagawa (1970), Pocock et al. (1984), Váňa (1991c). Pahang, Sabah.
- Andrewsianthus recurvifolius*** (Nees) R.M.Schust. – Váňa (1991c). Sabah.
- Aneura maxima*** (Schiffn.) Steph. – Kitagawa and Kodama (1974). Sabah.
- Aneura pinguis*** (L.) Dumort. – Johnson (1972 as *Riccardia pinguis*). Pahang.
- Aphanotropis saxicola*** Herzog – Herzog (1952a). Sarawak. (synonym of *Colura*?; see Gradstein and Benitez 2014, Lee and Gradstein 2021).
- Asterella limbata*** D.G.Long et Grolle – Long and Grolle (1994), Long (2006). Sabah.
- Balantiopsis ciliaris*** S.Hatt. – Hattori (1966), Kitagawa and Kodama (1973). Sabah.
- Bazzania albifolia*** Horik. – Cheah and Yong (2016). Pahang.
- Bazzania angustistipula*** N.Kitag. – Cheah and Yong (2016). Pahang.

- Bazzania asymmetrica** (Steph.) N.Kitag. – Cheah and Yong (2016). Pahang.
- Bazzania birenata** N.Kitag. – Cheah and Yong (2016). Pahang.
- Bazzania bidentula** (Steph.) Yasuda – Cheah and Yong (2016). Pahang.
- Bazzania bilobata** N.Kitag. – Pócs et al. (2014). Pahang.
- Bazzania borneensis** N.Kitag. – Stephani (1908 as as *Mastigobryum borneense*), Kitagawa (1973). Sarawak.
- Bazzania calcarata** (Sande Lac.) Schiffn. – Stephani (1908 as *Mastigobryum calcaratum*), Herzog (1950 as *B. richardsii*), Meijer (1960), Tixier (1971). Pahang, Sarawak.
- Bazzania caudata** (Steph.) Herzog – Stephani (1908 as *Mastigobryum caudatum*), Herzog (1950), Tixier (1971), Kitagawa and Kodama (1973). Penang, Pahang, Sarawak, Sabah.
- Bazzania ceylanica** (Mitt.) Steph. – Kamimura (1975). Sabah.
- Bazzania cincinnata** (De Not.) Trevis. – De Notaris (1874 as *Mastigobryum cincinnatum*), Schiffner (1898), Stephani (1908 as *M. cincinnatum*), Kamimura (1975). Sarawak, Sabah.
- Bazzania commutata** (Lindenb. et Gottsche) Schiffn. – Tixier (1971). Pahang.
- Bazzania confertifolia** (Steph.) Herzog – Herzog (1950). Sarawak.
- Bazzania conophylla** (Sande Lac.) Schiffn. – Kitagawa and Kodama (1973), Kitagawa (1973). Sabah.
- Bazzania densa** (Sande Lac.) Schiffn. – Kitagawa (1971), Kitagawa and Kodama (1973), Kürschner (1990). Penang, Sabah.
- Bazzania diminuta** Herzog – Herzog (1950). Sarawak.
- Bazzania distans** (Nees) Trevis. – Johnson (1972). Pahang.
- Bazzania drepanophylla** Herzog – Herzog (1950). Sarawak.
- Bazzania dulitensis** Herzog – Herzog (1950), Kitagawa and Kodama (1973), Kürschner (1990). Sarawak, Sabah.
- Bazzania erosa** (Reinw., Blume et Nees) Trevis. – De Notaris (1874 as *Mastigobryum vagum*), Schiffner (1898), Stephani (1908 as *M. vagum*), Herzog (1950 as *B. vaga* and *B. serrulata*), Kitagawa and Kodama (1973), Kitagawa (1977), Cheah and Yong (2016). Penang, Pahang, Sarawak, Sabah.
- Bazzania erosa** var. **pulopenangensis** (Lindenb. et Gottsche) Schiffn. – Lindenberg and Gottsche (1851 as *Mastigobryum erosum* δ *pulopenangense*), Schiffner (1898). Penang.
- Bazzania fallax** (Sande Lac.) Schiffn. – De Notaris (1874 as *Mastigobryum borneense*), Schiffner (1898), Herzog (1950 as *B. fallax* f. *fissa*), Meijer (1960). Sarawak.
- Bazzania fleischeri** (Steph.) Abeyw. – Stephani (1908, 1909 both as *Mastigobryum fleischeri*). Sarawak.
- Bazzania friabilis** N.Kitag. et T.Kodama – Kitagawa and Kodama (1973, 1975), Kürschner (1990), Cheah and Yong (2016). Pahang, Sabah.
- Bazzania grandiretis** (Steph.) Herzog – Herzog (1950), Kitagawa and Kodama (1973). Sarawak, Sabah.
- Bazzania harpago** (De Not.) Schiffn. – De Notaris (1874 as *Mastigobryum ferox* and *M. harpago*), Schiffner (1898), Stephani (1908 as *M. harpago*), Herzog (1950, 1952b),

Kitagawa (1972), Kitagawa and Kodama (1973), Kamimura (1975, also as *B. ferox*), Kürschner (1990), Ludwiczuk and Asakawa (2010), Ng et al. (2021). Sarawak, Sabah.

Bazzania herzogiana Meijer – Herzog (1950 as *B. remotifolia*). Sarawak.

Bazzania horridula Schiffn. – Herzog (1932 as *Mastigobryum muricatum*, 1950), Kitagawa and Kodama (1973), Kürschner (1990), Cheah and Yong (2016). Pahang, Sarawak, Sabah.

Bazzania inaequitexta Steph. – Stephani (1908, 1909 both as *Mastigobryum inaequitextum*). Sarawak.

Bazzania indica (Gottsche et Lindenb.) Trevis. – Kamimura (1975), Kürschner (1990). Sabah.

Bazzania insignis (De Not.) Trevis. – De Notaris (1874 as *Mastigobryum insigne*), Schiffner (1898), Evans (1932), Kamimura (1975). Sarawak, Sabah.

Bazzania intermedia (Gottsche et Lindenb.) Trevis. – De Notaris (1874 as *Mastigobryum concinnum*), Schiffner (1898 as *B. concinna*), Stephani (1908 as *M. concinnum*), Herzog (1950 as *B. concinna*), Meijer (1960), Kitagawa (1969c), Tixier (1971), Kitagawa and Kodama (1973), Kamimura (1975), Grolle (1987). Penang, Pahang, Sarawak, Sabah.

Bazzania intermedia var. ***sarawakiana*** (De Not.) Schiffn. – De Notaris (1874 as *Mastigobryum intermedium* var. *sarawakianum*), Schiffner (1898). Sarawak.

Bazzania involutiformis (De Not.) Trevis. – De Notaris (1874 as *Mastigobryum duplex* and *M. involutiforme*), Schiffner (1898), Herzog (1950, 1952b), Kitagawa (1972), Kitagawa and Kodama (1973), Kamimura (1975), Kürschner (1990). Sarawak, Sabah.

Bazzania kokawana N.Kitag. et T.Kodama – Kitagawa and Kodama (1973). Sabah.

Bazzania linearis Herzog – Herzog (1950). Sarawak.

Bazzania linguiformis (Sande Lac.) Trevis. – Stephani (1908 as *Mastigobryum linguiforme* ['linguaeforme']). Penang.

Bazzania longicaulis (Sande Lac.) Schiffn. – Herzog (1950), Johnson (1972), Kitagawa and Kodama (1973), Kitagawa (1977), Kürschner (1990). Pahang, Sarawak, Sabah.

Bazzania loricata (Reinw., Blume et Nees) Trevis. – Stephani (1908 as *Mastigobryum loricatum*), Herzog (1950), Inoue (1967a, 1968b), Pocock et al. (1984). Pahang, Sarawak.

Bazzania lowii (Steph.) Schiffn. – Stephani (1886, 1908 both as *Mastigobryum lowii*), Schiffner (1898), Evans (1932 as *M. lowii*). Sabah.

Bazzania malaccensis (Steph.) Tixier – Stephani (1908 as *Mastigobryum malaccense*), Tixier (1971, 1974). Kedah, Perak, Pahang.

Bazzania manillana (Steph.) Steph. – Stephani (1917 as *Mastigobryum crenatistipulum*), Kamimura (1975), Mizutani (1967a). Penang, Sabah.

Bazzania marginella (Herzog) N.Kitag. et T.Kodama – Kitagawa and Kodama (1973). Sabah.

Bazzania menzelii E.D.Cooper – Herzog (1950 as *Acromastigum emarginatum*). Sarawak.

Bazzania paradoxa (Sande Lac.) Steph. – Stephani (1908 as *Mastigobryum natunense*), Meijer (1960), Kitagawa and Kodama (1973). Pahang, Sarawak, Sabah.

- Bazzania parvitexta*** Steph. – Kitagawa (1979a). Sabah.
- Bazzania patentistipa*** (Sande Lac.) Schiffn. – Kitagawa and Kodama (1973 ['*patentistipula*']). Sabah.
- Bazzania pectinata*** (Lindenb. et Gottsche) Schiffn. – Herzog (1950, 1952b), Tixier (1971), Kitagawa and Kodama (1973), Pocock et al (1984). Pahang, Sarawak, Sabah.
- Bazzania praerupta*** (Reinw., Blume et Nees) Trevis. – Kitagawa and Kodama (1973), Kürschner (1990), Ludwiczuk and Asakawa (2010). Sabah.
- Bazzania pseudovittata*** N.Kitag. et T.Kodama – Kitagawa and Kodama (1973, 1975), Kürschner (1990), Cheah and Yong (2016). Pahang, Sabah.
- Bazzania recurva*** (Mont.) Trevis. – Montagne (1843 as *Herpetium recurvum*, 1856 as *Mastigobryum recurvum*), Gottsche et al. (1845 as *M. recurvum*), Lindenberg and Gottsche (1851 as *M. recurvum*), De Notaris (1874 as *M. recurvum* var. *pallens*), Schiffner (1898 as *B. recurva* var. *pallens*), Stephani (1908 as *M. recurvum*), Inoue (1968b). Penang, Pahang, Sarawak.
- Bazzania revoluta*** (Steph.) N.Kitag. – Kamimura (1975 as *B. recurvolimbata*). Sabah.
- Bazzania serpentina*** (Nees) Trevis. – Cheah and Yong (2016). Pahang.
- Bazzania sikkimensis*** Schiffn. – Kamimura (1975). Sabah.
- Bazzania spiralis*** (Reinw., Blume et Nees) Meijer – Meijer (1960), Kitagawa and Kodama (1973), Tixier (1971, 1974), Kamimura (1975), Kürschner (1990), Ludwiczuk and Asakawa (2010). Kedah, Pahang, Sarawak, Sabah.
- Bazzania subtilis*** (Sande Lac.) Trevis. – De Notaris (1874 as *Mastigobryum subtile*), Stephani (1917 as *M. repandistipulum*), Meijer (1960), Kitagawa and Kodama (1973), Kitagawa (1977, 1979 as *B. palmatifida*), Kürschner (1990), Wolseley et al. (1996). Negeri Sembilan, Sarawak, Sabah.
- Bazzania sumbavensis*** (Steph.) Steph. – Kamimura (1975). Sabah.
- Bazzania tridens*** (Reinw., Blume et Nees) Trevis. – Schiffner (1898 as *B. australis*), Herzog (1950, also as *B. coreana*), Kitagawa (1969c, 1972, also as *B. australis*), Tixer (1971), Kitagawa and Kodama (1973, also as *B. australis*), Kamimura (1975, also as *B. tridens* f. *minutissima*), Kürschner (1990). Penang, Pahang, Sarawak, Sabah.
- Bazzania tridens* var. *assamica*** (Steph.) Pócs – Kamimura (1975), Pócs et al. (2014 as *B. assamica*). Pahang, Sabah.
- Bazzania uncigera*** (Reinw., Blume et Nees) Trevis. – Herzog (1950), Kitagawa and Kodama (1973), Kürschner (1990), Cheah and Yong (2016). Pahang, Sarawak, Sabah.
- Bazzania uncigera* var. *brevifolia*** Herzog – Herzog (1950). Sarawak.
- Bazzania undulata*** Herzog – Herzog (1950). Sarawak.
- Bazzania vittata*** (Gottsche) Trevis. – Herzog (1950), Inoue (1967a), Kitagawa and Kodama (1973), Kürschner (1990). Pahang, Sarawak, Sabah.
- Bazzania vittata* var. *luxurians*** (De Not.) Schiffn. – De Notaris (1874 as *Mastigobryum vittatum* var. *luxurians*), Schiffner (1898). Sarawak.
- Bazzania wiltensi*** (Steph.) Schiffn. – Pocock et al. (1984). Pahang.
- Bazzania zollingeri*** (Lindenb.) Trevis. – De Notaris (1874 as *Mastigobryum zollingeri*). Sarawak.

- Blepharostoma trichophyllum*** (L.) Dumort. – Akiyama et al. (2001). Sabah.
- Calypogeia apiculata*** (Steph.) Steph. – Kitagawa and Kodama (1973). Sabah.
- Calypogeia arguta*** Nees et Mont – Wolseley et al. (1996), Bisang et al. (2003). Pahang, Negeri Sembilan.
- Caudalejeunea cristiloba*** (Steph.) Gradst. – Verdoorn (1934a, 1937 both as *C. circinata*), Mizutani (1966, 1969 both as *C. circinata*, 1988), Kitagawa and Kodama (1974 as *C. circinata*). Johor, Sarawak, Sabah.
- Caudalejeunea reniloba*** (Gottsche) Steph. – Stephan (1912 as *C. serrata*), Verdoorn (1934a), Herzog (1952b), Mizutani (1966, 1969, also as *C. stephanii*, 1988, also as *C. recurvistipula*), Tixier (1971 as *C. stephanii*, 1980a), Kitagawa and Kodama (1974), Thiers (1985), Pócs et al. (2020), Pesiu et al. (2021, in press). Penang, Perak, Selangor, Pahang, Malacca, Terengganu, Johor, Sarawak, Sabah.
- Cephalolejeunea parvilobula*** Mizut. – Mizutani (1979b). Sabah.
- Cephalozia acuminata*** (Herzog) Váňa – Herzog (1950 as *Metahygrobiella acuminata*), Váňa (1993 as *M. acuminata*). Sarawak.
- Cephalozia acutiloba*** (Inoue) Váňa – Inoue (1967a,b, both as *Metahygrobiella acutiloba*). Pahang.
- Cephalozia hamatiloba*** Steph. – Müller and Schäfer-Verwimp (1999), Cheah (2017). Pahang.
- Cephalozia mollusca*** (De Not.) Váňa – De Notaris (1874 as *Jungermannia mollusca*), Schiffner (1898 as *Hygrobiella mollusca*), Stephan (1908 as *H. mollusca*), Herzog (1950 as *Metahygrobiella mollusca*), Kitagawa and Kodama (1974 as *M. mollusca*), Váňa (1993 as *M. mollusca*). Sarawak, Sabah.
- Cephalozia stolonacea*** (Herzog) Váňa – Herzog (1950 as *Metahygrobiella stolonacea* and *Hygrobiella mollusca* f. *subintegerrima*), Grolle (1963 as *M. stolonacea*), Váňa (1993 as *M. stolonacea*). Sarawak.
- Cephaloziella capillaris*** (Steph.) Douin – Inoue (1967a), Inoue and Miller (1967). Pahang.
- Cephaloziella kiaeri*** (Austin) Douin – Kitagawa and Kodama (1974 as *C. willisana*), Váňa (1992). Sabah.
- Cephaloziella microphylla*** (Steph.) Douin – Kitagawa (1969c). Penang.
- Ceratolejeunea aliena*** Herzog – Herzog (1952b), Kitagawa and Kodama (1974), Mizutani (1981a). Sarawak, Sabah.
- Ceratolejeunea belangeriana*** (Gottsche) Steph. – Kitagawa and Kodama (1974, also as *C. ryukyuensis*), Mizutani (1981a as *C. oceanica*), Zhu et al. (2005), Cheah (2017). Pahang, Johor, Sabah.
- Ceratolejeunea cornuta*** (Lindenb.) Steph. – Inoue (1967a as *C. tahitensis*). Pahang.
- Ceratolejeunea minor*** Mizut. – Mizutani (1981a), Zhu et al. (2005), Sarimi et al. (2021). Terengganu, Sabah.
- Ceratolejeunea moniliata*** Herzog – Herzog (1952b), Mizutani (1970, 1981a), Pesiu et al. (in press). Terengganu, Johor, Sarawak, Sabah.
- Ceratolejeunea singapurensis*** (Lindenb.) Steph. – Herzog (1952b), Cheah (2017), Sarimi et al. (2021). Pahang, Terengganu, Sarawak.

Ceratolejeunea spinistipula (Herzog) R.L.Zhu, L.Shu, Xiong He et Y.M.Wei – Herzog (1948 as *Drepanolejeunea spinistipula*), Pócs et al. (1995 as *Acantholejeunea spinistipula*), Zhu et al. (2018a as *D. spinistipula*). Johor, Sarawak, Sabah.

Cheilolejeunea adnata (Lehm.) Grolle var. *autoica* Gradst. et Ilk.-Borg. – Shu et al. (2015 as *C. larsenii*). Penang.

Cheilolejeunea ceylanica (Gottsche) R.M.Schust. et Kachroo – Schiffner (1898 as *Pycnolejeunea ceylanica*), Mizutani (1966, 1970, 1980), Tixier (1972, 1974 both as *P. arietina*, 1980a as *Xenolejeunea ceylanica*), Kitagawa and Kodama (1974), Grolle (1979), Kürschner (1990), Wolseley et al. (1996), Zhu and So (2001), Pócs et al. (2020), Pesiu et al. (2021). Kedah, Penang, Pahang, Negeri Sembilan, Malacca, Terengganu, Sabah.

Cheilolejeunea decursiva (Sande Lac.) R.M.Schust. – Mizutani (1970 as *C. spathulata*), Grolle (1977), Zhu and Lai (2005), Shu et al. (2014), Cheah (2017). Pahang, Sabah.

Cheilolejeunea falsinervis (Sande Lac.) R.M.Schust. et Kachroo – Mizutani (1966, 1970), Kitagawa and Kodama (1974), Tixier (1974 as *Xenolejeunea falsinervis*), Thiers (1986), Kürschner (1990), Wolseley et al. (1996). Kedah, Negeri Sembilan, Sabah.

Cheilolejeunea gigantea (Steph.) R.M.Schust. et Kachroo – Herzog (1950 as *Pycnolejeunea gigantea*). Sarawak.

Cheilolejeunea incisa (Gottsche) R.M.Schust. et Kachroo – Hoffmann (1935 as *Pycnolejeunea excisula*), Mizutani (1970 as *C. excisula*), Tixier (1971 as *P. excisula*), Kamimura (1974 as *C. excisula*), Kitagawa and Kodama (1974 as *C. excisula*), Grolle and Piippo (1990 as *C. excisula*). Pahang, Johor, Sabah.

Cheilolejeunea insignis Jovet-Ast et Tixier – Kitagawa and Kodama (1974). Sabah.

Cheilolejeunea intertexta (Lindenb.) Steph. – Mizutani (1967b, 1970), Kitagawa (1971), Grolle (1979), Kürschner (1990), Pócs et al. (2020). Penang, Sarawak, Sabah.

Cheilolejeunea krakakammae (Lindenb.) R.M.Schust. – Cheah (2017). Pahang.

Cheilolejeunea lindenbergii (Gottsche) Mizut. – Herzog (1950 as *Hygrolejeunea lindenbergii* and *Euosmolejeunea luerssenii*), Inoue (1967 as *C. luerssenii* ['luersonii']), Kitagawa (1969a as *C. luerssenii*, 1971), Mizutani (1970), Kitagawa and Kodama (1974), Kürschner (1990), Cheah (2017). Penang, Pahang, Sarawak, Sabah.

Cheilolejeunea lorianae (Steph.) W.Ye et R.L.Zhu – Mizutani (1970 as *Leucolejeunea lorianae*). Sabah.

Cheilolejeunea malaccensis (G.Hoffm.) Xiao L.He – Hoffmann (1935 as *Pycnolejeunea malaccensis*), Thiers (1986 as *P. malaccensis*), He (1996). Penang.

Cheilolejeunea micholitzii (Steph.) R.M.Schust. et Kachroo – Hoffman (1935 as *Pycnolejeunea micholitzii*). Johor.

Cheilolejeunea mizutanii W.Ye et R.L.Zhu – Mizutani (1976 as *Leucolejeunea decurrens*), Grolle and Piippo (1990 as *L. decurrens*). Sabah.

Cheilolejeunea nipponica (S.Hatt.) S.Hatt. – Pócs and Lee (2016). Selangor.

Cheilolejeunea occlusa (Herzog) T.Kodama et N.Kitag. – Herzog (1950 as *Strepsilejeunea occlusa*), Kitagawa and Kodama (1974), Mizutani (1980), Wolseley et al. (1996), Pócs et al. (2020). Negeri Sembilan, Sarawak, Sabah.

Cheilolejeunea orientalis (Gottsche) Mizut. – Kitagawa and Kodama (1974). Sabah.

Cheilolejeunea serpentina (Mitt.) Mizut. – Hashimoto et al. (1993), Cheah (2017).

Langkawi, Pahang.

Cheilolejeunea streimannii Pócs et Ninh – Pócs and Lee (2016). Pahang.

Cheilolejeunea trapezia (Nees) R.M.Schust. et Kachroo – Stephani (1890 as *Lejeunea imbricata*), Hoffmann (1935 as *Pycnolejeunea imbricata*, *P. meyeniana* and its var. *ligulata*, *C. longiloba*), Herzog (1948 as *Placolejeunea subarrhyncha*), Mizutani (1966, 1970 both as *C. imbricata*, 1980 as *C. longiloba*), Inoue (1967a as *C. imbricata*), Kitagawa (1971 as *C. imbricata*), Tixier (1971, 1974, 1980a as *Xenolejeunea longiloba* and *X. meyeniana*), Kitagawa and Kodama (1974 as *C. imbricata* and *C. meyeniana*), Grolle (1979), Thiers (1986 as *C. meyeniana*), Kürschner (1990 as *C. imbricata*), Cheah (2017 as *C. imbricata*), Pócs et al. (2020, also as *C. meyeniana*), Pesiu et al. (2021). Kedah, Penang, Pahang, Terengganu, Johor, Sarawak, Sabah.

Cheilolejeunea trifaria (Reinw., Blume et Nees) Mizut. – Inoue (1967a as *C. viridula*), Mizutani (1970, 1982), Kamimura (1974), Kitagawa and Kodama (1974), Hashimoto et al. (1993), Lee et al. (2013), Pócs et al. (2020), Pesiu et al. (2021). Langkawi, Perak, Pahang, Terengganu, Sabah.

Cheilolejeunea ventricosa (P.Syd.) Xiao L.He – Hoffman (1935 as *Pycnolejeunea ventricosa*), Mizutani (1970 as *P. ventricosa*), Hattori and Kamimura (1971 as *P. ventricosa*), Zhu and Lai (2005), Pócs et al. (2020). Penang, Sabah.

Cheilolejeunea verrucosa Steph. – Tixier (1974), Mizutani (1979b). Kedah, Sabah.

Cheilolejeunea vittata (G.Hoffm.) R.M.Schust. et Kachroo – Mizutani (1970, 1980), Kürschner (1990), Wolseley et al. (1996), Pócs et al. (2020). Negeri Sembilan, Sabah.

Cheilolejeunea xanthocarpa (Lehm. et Lindenb.) Malombe – Verdoorn (1934a as *Leucolejeunea xanthocarpa*), Inoue (1967a as *L. xanthocarpa*), Tixier (1971 as *L. xanthocarpa*), Kamimura (1975 as *L. xanthocarpa*). Pahang, Sabah.

Chiastocaulon braunianum (Nees) S.D.F.Patzak, M.A.M Renner, Schäf.-Verw. et Heinrichs – Kitagawa and Kodama (1974 as *Plagiochilion braunianum*), Akiyama et al. (2001 as *P. braunianum*). Sabah.

Chiastocaulon dendroides (Nees) Carl – De Notaris (1874 as *Plagiochila dendroides*), Schiffner (1898 as *P. dendroides*), Herzog (1950 as *P. dendroides*), Kitagawa and Kodama (1974 as *P. dendroides*), Inoue (1967a, 1968b, 1984 as *P. dendroides*), Kürschner (1990 as *P. dendroides*), So (2001 as *P. dendroides*), Akiyama et al. (2001 as *P. dendroides*). Pahang, Sarawak, Sabah.

Chiastocaulon oppositum (Reinw., Blume et Nees) S.D.F.Patzak, M.A.M Renner, Schäf.-Verw. et Heinrichs – Stephani (1904 as *Plagiochila opposita*), Hattori (1942a as *Plagiochila opposita*, 1950), Inoue (1964, 1967a both as *Plagiochilion oppositum*), Kitagawa and Kodama (1974 as *Plagiochilion oppositum*), Kamimura (1975 as *Plagiochilion oppositum*), Kürschner (1990 as *Plagiochilion oppositum*). Perak, Pahang, Sarawak, Sabah.

Chiastocaulon pachycephalum (De Not.) Herzog – De Notaris (1874 as *Plagiochila pachycephala*), Schiffner (1898 as *Plagiochila pachycephala*), Herzog (1950 as *Plagiochilion pachycephalum*), Inoue (1964 as *Plagiochilion pachycephalum*), So and Grolle (2000 as *Plagiochilion pachycephalum*), So (2001 as *Plagiochila pachycephala*). Sarawak.

- Chiastocaulon theriotianum*** (Steph.) S.D.F.Patzak, M.A.M Renner, Schäf.-Verw. et Heinrichs – Inoue (1964 as *Plagiochilion theriotianum*). Sarawak.
- Cololejeunea abnormis*** Mizut. – Mizutani (1970), Tixier (1985). Penang, Sabah.
- Cololejeunea acuminata*** Mizut. – Mizutani (1970), Wolseley et al. (1996), Pócs et al. (2020). Negeri Sembilan, Sabah.
- Cololejeunea aequabilis*** (Sande Lac.) Schiffn. – Benedix (1953 as *C. yulensis*), Mizutani (1966 as *C. yulensis*), Kitagawa and Kodama (1974 as *C. yulensis*), Pesiu et al. (2021). Terengganu, Johor, Sarawak, Sabah.
- Cololejeunea amphibola*** B.M.Thiers – Eggers et al. (1998), Pócs and Lee (2016). Selangor, Kelantan, Pahang, Sarawak.
- Cololejeunea angulata*** (Steph.) Mizut. – Kitagawa (1969a, 1969c), Wolseley et al. (1996), Mizutani (1966). Penang, Negeri Sembilan, Sabah.
- Cololejeunea angustiflora*** (Steph.) Mizut. – Mizutani (1966, 1970 both as *C. javanica* and *C. crenulata*), Kitagawa and Kodama (1974 as *C. crenulata*), Tixier (1985 as *C. javanica*), Zhu and So (2000a as *C. mackeeana*, 2002). Penang, Sarawak, Sabah.
- Cololejeunea appressa*** (A.Evans) Benedix – Mizutani (1966, 1970), Sarimi et al. (2021). Terengganu, Sabah.
- Cololejeunea bidentula*** (Steph.) E.W.Jones – Pócs and Lee (2016). Selangor.
- Cololejeunea ceatocarpa*** (Ångstr.) Steph – Pócs and Lee (2016). Kelantan, Pahang.
- Cololejeunea ceratilobula*** (P.C.Chen) R.M.Schust. – Mizutani (1966, 1970 both as *C. formosana*), Pesiu et al. (in press). Terengganu, Sabah.
- Cololejeunea chamlongiana*** Tixier – Tixier (1985). Perak.
- Cololejeunea chinii*** Tixier – Tixier (1973b), Kitagawa (1981). Selangor, Kelantan.
- Cololejeunea cordiflora*** Steph. – Tixier (1971 as *C. karstenii*, 1985). Perak, Penang, Pahang.
- Cololejeunea decliviloba*** Steph. – Tixier (1980a). Pahang.
- Cololejeunea desciscens*** Steph. – Eggers et al. (1998). Sarawak.
- Cololejeunea diaphana*** A.Evans – Eggers et al. (1998 as *Aphanolejeunea proboscoidea*), Pócs and Lee (2016). Kelantan, Sarawak.
- Cololejeunea dilatata*** (Steph.) Mizut. – Mizutani (1966, 1970). Sabah.
- Cololejeunea dozyana*** (Sande Lac.) Schiffn. – Benedix (1953), Tixier (1980a), Pócs et al. (2020). Pahang, Sabah.
- Cololejeunea ensifera*** Tixier – Pócs et al. (2020), Sarimi et al. (2021). Sabah.
- Cololejeunea equialbi*** Tixier – Pócs et al. (2020), Sarimi et al. (2021), Pesiu et al (in press). Terengganu, Sabah.
- Cololejeunea falcata*** (Horik.) Benedix – Mizutani (1966, 1970 both as *C. falcatooides*), Tixier (1971, 1974 both as *C. falcatooides*, 1978, 1980a), Kitagawa and Kodama (1974 as *C. falcatooides*), Pesiu et al. (2021, in press). Kedah, Perak, Penang, Pahang, Terengganu, Sabah.
- Cololejeunea filidens*** Benedix – Tixier (1985). Perak, Selangor.
- Cololejeunea fissilobula*** Herzog – Herzog (1950). Sarawak.
- Cololejeunea floccosa*** (Lehm. et Lindenb.) Schiffn. – Benedix (1953), Kitagawa (1969c), Mizutani (1966, 1970, 1984a), Tixier (1971, 1974, 1978), Kitagawa and

Kodama (1974), Wolseley et al. (1996), Pesiu et al. (2021, in press). Kedah, Penang, Perak, Pahang, Negeri Sembilan, Terengganu, Sarawak, Sabah.

Cololejeunea floccosa var. ***amoena*** (Benedix) Pócs – Benedix (1953 as *C. amoena*), Mizutani (1966, 1970, both as *C. amoena*). Johor, Sabah.

Cololejeunea floccosa var. ***aurita*** Benedix – Benedix (1953), Tixier (1978). Kedah, Penang, Perak, Johor.

Cololejeunea floccosa var. ***trivittata*** Tixier – Eggers et al. (1998 as *C. floccosa* var. *vittata*), Crosby and Engel (2006). Pahang, Sarawak.

Cololejeunea fructumarginata Tixier – Tixier (1985). Penang.

Cololejeunea georgiana Tixier – Tixier (1985). Penang.

Cololejeunea gottschei (Steph.) Pandé, K.P.Srivast. et Ahmad – Mizutani (1966 as *C. paroica*), Pócs et al. (2020), Sarimi et al. (2021), Pesiu et al. (in press). Kelantan, Terengganu, Sabah.

Cololejeunea gradsteinii M.J.Lai et R.L.Zhu – Tixier (1971 as *C. pusilla*). Pahang.

Cololejeunea gynophthalma Benedix – Tixier (1971, 1978), Mizutani (1966, 1970). Penang, Pahang, Sabah.

Cololejeunea baskarliana (Lehm.) Schiffn. – Benedix (1953), Mizutani (1966, 1970, 1986a), Kitagawa (1971), Kitagawa and Kodama (1974), Tixier (1980a, 1985), Wolseley et al. (1996), Pócs et al. (2020). Penang, Perak, Pahang, Negeri Sembilan, Johor, Sarawak, Sabah.

Cololejeunea battorianae Mizut. et Pócs – Mizutani (1966 as *Campylolejeunea pusilla*). Sabah.

Cololejeunea hildebrandii (Austin) Steph. – Tixier (1980a as *C. filicaulis*, 1985), Pócs et al. (2014, 2020). Penang, Perak, Selangor, Pahang, Sabah.

Cololejeunea birta Steph. – Tixier (1985). Perak, Pahang.

Cololejeunea indica Pandé et R.N.Misra – Tixier (1985 as *C. planiflora*). Penang.

Cololejeunea inflata Steph. – Benedix (1953 as *C. oshimensis*), Mizutani (1966, 1970 both as *C. oshimensis*), Tixier (1971, 1974 both as *C. oshimensis*, 1978, 1980a), Kitagawa and Kodama (1974 as *C. oshimensis*), Pesiu et al. (2021). Kedah, Pahang, Terengganu, Johor, Sabah.

Cololejeunea inflectens (Mitt.) Benedix – Benedix (1953 as *C. ciliatilobula* and *C. pecularis*), Mizutani (1970 as *Campylolejeunea pecularis*), Tixier (1971 as *C. ciliatilobula*, 1974 as *Campylolejeunea pecularis*, 1980a as *C. inflectidens*), Pesiu et al. (2021). Kedah, Pahang, Terengganu, Johor, Sarawak, Sabah.

Cololejeunea johannis-winkleri (Herzog) R.L.Zhu – Zhu et al. (2004). Sabah.

Cololejeunea kulenensis Tixier – Tixier (1985). Johor.

Cololejeunea lacinulata Benedix – Benedix (1953). Sabah.

Cololejeunea lanciloba Steph. – Mizutani (1966, 1984b), Kitagawa (1971), Tixier (1971 as *C. pahangiana*, 1985 as *C. bolombensis*), Kitagawa and Kodama (1974), Pócs et al. (2020), Pesiu et al. (2021, in press). Penang, Pahang, Terengganu, Johor, Sabah.

Cololejeunea latilobula (Herzog) Tixier – Pócs and Lee (2016). Kelantan.

Cololejeunea longifolia (Mitt.) Mizut. – Tixier (1984, 1985), Pócs et al. (2020). Penang, Johor, Sabah.

Cololejeunea macounii (Spruce) A.Evans – Mizutani (1966, 1970 both as *C. kinabalensis*), Pócs et al. (2020). Sabah.

Cololejeunea madothecoides (Steph.) Benedix. – Benedix (1953). Sarawak.

Cololejeunea magnilobula (Horik.) S.Hatt. – Pócs et al. (2020). Sabah.

Cololejeunea magnilobula var. ***falcidentata*** Pócs et G.E.Lee – Pócs and Lee (2016). Kelantan.

Cololejeunea malaccensis Tixier – Tixier (1985). Johor.

Cololejeunea malayana Tixier – Tixier (1980a, 1985), Eggers (2006). Perak, Pahang.

Cololejeunea maritima Tixier – Tixier (1979, 1985). Perak, Johor.

Cololejeunea metzgeriopsis (K.I.Goebel) Gradst., R.Wilson, Ilk.-Borg, et Heinrichs – Mizutani (1966 as *Metzgeriopsis pusilla*), Kitagawa (1969b as *M. pusilla*), Kitagawa and Kodama (1974 as *M. pusilla*), Tixier (1980a as *M. pusilla*), Akiyama et al. (2001 as *M. pusilla*), Gradstein et al. (2006), Pócs and Piippo (2011), Pócs et al. (2020), Pesiu et al. (2021). Perak, Pahang, Terengganu, Sabah.

Cololejeunea mutabilis Benedix – Benedix (1953 as *C. mutabilis* f. *borneensis*), Tixier (1978 as *C. mutabilis* f. *borneensis*, f. *floccodoides* and f. *subfalcata*), Mizutani (1966), Pócs et al. (2020). Perak, Sabah.

Cololejeunea obliqua (Nees et Mont.) Schiffn. – Benedix (1953 as *C. androgyna*, *C. nymannii*), Mizutani (1966 as *C. jelinekii* and *C. nymannii*, 1970 as *C. nymannii*), Tixier (1971 as *C. jelinekii*, 1980a, 1985 both as *C. scabriflora*), Kitagawa and Kodama (1974 as *C. nymannii*), Asthana and Srivastava (2003 as *C. jelinekii*), Pócs et al. (2020), Pesiu et al. (2021). Penang, Perak, Pahang, Terengganu, Sarawak, Sabah.

Cololejeunea ocellata (Horik.) Benedix – Pócs and Lee (2016). Pahang.

Cololejeunea ocelloides (Horik.) Mizut. – Benedix (1953 as *C. leonidens* and its var. *saccata*), Mizutani (1966, 1970 both as *C. leonidens*, 1984a), Inoue (1967a as *C. leonidens*), Tixier (1969 as *C. meijeri*, 1971, 1978, 1980a all as *C. leonidens*), Kitagawa and Kodama (1974 as *C. leonidens*), Pesiu et al. (2021). Perak, Pahang, Terengganu, Sabah.

Cololejeunea pacifica Pócs – Pócs and Lee (2016). Kelantan.

Cololejeunea papillosa (K.I.Goebel) Mizut. – Herzog (1950 as *Aphanolejeunea microscopica* var. *borneensis*), Mizutani (1966), Pócs and Piippo (1999 as *A. borneensis*), Pócs and Bernecker (2009), Pócs and Lee (2016), Pócs et al. (2020). Pahang, Sarawak, Sabah.

Cololejeunea peponiformis Mizut. – Mizutani (1970), Pócs et al. (2020). Sabah.

Cololejeunea peraffinis (Schiffn.) Schiffn. – Herzog (1952b as *Taeniolejeunea peraffinis*), Benedix (1953), Mizutani (1966, 1970, 1984a), Kitagawa (1969a), Kitagawa and Kodama (1974), Tixier (1978 as *C. peraffinis* var. *elegans*, 1980a). Penang, Pahang, Johor, Sarawak, Sabah.

Cololejeunea perakensis Tixier – Tixier (1985). Perak.

Cololejeunea planissima (Mitt.) Abeyw. – Mizutani (1970, 1984b), Kitagawa (1971), Kitagawa and Kodama (1974), Tixier (1985), Asthana and Srivastava (2003), Pócs et al. (2020), Pesiu et al. (2021). Penang, Perak, Terengganu, Johor, Sabah.

- Cololejeunea platyneura*** (Spruce) A.Evans – Mizutani (1966 as *C. astyla*), Zhu and So (1998b, 2001), Cheah (2017). Pahang, Sabah.
- Cololejeunea pretiosa*** Benedix – Kitagawa and Kodama (1974). Sabah.
- Cololejeunea pseudofloccosa*** (Horik.) Benedix – Benedix (1953), Mizutani (1966, 1970), Kitagawa and Kodama (1974), Tixier (1980a). Pahang, Sabah.
- Cololejeunea pseudoschmidii*** Tixier – Tixier (1985). Penang.
- Cololejeunea pseudostephanii*** Tixier – Pócs and Lee (2016). Pahang.
- Cololejeunea pseudostipulata*** P.Syd. – Mizutani (1970). Sabah.
- Cololejeunea raduliloba*** Steph. – Mizutani (1966), Pócs et al. (2020). Sabah.
- Cololejeunea reineckeana*** Steph. – Tixier (1985). Perak.
- Cololejeunea rosellata*** Mizut. – Mizutani (1966), Kitagawa and Kodama (1974), Tixier (1985). Sabah.
- Cololejeunea schmidii*** Steph. – Mizutani (1966, 1970 as *C. benedixii*), Kitagawa and Kodama (1974), Cheah (2017), Sarimi et al. (2021), Pesiu et al. (in press). Pahang, Terengganu, Sabah.
- Cololejeunea selangorensis*** Tixier – Tixier (1985). Selangor.
- Cololejeunea serrulata*** Steph. – Kitagawa (1971). Penang.
- Cololejeunea setosa*** Mizut. – Mizutani (1966), Eggers et al. (1998). Sarawak, Sabah.
- Cololejeunea shimizui*** N.Kitag. – Kitagawa (1969c, 1981). Kelantan.
- Cololejeunea siamensis*** Steph. – Benedix (1953 as *C. pluriplicata*, orth. var. of *C. pluripunctata*), Mizutani (1966, 1970 both as *C. pluripunctata*), Tixier (1978), Wolseley et al. (1996). Penang, Negeri Sembilan, Johor, Sabah.
- Cololejeunea sigmoidea*** Jovet-Ast et Tixier – Mizutani (1966), Kitagawa (1969c), Tixier (1971, 1980a), Kitagawa and Kodama (1974), Bernecker-Lücking and Morales (1999), Pesiu et al. (2021). Penang, Pahang, Terengganu, Sabah.
- Cololejeunea sigmoidea*** var. ***dubia*** Tixier – Tixier (1985). Perak.
- Cololejeunea smitinandii*** Tixier – Pócs and Lee (2016). Kelantan.
- Cololejeunea spathulifolia*** (Steph.) H.A.Mill. – Pócs and Lee (2016). Kelantan.
- Cololejeunea sphaerodonta*** Mizut. – Mizutani (1966), Zhu (1995), Zhu and So (2001), Pócs et al. (2020). Sabah.
- Cololejeunea stephanii*** Benedix – Benedix (1953), Mizutani (1966, 1970), Kitagawa and Kodama (1974), Tixier (1974, 1978, 1980a), Zhu (1995), Eggers et al. (1998), Pócs et al. (2020), Pesiu et al. (2021, in press). Kedah, Perak, Pahang, Terengganu, Johor, Sarawak, Sabah.
- Cololejeunea stoniana*** Tixier – Tixier (1976, 1985), Eggers et al. (1998). Johor, Sarawak.
- Cololejeunea stylosa*** Steph. – Tixier (1985), Pócs and Lee (2016), Pócs et al. (2020). Penang, Kelantan, Sabah.
- Cololejeunea tenella*** Benedix – Benedix (1953), Tixier (1974, 1978, 1985 the latter two as *C. tenella* var. *vittata*), Wolseley et al. (1996), Pócs et al. (2020). Kedah, Penang, Perak, Negeri Sembilan, Johor, Sabah.
- Cololejeunea thailandensis*** Tixier – Tixier (1985). Penang.
- Cololejeunea triapiculata*** (Herzog) Tixier – Tixier (1971, 1980a, 1985). Pahang.

Cololejeunea trichomanis (Gottsche) Besch. – Mizutani (1966, 1970 both as *C. goebelii*), Kitagawa (1971 as *C. goebelii*), Kitagawa and Kodama (1974 as *C. goebelii*), Tixier (1974, 1985 as *C. balansae* and *C. goebelii*), Asthana and Srivastava (2003). Kedah, Penang, Perak, Sabah.

Cololejeunea tridentata Tixier – Tixier (1985), Eggers et al. (1998). Johor, Sarawak.

Cololejeunea uchimae Amakawa – Tixier (1985 as *C. pakseana*). Selangor.

Cololejeunea veillonii Tixier – Pócs and Lee (2016). Pahang.

Cololejeunea verrucosa Steph. – Benedix (1953), Pesiu et al. (2021, in press). Terengganu, Johor.

Cololejeunea verrucosa var. ***rectispina*** (Herzog) Benedix – Benedix (1953), Kitagawa and Kodama (1974). Sarawak, Sabah.

Cololejeunea wightii Steph. – Stephan (1895), Kitagawa (1971, 1972), Tixier (1971, 1985). Penang, Pahang.

Colura acroloba (Prantl) Jovet-Ast – Jovet-Ast (1954, 1967, 1976), Mizutani (1966, 1970), Kitagawa (1969a), Tixier (1971, 1980a), Kitagawa and Kodama (1974), Wolseley et al. (1996), Pócs et al. (2020), Pesiu et al. (2021, in press). Kedah, Selangor, Pahang, Negeri Sembilan, Terengganu, Johor, Sarawak, Sabah.

Colura ari (Steph.) Steph. – Herzog (1952b as *C. javanica*), Jovet-Ast (1976), Mizutani (1966, 1970), Sarimi et al. (2021), Pesiu et al. (in press). Perak, Terengganu, Sarawak, Sabah.

Colura bisvoluta Herzog et Jovet-Ast – Jovet-Ast (1954). Malacca.

Colura brevistyla Herzog – Pócs and Lee (2016). Kelantan.

Colura clementis Grolle – Jovet-Ast (1967). Sabah.

Colura conica (Sande Lac.) K.I.Goebel – Jovet-Ast (1958, 1967), Mizutani (1966, 1970 both as *C. acutifolia*), Kitagawa (1969a as *C. acutifolia*), Kitagawa and Kodama (1974), Wolseley et al. (1996), Pócs et al. (2020), Pesiu et al. (2021, in press). Penang, Negeri Sembilan, Terengganu, Sarawak, Sabah.

Colura corynophora (Nees, Lindenb. et Gottsche) Trevis. – Herzog (1952b as *C. trialata*), Mizutani (1966, 1970), Jovet-Ast (1954, 1958, 1967, 1976), Kitagawa (1969c), Wolseley et al. (1996), Pócs et al. (2020), Pesiu et al. (2021, in press). Penang, Perak, Negeri Sembilan, Terengganu, Johor, Sarawak, Sabah.

Colura crenulata Grolle – Jovet-Ast (1967). Sabah.

Colura cristata Jovet-Ast – Jovet-Ast (1976), Sangrattanaprasert et al. (2019), Pócs et al. (2020). Penang, Sabah.

Colura cymbalifera Herzog et Jovet-Ast – Jovet-Ast (1954). Peninsular Malaysia (type locality).

Colura galeata Jovet-Ast – Jovet-Ast (1967). Sabah.

Colura imperfecta Steph. – Jovet-Ast (1954), Eggers et al. (1998). Pahang, Sarawak.

Colura inflata K.I.Goebel – Müller and Schäfer-Verwimp (1999). Perak.

Colura inuii Horik. – Cheah (2017), Sarimi et al. (2021), Pesiu et al. (in press). Terengganu, Pahang.

Colura karstenii K.I.Goebel – Jovet-Ast (1954), Lee et al. (2013), Sangrattanaprasert et al. (2018). Kedah, Pahang, Johor, Sabah.

Colura leratii (Steph.) Steph. – Jovet-Ast (1967 as *C. apiculata*). Sabah.

Colura maxima Jovet-Ast – Pócs et al. (2020). Sabah.

Colura mosenii Steph. – Pócs and Lee (2016). Kelantan.

Colura ornata K.I.Goebel – Schiffner (1893 as *Lejeunea ornata*, 1898 as *Colurolejeunea ornata*), Jovet-Ast (1954, 1967), Mizutani (1966), Kitagawa and Kodama (1974), Wolseley et al. (1996), Pócs et al. (2020). Penang, Pahang, Negeri Sembilan, Sarawak, Sabah.

Colura pluridentata Jovet-Ast – Mizutani (1970). Sabah.

Colura sigmoidea Sangratt., Chantanaorr. et R.L.Zhu – Sangrattanaprasert et al. (2019). Pahang.

Colura speciosa Jovet-Ast – Pócs and Lee (2016). Kelantan.

Colura strophiolata Jovet-Ast – Jovet-Ast (1976). Kedah.

Colura superba (Mont.) Steph. – Jovet-Ast (1967), Pócs et al. (2020). Sabah.

Colura tenuicornis (A.Evans) Steph. – Jovet-Ast (1954, 1976), Mizutani (1970), Tixier (1980a), Pócs et al. (2020). Pahang, Johor, Sabah.

Colura valida Jovet-Ast – Sangrattanaprasert et al. (2019). Pahang.

Colura verdoornii Herzog et Jovet-Ast – Jovet-Ast (1954, 1976), Tixier (1980a), Sangrattanaprasert et al. (2019), Pócs et al. (2020). Kedah, Pahang, Johor, Sabah.

Conoscyphus trapezoides (Sande Lac.) Schiffn. – De Notaris (1874 as *Diploscyphus borneensis*), Herzog (1950 as *C. inflexifolius*), Inoue (1967a), Kitagawa and Kodama (1974), Piippo (1989), Piippo et al. (2014). Pahang, Malacca, Sarawak, Sabah.

Cryptolophocolea ciliolata (Nees) L.Söderstr., Crand.-Stotl., Stotler et Váňa – Kitagawa and Kodama (1974 as *Lophocolea ciliolata*), Piippo (1989 as *Chiloscyphus ciliolatus*), Inoue (1967a, 1968b both as *L. ciliolata*), Cheah (2017 as *C. ciliolatus*). Pahang, Sabah.

Cryptolophocolea costata (Nees) L.Söderstr. – Herzog (1950 as *Lophocolea costata*), Inoue (1967a as *L. costata*), Kitagawa and Kodama (1974 as *L. costata*), Piippo (1989 as *Chiloscyphus costatus*), Akiyama et al. (2001 as *L. costata*). Pahang, Sarawak, Sabah.

Cryptolophocolea levieri (Schiffn.) L.Söderstr. – Piippo (1989 as *Chiloscyphus paroicus*). Sabah.

Cryptolophocolea massalongoana (Schiffn.) L.Söderstr. – Pocock et al. (1984 as *Lophocolea massalongoana*). Pahang.

Cyathodium foetidissimum Schiffn. – Lang (1905). Perak.

Cyathodium cavernarum Kunze – Lee and Gradstein (2021). Kelantan.

Cylindrocolea tagawae (N.Kitag.) R.M.Schust. – Kitagawa (1971 as *Cephaloziella tagawae*). Penang.

Dactylophorella muricata (Gottsche) R.M.Schust. – Mizutani (1970 as *Drepanolejeunea muricata*), Yong and Chan (2017). Perak, Sabah.

Denotarisia linguiifolia (De Not.) Grolle – De Notaris (1874 as *Plagiochila linguiifolia*), Inoue (1968b as *Jamesoniella ovifolia*), Amakawa (1969a as *J. flexicaulis* f. *affinis*), Kitagawa (1970 as *J. pulchra*), Grolle (1971), Kitagawa and Kodama (1973), Kürschner (1990), Váňa (1991c), Akiyama et al. (2001). Pahang, Sarawak, Sabah.

- Dinckleria singularis*** (Schiffn.) M.A.M.Renner, Schäf.-Verw. et Heinrichs – Inoue (1989 as *Plagiochila singularis*), Cheah (2017 as *P. singularis*). Pahang, Sabah.
- Diplasiolejeunea cavifolia*** Steph. – Tixier (1971 as *D. brachyclada*, 1980a as *D. javanica*), Mizutani (1966 as *D. javanica*, 1970 as *D. brachyclada*), Kitagawa and Kodama (1974), Dong et al. (2012), Pócs et al. (2020). Perak, Pahang, Sabah.
- Diplasiolejeunea cobrensis*** Steph. – Mizutani (1970 as *D. incurvata*). Sabah.
- Diplasiolejeunea jovet-astiae*** Grolle – Grolle (1966), Kitagawa and Kodama (1974), Tixier (1980a), Dong et al. (2012), Pócs et al. (2020). Pahang, Sarawak, Sabah.
- Diplasiolejeunea longilobula*** Herzog – Herzog (1950). Sarawak.
- Diplasiolejeunea patelligera*** Herzog – Mizutani (1970 as *D. neobrachyclada*), Tixier (1980a, also as *D. neobrachyclada*), Dong et al. (2012). Pahang, Sabah.
- Diplasiolejeunea unidentata*** (Lehm. et Lindenb.) Schiffn. – Pócs and Lee (2016 as *D. rudolphiana*). Kelantan.
- Diplophyllum kinabaluense*** Furuki et Suleiman – Furuki and Suleiman (2016). Sabah.
- Diplophyllum nanum*** Herzog – Müller and Schäfer-Verwimp (1999). Pahang.
- Drepanolejeunea angustifolia*** (Mitt.) Grolle – Herzog (1950 as *D. tenuis*), Tixier (1971 as *D. tenuis*), Kamimura (1974 as *D. tenuis*). Pahang, Sarawak, Sabah.
- Drepanolejeunea bischlerae*** (Grolle) Grolle et R.L.Zhu – Grolle and Zhu (2000). Sabah.
- Drepanolejeunea ciliata*** Mizut. – Mizutani (1970), Kamimura (1974). Sabah.
- Drepanolejeunea cyclops*** (Sande Lac.) Grolle et R.L.Zhu – Herzog (1943 as *Rhaphidolejeunea cyclops*), Mizutani (1966, 1970 both as *R. cyclops*), Bischler (1968 as *R. cyclops*). Selangor, Sarawak, Sabah.
- Drepanolejeunea dactylophora*** (Nees, Lindenb. et Gottsche) J.B.Jack et Steph. – Herzog (1934, 1950), Mizutani (1966, 1970), Kamimura (1974), Kitagawa and Kodama (1974), Pócs et al. (2020), Pesiu et al. (2021). Terengganu, Johor, Sarawak, Sabah.
- Drepanolejeunea elegans*** Herzog – Herzog (1936). Sabah.
- Drepanolejeunea fissicornua*** Steph. – Mizutani (1990), Pócs et al. (2014, 2020), Pócs and Lee (2016). Kelantan, Pahang, Selangor, Sabah.
- Drepanolejeunea foliocola*** Horik. – Eggers (2006). Pahang.
- Drepanolejeunea intermedia*** Zwickel – Grolle (1976). Sabah.
- Drepanolejeunea levicornua*** Steph. – Tixier (1971 ['*laevicornua*']), Mizutani (1990), Eggers et al. (1998), Pócs et al. (2014), Pesiu et al. (2021, in press). Selangor, Pahang, Terengganu, Sarawak.
- Drepanolejeunea longicornua*** (Herzog) Mizut. – Mizutani (1970 as *D. levicornua* var. *longicornua*, 1990), Kitagawa and Kodama (1974 as *D. levicornua* var. *longicornua*), Pócs et al. (2020), Pesiu et al. (2021). Penang, Terengganu, Sarawak, Sabah.
- Drepanolejeunea longicruris*** (Steph.) Grolle et R.L.Zhu – Herzog (1943 as *Rhaphidolejeunea longicruris*), Bischler (1968 as *R. longicruris*), Kitagawa and Kodama (1974 as *R. longicruris*), Grolle and Zhu (2000). Sabah.
- Drepanolejeunea nymanii*** Steph. – Mizutani (1990). Sabah.
- Drepanolejeunea obliqua*** Steph. – Herzog (1939), Mizutani (1970). Johor, Sabah.

Drepanolejeunea obtriangulata T.Kodama – Kodama (1976), Pócs et al. (2014).

Selangor, Sabah.

Drepanolejeunea pentadactyla (Mont.) Steph. – Herzog (1934 as *D. micholitzii* and its var. *angustissima*), Tixier (1974 as *D. micholitzii*, 1980a as *D. micholitzii* var. *brevifolia*), Mizutani (1966, 1970 both as *D. micholitzii*), Kitagawa and Kodama (1974 as *D. micholitzii*), Pócs et al. (2014, 2020), Pesiu et al. (2021, in press). Kedah, Selangor, Pahang, Terengganu, Johor, Sarawak, Sabah.

Drepanolejeunea pentadactyla var. ***dactylophoroides*** (Herzog) Pócs – Herzog (1934 as *D. micholitzii* var. *dactylophoroides*). Sabah.

Drepanolejeunea pleiodictya Herzog – Tixier (1980a). Pahang.

Drepanolejeunea serricalyx Herzog – Pócs et al. (2020). Sabah.

Drepanolejeunea spicata (Steph.) Grolle et R.L.Zhu – Mizutani (1966 as *Rhaphidolejeunea spicata*), Bischler (1968 as *R. spicata*), Grolle and Zhu (2000), Pócs et al. (2014), Pesiu et al. (2021, in press). Pahang, Terengganu, Sarawak, Sabah.

Drepanolejeunea spinosocornuta Steph. – Tixier (1980a). Pahang.

Drepanolejeunea tenera K.I.Goebel – Herzog (1934 as *D. tenera* var. *genuina* and f. *goebelii*, 1952b), Mizutani (1966, 1970), Tixier (1971, 1974, 1980a as *D. tenera* f. *goebelii*), Kitagawa and Kodama (1974), Pócs et al. (2020). Kedah, Pahang, Sarawak, Sabah.

Drepanolejeunea ternatensis (Gottsche) Schiffn. – Herzog (1950, also as *D. ternatensis* var. *lancispina*), Mizutani (1966, 1970), Kamimura (1974), Cheah (2017), Pócs et al. (2020), Pesiu et al. (2021, in press). Pahang, Terengganu, Sarawak, Sabah.

Drepanolejeunea teysmannii (Gottsche) Steph. – Herzog (1950), Mizutani (1966, 1970), Inoue (1968b), Kamimura (1974, 1975), Kitagawa and Kodama (1974), Kürschner (1990), Pócs et al. (2020). Pahang, Sarawak, Sabah.

Drepanolejeunea thwaitesiana (Mitt.) Steph. – Goebel (1930 ['*Thwaitesii*']), Mizutani (1966, 1970, 1990), Tixier (1971, 1974, 1980a), Kitagawa and Kodama (1974), Pócs et al. (2020), Pesiu et al. (2021, in press). Kedah, Perak, Selangor, Pahang, Terengganu, Sabah.

Drepanolejeunea thwaitesiana var. ***zhengii*** R.L.Zhu – Zhu and So (2001). Pahang.

Drepanolejeunea tricornua Herzog – Mizutani (1970, 1990), Pócs et al. (2014, 2020). Selangor, Pahang, Sarawak, Sabah.

Drepanolejeunea vesiculosaa (Mitt.) Steph. – Herzog (1950 as *D. vesiculosaa* f. *robusta*), Inoue (1967a, 1968b), Mizutani (1966, 1970), Kamimura (1974), Kitagawa and Kodama (1974), Kürschner (1990), Lee et al. (2013), Pócs et al. (2020). Perak, Pahang, Sarawak, Sabah.

Dumortiera hirsuta (Sw.) Nees – Johnson (1958), Akiyama et al. (2001), Ludwiczuk and Asakawa (2010). Pahang, Sabah.

Dumortiera hirsuta subsp. ***nepalensis*** (Taylor) R.M.Schust. – Campbell (1915 as *D. trichocephala*, 1918 as *D. calcicola*), Evans (1919 as *D. nepalensis*), Kitagawa and Kodama (1974 as *D. nepalensis*). Perak, Selangor, Sarawak, Sabah.

Eotrichocolea furukii T.Katag. – Katagiri et al. (2012). Sabah.

Frullania alstonii Verd. – Verdoorn (1932b), Hattori (1976). Johor, Sabah.

Frullania apiculata (Reinw., Blume et Nees) Nees – Verdoorn (1932a), Herzog (1950), Inoue (1967a, 1968b), Tixier (1974, 1980a), Kamimura (1974, 1975), Kitagawa and Kodama (1974), Hattori (1975c, 1976), Kodama (1976), Pócs et al. (2020), Pesiu et al. (2021). Kedah, Terengganu, Pahang, Selangor, Sarawak, Sabah.

Frullania apiculata var. *goebelii* Schiffn. – Verdoorn (1934b), Herzog (1950), Tixier (1971). Pahang, Sarawak, Sabah.

Frullania armatifolia Verd. – Hattori (1976 as *F. altemammillata*). Sabah.

Frullania armitiana Steph. – Kamimura (1974). Sabah.

Frullania benjaminiiana Inoue – Inoue (1967a,b), Hattori (1975a). Pahang.

Frullania berthoumieu Steph. – Hattori (1976). Sabah.

Frullania brotheri Steph. – Stephani (1894), Schiffner (1898), Bonner (1965), Hattori (1975a,c, 1976, 1980), Kürschner (1990), Sukkharak (2018). Perlis, Perak, Selangor, Pahang, Malacca, Johor, Sabah.

Frullania claviloba Steph. – Verdoorn (1930, 1932b), Herzog (1950), Kamimura (1974), Kitagawa and Kodama (1974), Hattori (1974b, 1975b,c, 1976). Selangor, Johor, Sarawak, Sabah.

Frullania clemensiana Verd. – Verdoorn (1932a), Hattori and Kamimura (1971 as *Steereopsis mastigophoroides*), Hattori (1976 as *S. clemensiana*). Sabah.

Frullania cordistipula (Reinw., Blume et Nees) Nees – Kamimura (1974, 1975). Sabah.

Frullania ericoides (Nees) Mont. – Verdoorn (1929 as *F. squarrosa*), Hattori (1975a, 1976). Penang, Pahang, Sabah.

Frullania fallax Gottsche – Verdoorn (1930). Pahang.

Frullania gaudichaudii (Nees et Mont.) Nees et Mont. – Verdoorn (1930, 1932a), Herzog (1950), Kitagawa and Kodama (1974), Hattori (1975c, 1976), Cheah (2017). Selangor, Pahang, Sarawak, Sabah.

Frullania gracilis (Reinw., Blume et Nees) Nees – Verdoorn (1932a as *F. minor*), Herzog (1950), Kamimura (1974, 1975), Kitagawa and Kodama (1974), Hattori (1975a, 1975c as *F. minor*, 1976), Kürschner (1990). Selangor, Pahang, Malacca, Johor, Sarawak, Sabah.

Frullania grandistipula Lindenb. – Verdoorn (1932a), Tixier (1971), Hattori (1976). Pahang, Sabah.

Frullania hasskarliana Lindenb. – Verdoorn (1932a), Hattori (1973, 1975a, 1976 as *F. hasskarliana* var. *integribracteata*), Kitagawa and Kodama (1974). Pahang, Sabah.

Frullania bottana S.Hatt. – Hattori (1976, 1986). Sarawak.

Frullania hypoleuca Nees – Hattori (1976), Kamimura (1974). Sarawak, Sabah.

Frullania integrifistipula (Nees) Nees – Verdoorn (1930, 1932a), Herzog (1950), Kamimura (1974), Kitagawa and Kodama (1974), Tixier (1974, 1980a), Hattori (1976, 1980). Kedah, Pahang, Johor, Sarawak, Sabah.

Frullania intermedia (Reinw., Blume et Nees) Nees – Verdoorn (1930, 1934b), Herzog (1950), Kitagawa and Kodama (1974), Hattori (1975c, 1976 as *F. intermedia* var. *submorokensis* and *F. intermedia* f. *billardieriana*, 1980), Wolseley et al. (1996). Penang, Perak, Kelantan, Negeri Sembilan, Johor, Sarawak, Sabah.

Frullania junghuhniana Gottsche – Verdoorn (1932a, 1934b), Hattori (1974c, 1976), Kürschner (1990). Sabah.

Frullania junghuhniana var. *bisexualis* S.Hatt. – Hattori (1976), Kodama (1976). Sabah.

Frullania junghuhniana var. *tenella* (Sande Lac.) Grolle et S.Hatt. – Kamimura (1974 as *F. perversa*), Tixier (1974 as *Neohattoria perversa*), Hattori (1975a, 1976 as *F. junghuhniana* var. *minutissima* and *F. perminuta*). Kedah, Pahang, Sabah.

Frullania meijeri S.Hatt. – Hattori (1974c, 1976). Sabah.

Frullania meyeniana Lindenb. – Verdoorn (1934b), Tixier (1971), Hattori (1975c). Pahang, Sabah.

Frullania mizutanii Kamim. et S.Hatt. – Hattori and Kamimura (1973), Kamimura (1974), Hattori (1976, 1978), Kodama (1976). Sabah.

Frullania moniliata (Reinw., Blume et Nees) Mont. – Verdoorn (1932a as *F. moniliata* subsp. *breviramea*), Hattori (1972, 1976 both as *F. tamarisci* var. *breviramea*). Sabah.

Frullania monocera (Hook.f. et Taylor) Gottsche, Lindenb. et Nees – Hattori (1976 as *F. hampeana*). Sabah.

Frullania nepalensis (Spreng.) Lehm. et Lindenb. – Verdoorn (1932b). Pahang.

Frullania nigricaulis (Reinw., Blume et Nees) Nees – Verdoorn (1930, 1932a), Hattori (1975a). Pahang, Sabah.

Frullania nodulosa (Reinw., Blume et Nees) Nees – Verdoorn (1930, 1932a, 1934b), Herzog (1950), Inoue (1968b), Kitagawa and Kodama (1974), Hattori (1975c, 1980). Perak, Selangor, Pahang, Johor, Sarawak, Sabah.

Frullania notarisi Steph. – Verdoorn (1934b), Hattori (1974c, 1976), Kitagawa and Kodama (1974), Tixier (1974). Kedah, Sarawak, Sabah.

Frullania obscura (Sw.) Mont. – Hattori (1975a as *F. wallichiana*). Pahang.

Frullania ocellata S.Hatt. et Kamim. – Hattori and Kamimura (1973), Kamimura (1974). Sabah.

Frullania orientalis Sande Lac. – Verdoorn (1937), Hattori (1976). Pahang, Sabah.

Frullania ornithocephala (Reinw., Blume et Nees) Nees – Verdoorn (1934b), Hattori (1975a, 1976 as *F. ornithocephala* f. *magnilobula* and f. *retusa*, 1980). Pahang, Sabah.

Frullania papillata Steph. – Kamimura (1974, 1975). Sabah.

Frullania papillolobula S.Hatt. – Hattori (1975b, 1976). Sabah.

Frullania polyptera Taylor – Hattori (1975a). Pahang.

Frullania pullei Verd. – Tixier (1974). Kedah.

Frullania ramuligera (Nees) Mont. – Verdoorn (1932a, 1934b), Hattori (1972), Pócs et al. (2020). Sabah.

Frullania recurvistipula S.Hatt. – Hattori (1975a, 1986). Pahang.

Frullania reflexistipula Sande Lac. – Verdoorn (1932a), Hattori (1975a as *F. philippinensis*, 1976). Pahang, Sabah.

Frullania repandistipula Sande Lac. subsp. *spinibractea* S.Hatt. – Hattori (1975c, 1976 as *F. repandistipula* subsp. *spinifera*), Pesiu et al. (in press). Terengganu, Sabah.

Frullania sabahana S.Hatt. – Hattori (1976, 1980). Sarawak, Sabah.

Frullania sarawakensis S.Hatt. – Hattori (1976, 1980). Sarawak.

Frullania serrata Gottsche – Verdoorn (1932b, 1934b), Herzog (1950), Kamimura (1974, 1975), Kitagawa and Kodama (1974), Hattori (1975a, 1976 as *F. serrata* f. *crispulodentata*), Ludwiczuk and Asakawa (2010). Pahang, Johor, Sarawak, Sabah.

Frullania sinuata Sande Lac. – Verdoorn (1932b, 1934b), Hattori (1975a, 1980). Johor, Pahang.

Frullania sublignosa Steph. – Stephani (1910 as *F. borneensis*), Verdoorn (1930), Hattori (1976). Sarawak.

Frullania subnigricaulis S.Hatt. – Hattori (1974b, 1975a, 1976). Pahang, Sabah.

Frullania subocellata S.Hatt. – Pócs et al. (2014). Pahang.

Frullania ternatensis Gottsche – Verdoorn (1930, 1932a, 1934b), Herzog (1950), Tixier (1971, 1974), Kamimura (1974, 1975), Kitagawa and Kodama (1974), Hattori (1975c). Kedah, Pahang, Sarawak, Sabah.

Frullania ternatensis var. *nonappendiculata* S.Hatt. – Hattori (1976). Sarawak, Sabah.

Frullania togashiana S.Hatt. – Hattori (1975a). Pahang.

Frullania tricarinata Sande Lac. – Kamimura (1974). Sabah.

Frullania trichodes Mitt. – Verdoorn (1930, 1934b as *F. picta*, *F. tenuicaulis* and *F. vethii*), Herzog (1950 as *F. picta*, *F. tenuicaulis* and *F. vethii*), Kitagawa (1969c as *F. picta*), Kamimura (1974, 1975 both as *F. tenuicaulis*), Kitagawa and Kodama (1974 as *F. tenuicaulis*), Tixier (1974 as *F. picta*), Hattori (1976 as *F. vethii* f. *acutiloba*), Pócs et al. (2014), Cheah (2017). Kedah, Penang, Pahang, Johor, Sarawak, Sabah.

Frullania vaginata (Sw.) Nees – Hattori (1975a). Pahang.

Frullania venusta S.Hatt. – Hattori (1974b, 1976). Sabah.

Gottschelia schizophleura (Spruce) Grolle – Inoue (1967a as *Jamesoniella microphylla*), Amakawa (1969a as *J. microphylla*), Váňa (1991c). Pahang, Sabah.

Gymnomitrion incompletum (Gottsche) Váňa – Kitagawa (1973 as *G. laceratum* var. *borneense*), Kitagawa and Kodama (1973 as *G. laceratum* var. *borneense*), Váňa (1991a). Sabah.

Gymnomitrion revolutum (Nees) H.Philib. – Kitagawa (1967 as *Marsupella revoluta*), Kitagawa and Kodama (1973 as *M. revoluta*), Váňa (1991a as *M. revoluta*), Akiyama et al. (2001 as *M. revoluta*). Sabah.

Gymnomitrion subintegrum (S.W.Arnell) Váňa – Kitagawa (1967 as *Marsupella integra*), Váňa (1991a *M. subintegra*). Sabah.

Haplomitrium blumei (Nees) R.M.Schust. – Bartholomew-Began (1991). Pahang.

Herbertus aduncus (Dicks.) Gray – Kürschner (1990 as *H. dicranus* [*dicrananus*']), Juslén (2006 as *H. dicranus* and *H. longispinus*), Cheah (2017 as *H. dicranus*). Pahang, Sabah.

Herbertus ceylanicus (Steph.) Abeyw. – Juslén (2006). Pahang.

Herbertus pilifer (Steph.) H.A.Mill. – Juslén (2006). Sarawak.

Herbertus ramosus (Steph.) H.A.Mill. – Kamimura (1975 [*Herbertha ramosa*']). Sabah.

Herbertus sendtneri (Nees) Lindb. – Kürschner (1990 as *H. armitanus* and *H. circinatus*), Akiyama et al. (2001 as *H. armitanus*), Juslén (2006 as *H. circinatus*), Cheah (2017 as *H. armitanus*). Pahang, Sabah.

Heteroscyphus acutangulus (Schiffn.) Schiffn. – Inoue (1968b as *Chiloscyphus acutangulus*). Pahang.

Heteroscyphus argutus (Reinw., Blume et Nees) Schiffn. – Herzog (1950 as *Chiloscyphus argutus*), Kitagawa (1969c), Tixier (1971 as *C. argutus*), Kitagawa and Kodama (1974 as *C. argutus*), Inoue (1981), Piippo (1989), Wolseley et al. (1996). Penang, Pahang, Negeri Sembilan, Sarawak, Sabah.

Heteroscyphus aselliformis (Reinw., Blume et Nees) Schiffn. – Mitten and Wright (1894 as *Chiloscyphus aselliformis*), Herzog (1950 as *C. aselliformis* var. *neesii*), Inoue (1967a as *C. aselliformis*), Kitagawa and Kodama (1974), Piippo (1989), Kürschner (1990 as *C. aselliformis*), Ludwiczuk and Asakawa (2010). Pahang, Sarawak, Sabah.

Heteroscyphus balnetii (Herzog) Grolle – Piippo (1989). Sabah.

Heteroscyphus coalitus (Hook.) Schiffn. – Herzog (1950 as *Chiloscyphus communis*), Inoue (1967a, 1968b both as *C. communis*), Kitagawa (1971 as *H. communis*), Tixier (1971 as *C. communis*), Kitagawa and Kodama (1974 as *C. communis*), Kamimura (1975 as *H. bescherellei*), Piippo (1989). Penang, Pahang, Sarawak, Sabah.

Heteroscyphus diestianus (Sande Lac.) Piippo – Kitagawa and Kodama (1974 as *Chiloscyphus diestianus*), Piippo (1989), Akiyama et al. (2001). Sarawak, Sabah.

Heteroscyphus integrerrimus (Schiffn.) Gradst. et G.E.Lee – Pócs et al. (2014 as *Chiloscyphus integrerrimus*). Pahang.

Heteroscyphus iwatsukii (S.Hatt.) Piippo – Hattori (1964 as *Saccogynidium iwatsukii*), Piippo (1989). Sabah.

Heteroscyphus parvulus (Schiffn.) Schiffn. – Kitagawa and Kodama (1974 as *Chiloscyphus parvulus*). Sabah.

Heteroscyphus splendens (Lehm. et Lindenb.) Grolle – De Notaris (1874 as *Chiloscyphus decurrens* and *C. densifolius*), Herzog (1950, 1952b both as *C. decurrens*), Inoue (1967a, 1968b, both as *C. decurrens*), Kitagawa (1969c as *C. decurrens*), Kitagawa and Kodama (1974 as *C. decurrens*), Tixier (1974 as *C. decurrens*), Piippo (1989), Kürschner (1990), Akiyama et al. (2001). Kedah, Penang, Pahang, Sarawak, Sabah.

Heteroscyphus succulentus (Gottscche) Schiffn. – De Notaris (1874 as *Chiloscyphus concinnus*), Stephani (1907 as *C. succulentus*), Herzog (1950 as *C. succulentus*), Kitagawa (1973 as *C. succulentus*), Kitagawa and Kodama (1974 as *C. succulentus*), Piippo (1989). Penang, Sarawak, Sabah.

Heteroscyphus tridentatus (Sande Lac.) Grolle – Cheah (2017). Pahang.

Heteroscyphus wettsteinii (Schiffn.) Schiffn. – Kitagawa and Kodama (1974 as *Chiloscyphus wettsteinii*), Müller and Schäfer-Verwimp (1999), Cheah (2017). Perak, Pahang, Sabah.

Hygrolepidium boschianum (Sande Lac.) R.M.Schust. – Grolle (1967). Malacca.

Isotachis japonica Steph. – Inoue (1967a). Pahang.

Jackiella angustifolia Herzog – Herzog (1950, 1952a), Váňa (1992). Sarawak, Sabah.

Jackiella javanica Schiffn. – Herzog (1950), Inoue (1967a), Kitagawa (1971), Váňa (1992). Penang, Pahang, Sarawak, Sabah.

Jackiella singapurensis Schiffn. – Kitagawa (1969c, 1981). Penang.

Jensenia decipiens (Mitt.) Grolle – Herzog (1950 as *Makednothallus obtusidens*), Kitagawa and Kodama (1974 as *J. zollingeri*), Grolle and Piippo (1986), Akiyama et al. (2001), Forrest et al. (2005). Sarawak, Sabah.

Jubula javanica Steph. – Herzog (1950 as *J. hutchinsiae* subsp. *javanica*), Kitagawa and Kodama (1974 as *J. hutchinsiae* subsp. *javanica*), Váňa and Piippo (1989b as *J. hutchinsiae* subsp. *javanica*), Pätsch et al. (2010 as *J. hutchinsiae* subsp. *javanica*). Pahang, Sarawak, Sabah.

Kurzia abbreviata Mizut. – Mizutani (1974), Hürlimann (1985), Cheah (2017). Pahang, Sarawak, Sabah.

Kurzia abietinella (Herzog) Grolle – Herzog (1950 as *Lepidozia abietinella*), Kitagawa and Kodama (1973), Mizutani (1974), Kürschner (1990), Cheah (2017). Pahang, Sarawak, Sabah.

Kurzia borneensis Mizut. – Mizutani (1974), Kamimura (1975), Akiyama et al. (2001), Cheah (2017). Pahang, Sabah.

Kurzia geniculata Mizut. – Mizutani (1974), Cheah (2017). Pahang, Sabah.

Kurzia gonyotricha (Sande Lac.) Grolle – Herzog (1952b as *Lepidozia gonyotricha*), Kitagawa (1969c), Mizutani (1974), Akiyama et al. (2001). Penang, Sarawak, Sabah.

Kurzia lineariloba Mizut. – Mizutani (1974), Kürschner (1990), Cheah (2017). Pahang, Sabah.

Kymatocalyx rhizomaticus (Herzog) Gradst. et Váňa – Herzog (1950, 1952a both as *Stenorrhapis rhizomatica*), Váňa (1991c as *S. rhizomatica*). Sarawak.

Leiomitra merrillana (Steph.) T.Katag. – Kitagawa (1973 as *Trichocolea merrillana*), Akiyama et al. (2001 as *T. merrillana*), Katagiri and Deguchi (2012). Pahang, Sabah.

Lejeunea adpressa Nees – Inoue (1968b as *L. boninensis*), Kitagawa (1971 as *L. borneensis*), Mizutani (1978 as *L. borneensis*), Wolseley et al. (1996 as *L. caespitosa*), Zhu and So (2001 as *L. anisophylla*), Lee (2013 as *L. anisophylla*), Pesiu et al. (2021, in press). Perlis, Langkawi, Perak, Penang, Selangor, Kuala Lumpur, Pahang, Negeri Sembilan, Terengganu, Johor, Sarawak, Sabah.

Lejeunea alata Gottsche – Mizutani (1970 as *L. mitracalyx*), Kitagawa and Kodama (1974 as *L. mitracalyx*), Lee (2013). Pahang, Sabah.

Lejeunea albescens (Steph.) Mizut. – Eifrig (1937 as *Taxilejeunea albescens*), Inoue (1967a as *T. albescens*), Mizutani (1970), Hattori and Kamimura (1971), Lee (2013). Pahang, Sabah.

Lejeunea apiculata Sande Lac. – Mizutani (1966 as *Prionolejeunea unguis*, 1970 as *Stenolejeunea apiculata*), Tixier (1971 as *S. apiculata*), Kitagawa and Kodama (1974 as *P. unguis*), Lee (2013), Cheah (2017). Pahang, Sabah.

Lejeunea cocoes Mitt. – Mizutani (1963), Kamimura (1974), Lee (2013), Pesiu et al. (in press). Perlis, Pahang, Terengganu, Sarawak, Sabah.

Lejeunea compacta (Steph.) Steph. – Lee (2013). Sabah.

Lejeunea compressiuscula (Steph.) G.E.Lee et Heinrichs – Eifrig (1937 as *Taxilejeunea compressiuscula*), Tixier (1971 as *T. compressiuscula*). Pahang, Johor.

Lejeunea contracta Mizut. – Mizutani (1970), Kitagawa and Kodama (1974), Lee (2013). Sabah.

Lejeunea convexiloba M.L.So et R.L.Zhu – Sarimi et al. (2021). Sabah.

Lejeunea dimorpha Kodama – Kodama (1976), Lee (2013), Pócs et al. (2014). Selangor, Kelantan, Pahang, Sabah.

Lejeunea dipterota (Eifrig) G.E.Lee – Lee (2013). Sabah.

Lejeunea discreta Lindenb. – Mizutani (1970), Kitagawa and Kodama (1974), Tixier (1980a as *Xylolejeunea longiloba*), Lee et al. (2011b), Lee (2013). Perlis, Perak, Pahang, Sabah.

Lejeunea eifrigii Mizut. – Mizutani (1970), Lee et al. (2011b), Lee (2013). Pahang, Sabah.

Lejeunea exilis (Reinw., Blume et Nees) Grolle – Mizutani (1970), Pócs et al. (2020). Sabah.

Lejeunea exilis var. ***abnormis*** (Herzog) G.E.Lee – Lee (2013). Kelantan, Pahang.

Lejeunea flava (Sw.) Nees – Inoue (1967a), Mizutani (1970), Kitagawa and Kodama (1974), Lee (2013), Pócs et al. (2020). Kedah, Penang, Perak, Selangor, Kelantan, Pahang, Sabah.

Lejeunea flavaida Mitt. – Kamimura (1974 as *Pycnolejeunea flavaida*), Inoue (1967a as *P. flavaida*). Pahang, Sabah.

Lejeunea fleischeri (Steph.) Mizut. – Lee (2013). Perak, Pahang.

Lejeunea gradsteinii G.E.Lee, Damanhuri et Latiff – Lee et al. (2011a), Lee (2013), Pócs and Lee (2016). Pahang, Sabah.

Lejeunea kinabalensis Mizut. – Mizutani (1970), Lee (2013). Sabah.

Lejeunea leratii (Steph.) Mizut. – Eifrig (1937 as *Taxilejeunea patersonii*). Sabah.

Lejeunea lumbricoides (Nees) Nees – Eifrig (1937 as *Taxilejeunea lumbricoides*), Mizutani (1970), Kitagawa and Kodama (1974), Tixier (1980a), Lee (2013). Pahang, Sabah.

Lejeunea malaysiana G.E.Lee et Pócs - Lee et al. (in press). Pahang.

Lejeunea micholitzii Mizut. – Mizutani (1970), Lee (2013), Pócs et al. (2014, 2020), Pesiu et al. (2021). Langkawi, Selangor, Pahang, Negeri Sembilan, Kelantan, Terengganu, Sarawak, Sabah.

Lejeunea microloba Taylor – Mizutani (1970 as *L. chalmersii*), Lee (2013). Sabah.

Lejeunea mimula Hürl. – Tixier (1971 as *Taxilejeunea luteola*), Mizutani (1970 as *L. luteola*), Kitagawa and Kodama (1974 as *L. luteola*), Lee (2013). Pahang, Sabah.

Lejeunea mizutanii Grolle – Mizutani (1970 as *L. zollingeri*), Lee (2013). Sabah.

Lejeunea papilionacea Prantl – Mizutani (1966 as *L. infestans* and *L. pterota*, 1970 as *L. herzogii* and *L. infestans*, 1972b as *L. diversitexta*), Kitagawa and Kodama (1974 as *L. diversitexta*), Zhu and Grolle (2001), Lee (2013), Pócs et al. (2020). Kedah, Langkawi, Selangor, Kelantan, Pahang, Sarawak, Sabah.

Lejeunea patersonii (Steph.) Steph. – Inoue (1967a), Lee (2013). Kuala Lumpur, Kelantan, Pahang, Johor.

Lejeunea patriciae Schäf.-Verw. – Tixier (1971 as *L. pilifera*), Schäfer-Verwimp (2001, 2006), Lee (2013). Penang, Perak, Kelantan, Pahang.

Lejeunea pectinella Mizut. – Mizutani (1970), Lee (2013). Sabah.

Lejeunea pulchritflora (Pearson) G.E.Lee, Bechteler, Pócs, Schäf.-Verw. et Heinrichs – Lee (2013 as *L. tamaspocsii*), Lee and Gradstein (2013 as *L. tamaspocsii*), Lee et al. (2016). Kelantan, Pahang, Sabah.

Lejeunea sordida (Nees) Nees – Eifrig (1937 as *Taxilejeunea sordida*), Mizutani (1970), Lee et al. (2011a, 2011b), Lee (2013). Perlis, Langkawi, Kedah, Penang, Perak, Selangor, Kelantan, Pahang, Johor, Sarawak, Sabah.

Lejeunea stenodentata M.A.M.Renner et Pócs – Herzog (1950 as *Crossotolejeunea borneensis*). Mizutani (1966, 1970 both as *C. borneensis*, 1972a as *Drepanolejeunea dentata*). Sarawak, Sabah.

Lejeunea stephaniana Mizut. – Mizutani (1966, 1970), Lee (2013). Sabah.

Lejeunea thallophora (Eifrig) Gradst. – Zhu et al. (2018b). Sabah.

Lejeunea trinitensis Lindenb. – Reiner-Drehwald and Grolle (2012). Johor.

Lejeunea tuberculosa Steph. – Lee (2013). Kedah, Penang, Perak, Selangor, Pahang, Sabah.

Lejeunea umbilicata (Nees) Nees – Herzog (1950 as *Taxilejeunea umbilicata*), Mizutani (1970), Kitagawa and Kodama (1974), Tixier (1980a), Grolle (1988 as *L. cuculliflora*), Lee (2013). Perak, Selangor, Kelantan, Pahang, Johor, Sarawak, Sabah.

Lejeunea utriculata (Steph.) Mizut. – Mizutani (1966 as *Pycnolejeunea utriculata*, 1970), Lee (2013). Sabah.

Lejeunea wightii Steph. – Mizutani (1966, 1970). Sabah.

Lepicolea rara (Steph.) Grolle – Inoue (1967a, 1968b both as *L. lorianae*), Kitagawa (1978 as *L. lorianae*), Pocock et al. (1984 as *L. lorianae*), Kürschner (1990), Cheah (2017). Pahang, Sabah.

Lepicolea yakusimensis (S.Hatt.) S.Hatt. – Inoue (1967a), Kitagawa and Kodama (1973), Akiyama et al. (2001). Pahang, Sabah.

Lepidolejeunea bidentula (Steph.) R.M.Schust – Hoffman (1935 as *Pycnolejeunea corticola* and *P. decurvifolia*), Herzog (1950 as *P. badia* f. *parvistipa*, 1952b as *P. corticola* and *P. nicobarica*), Mizutani (1966, 1970 as *P. bidentula*, *P. punctata* and *P. nicobarica*), Inoue (1967a as *P. bidentula*), Kitagawa (1969c as *P. nicobarica*), Kitagawa and Kodama (1974 as *P. bidentula* and *P. nicobarica*), Piippo (1986), Wolseley et al. (1996), Pócs et al. (2020), Pesiu et al. (2021). Penang, Selangor, Pahang, Negeri Sembilan, Terengganu, Johor, Sarawak, Sabah.

Lepidolejeunea integriflora (J.B.Jack et Steph.) R.M.Schust. – Mizutani (1970, 1972b both as *Pycnolejeunea integriflora*), Kitagawa and Kodama (1974 as *P. integriflora*), Piippo (1986), Cheah (2017). Pahang, Sabah.

Lepidozia ambigua De Not. – De Notaris (1874), Schiffner (1898), Stephani (1909). Sarawak.

Lepidozia borneensis Steph. – Herzog (1950), Kitagawa and Kodama (1973), Mizutani (1974), Kamimura (1975), Ludwiczuk and Asakawa (2010). Sarawak, Sabah.

Lepidozia brotheri Steph. – Kürschner (1990). Sabah.

Lepidozia cladorhiza (Reinw., Blume et Nees) Nees – Mitten and Wright (1894), Herzog (1950 as *L. cladorhiza* var. *macgregorii*), Kitagawa and Kodama (1973), Mizutani (1974), Kürschner (1990), Akiyama et al. (2001). Sarawak, Sabah.

Lepidozia everettii Steph. – Stephani (1909), Herzog (1950), Mizutani (1968). Sarawak.

Lepidozia fauriana Steph. – Mizutani (1974), Ludwiczuk and Asakawa (2010). Sabah.

Lepidozia ferdinandi-muelleri Steph. – Kitagawa and Kodama (1973), Mizutani (1974). Sabah.

Lepidozia baskarliana (Gottsche, Lindenb. et Nees) Steph. – Mizutani (1974). Sabah.

Lepidozia holorhiza (Reinw., Blume et Nees) Nees – Mitten and Wright (1894), Inoue (1968b). Pahang, Sabah.

Lepidozia kinabaluensis Mizut. – Mizutani (1974). Sabah.

Lepidozia lacerifolia Steph. – Herzog (1950). Sarawak.

Lepidozia miquelianiana Sande Lac. – De Notaris (1874), Schiffner (1898), Herzog (1950). Sarawak.

Lepidozia reptans (L.) Dumort. – Mizutani (1974). Sabah.

Lepidozia richardsii Herzog – Herzog (1950). Sarawak.

Lepidozia squamifolia Steph. – Mizutani (1968, 1974). Sarawak, Sabah.

Lepidozia subintegra Lindenb. – Mitten and Wright (1894), Herzog (1950). Sarawak, Sabah.

Lepidozia supradecomposita Lindenb. – Kitagawa and Kodama (1973), Mizutani (1974), Akiyama et al. (2001). Sabah.

Lepidozia trichodes (Reinw., Blume et Nees) Nees – Mitten and Wright (1894), Herzog (1950), Inoue (1967a), Kitagawa (1969c), Kitagawa and Kodama (1973), Mizutani (1974), Kamimura (1975), Pocock et al. (1984), Kürschner (1990). Penang, Pahang, Sarawak, Sabah.

Leptolejeunea amphioptthalma Zwickel – Mizutani (1966 as *L. picta*), Kitagawa and Kodama (1974 as *L. picta*), Tixier (1974 as *L. picta*), Grolle (1988), Pócs et al. (2020), Pesiu et al. (2021). Kedah, Terengganu, Sarawak, Sabah.

Leptolejeunea apiculata (Horik.) S.Hatt. – Pócs and Lee (2016). Pahang.

Leptolejeunea balansae Steph. – Dürhammer and Schäfer-Verwimp (1995). Perak.

Leptolejeunea borneensis Herzog – Herzog (1942), Mizutani (1966). Sabah.

Leptolejeunea dentistipula Steph. – Herzog (1942). Sarawak.

Leptolejeunea epiphylla (Mitt.) Steph. – Herzog (1942), Mizutani (1966), Kitagawa (1969c), Kitagawa and Kodama (1974), Tixier (1974), Thiers (1986), Wolseley et al. (1996), Pócs et al. (2020), Pesiu et al. (2021, in press). Kedah, Penang, Selangor, Pahang, Negeri Sembilan, Terengganu, Sabah.

Leptolejeunea foliicola Steph. – Herzog (1942), Tixier (1971, 1974). Kedah, Pahang, Johor.

Leptolejeunea ligulata Herzog – Herzog (1942), Pócs et al. (2020). Pahang, Sabah.

Leptolejeunea maculata (Mitt.) Schiffn. – Herzog (1942 as *L. schiffneri* f. *latifolia*, f. *angustifolia* and var. *subintegerrima*), Tixier (1974, 1980a both as *L. radiata*), Kitagawa and Kodama (1974 as *L. schiffneri*), Mizutani (1966, 1970 both as *L. schiffneri*, 1975), Dürhammer and Schäfer-Verwimp (1995), Wolseley et al. (1996 as *L. schiffneri*), Pócs et al. (2020), Pesiu et al. (2021, in press). Kedah, Perak, Pahang, Negeri Sembilan, Terengganu, Johor, Sarawak, Sabah.

Leptolejeunea massartiana Herzog – Tixier (1971). Pahang.

Leptolejeunea renneri Herzog – Shu et al. (2021). Kelantan.

Leptolejeunea subacuta A.Evans – Herzog (1942), Mizutani (1966, also as *L. elliptica*), Tixier (1971), Kitagawa and Kodama (1974 as *L. elliptica*), Wolseley et al. (1996 as

- L. elliptica* subsp. *subacuta*), Pócs et al. (2020 as *L. elliptica*), Pesiu et al. (2021, in press). Perak, Pahang, Negeri Sembilan, Terengganu, Johor, Sabah.
- Leptolejeunea subdentata*** Herzog – Herzog (1942), Mizutani (1966), Pócs et al. (2020). Johor, Sarawak, Sabah.
- Leptolejeunea subrotundifolia*** Herzog – Shu et al. (2021). Kelantan, Pahang.
- Leptolejeunea tripuncta*** (Mitt.) Steph. – Herzog (1942 as *L. serrulata*), Inoue (1967a as *L. serrulata*), Kitagawa (1969c as *L. serrulata*), Thiers (1986 as *L. serrulata*), Pócs et al. (2020), Shu et al. (2021). Penang, Selangor, Pahang, Sabah.
- Leptolejeunea vitrea*** (Nees) Schiffn. – Herzog (1942), Mizutani (1966), Kitagawa (1969c), Tixier (1971, 1974, 1980a), Kitagawa and Kodama (1974), Wolseley et al. (1996), Pócs et al. (2020), Pesiu et al. (2021, in press). Kedah, Penang, Perak, Pahang, Negeri Sembilan, Terengganu, Johor, Sabah.
- Lobatiriccardia coronopus*** (De Not.) Furuki – Herzog (1950 as *Riccardia lobata* and *f. gigantea*), Furuki (1996 as *L. lobata*). Pahang, Sarawak, Sabah.
- Lophocolea bidentata*** (L.) Dumort. – Piippo (1989 as *Chiloscyphus latifolius*), Cheah (2017 as *C. coadunatus* and *C. cuspidatus*). Pahang, Sabah.
- Lophocolea kurzii*** Sande Lac. – Kitagawa and Kodama (1974), Piippo (1989 as *Chiloscyphus kurzii*). Sabah.
- Lophocolea mollis*** (Nees) Nees – Inoue (1967a). Pahang.
- Lophocolea muricata*** (Lehm.) Nees – Kitagawa and Kodama (1974), Piippo (1989 as *Chiloscyphus muricatus*), Müller and Schäfer-Verwimp (1999), Cheah (2017 as *C. muricatus*). Pahang, Sabah.
- Lophocolea sikkimensis*** (Steph.) Herzog et Grolle – Piippo (1989 as *Chiloscyphus sikkimensis*). Sabah.
- Lophocolea stetziae*** De Not. – De Notaris (1874), Schiffner (1898), Piippo (1989 as *Chiloscyphus stetziae*).
- Lopholejeunea appianata*** (Reinw., Blume et Nees) Schiffn. – Verdoorn (1934a), Mizutani (1969), Kitagawa and Kodama (1974), Zhu and Gradstein (2005). Perak, Sabah.
- Lopholejeunea borneensis*** (Steph.) Verd. – Verdoorn (1934a), Zhu and Gradstein (2005). Sarawak, Sabah.
- Lopholejeunea ceylanica*** Steph. – Mizutani (1985), Zhu and Gradstein (2005), Cheah (2017), Pesiu et al. (in press). Pahang, Terengganu, Sabah.
- Lopholejeunea eulopha*** (Taylor) Schiffn. – Stephani (1912 as *L. cranstonii*), Verdoorn (1934a), Kitagawa (1969a), Mizutani (1969, 1979b), Kitagawa and Kodama (1974), Zhu and Gradstein (2005), Lee et al. (2013), Cheah (2017 as *L. nicobarica*), Pócs et al. (2020), Pesiu et al. (in press). Penang, Perak, Pahang, Terengganu, Johor, Sarawak, Sabah.
- Lopholejeunea herzogiana*** Verd. – Verdoorn (1934a), Mizutani (1969, 1985), Kitagawa and Kodama (1974), Tixier (1974), Thiers (1983), Zhu and Gradstein (2005). Kedah, Pahang, Sabah.
- Lopholejeunea horticola*** Schiffn. – Mizutani (1985). Sabah.
- Lopholejeunea magna*** Mizut. – Mizutani (1969), Kitagawa and Kodama (1974), Zhu and Gradstein (2005). Sabah.

Lopholejeunea nigricans (Lindenb.) Schiffn. – Mizutani (1969, 1985 as *L. javanica*), Kitagawa and Kodama (1974), Zhu and Gradstein (2005), Lee et al. (2013), Cheah (2017), Pócs et al. (2020), Pesiu et al. (in press). Perak, Pahang, Terengganu, Sarawak, Sabah.

Lopholejeunea recurvata Mizut. – Zhu and Gradstein (2005). Pahang.

Lopholejeunea subfuscata (Nees) Schiffn. – Verdoorn (1934a), Herzog (1950), Mizutani (1966, 1969), Kitagawa (1969a), Tixier (1971, 1980a), Kamimura (1974), Kitagawa and Kodama (1974), Kürschner (1990), Wolseley et al. (1996), Zhu and Gradstein (2005), Lee et al. (2013), Pócs et al. (2020). Perak, Penang, Pahang, Negeri Sembilan, Sarawak, Sabah.

Lopholejeunea wiltensis Steph. – Mizutani (1979a), Akiyama et al. (2001), Zhu and Gradstein (2005). Pahang, Sabah.

Lopholejeunea zollingeri (Steph.) Schiffn. – Verdoorn (1934a), Mizutani (1969, also as *L. nipponica*, 1981b), Kitagawa and Kodama (1974), Zhu and Gradstein (2005), Cheah (2017 as *L. latialata*). Pahang, Sabah.

Marchantia acaulis Steph. – Tixier (1971), Bischler-Causse (1989). Perak, Pahang, Sarawak, Sabah.

Marchantia emarginata Reinw., Blume et Nees – Bischler-Causse (1989), Gepp (1914). Selangor, Sarawak, Sabah.

Marchantia geminata Reinw., Blume et Nees – Johnson (1958), Bischler-Causse (1989). Perak, Pahang, Selangor.

Marchantia novoguineensis Bischl. – Bischler-Causse (1989). Sabah.

Marchantia polymorpha L. – Johnson (1958), Kitagawa and Kodama (1974), Bischler-Causse (1989). Perak, Sabah.

Marchantia streimannii Bischl. – Bischler-Causse (1989). Sabah.

Marchantia subgeminata Steph. – Bischler-Causse (1989). Sabah.

Marsupella emarginata (Ehrh.) Dumort. – Kitagawa (1967), Gradstein and Váňa (1987), Váňa (1991a). Sabah.

Marsupella stoloniformis N.Kitag. – Kitagawa (1967), Váňa (1991a). Sabah.

Marsupella vermiformis (R.M.Schust.) Bakalin et Fedosov. – Bakalin et al. (2021). Sabah.

Mastigopelma pulvinulatum (De Not.) Grolle – De Notaris (1874 as *Mastigobryum pulvinulatum*), Schiffner (1898 as *Bazzania pulvinulata*), Herzog (1950 as *M. bilobum*). Sarawak.

Mastigophora diclados (F.Weber) Nees – De Notaris (1874 as *Sendtnera diclados* var. *borneensis*), Verdoorn (1932c), Herzog (1950, 1952b), Johnson (1958), Inoue (1967a, 1968b), Tixier (1971), Kitagawa and Kodama (1973), Kamimura (1975), Kodama (1976), Kürschner (1990), Ludwiczuk and Asakawa (2010), Ng et al. (2017). Kedah, Pahang, Johor, Sarawak, Sabah.

Mastigophora diclados var. *borneensis* (De Not.) Schiffn. – Schiffner (1898). Sarawak.

Mastigophora diclados var. *ramentifissa* Herzog – Herzog (1950). Sarawak.

Mastigophora diclados var. *villosa* Herzog – Herzog (1950). Sarawak.

Mesoptychia subcrispa (Herzog) L.Söderstr. et Váňa – Cheah (2017 as *Hattoriella subcrispa*). Pahang.

Metalejeunea cucullata (Reinw., Blume et Nees) Grolle – Herzog (1950 as *Microlejeunea sundaica*), Mizutani (1966, 1970 both as *Lejeunea cucullata*), Hattori and Kamimura (1971), Tixier (1971, 1974, 1980a as *M. cucullata*), Kitagawa and Kodama (1974 as *L. cucullata*), Kürschner (1990 as *L. cucullata*), Wolseley et al. (1996 as *M. cucullata*), Pócs et al. (2020), Pesiu et al. (2021). Kedah, Pahang, Negeri Sembilan, Terengganu, Sarawak, Sabah.

Metzgeria ciliata Raddi – Kuwahara (1965 as *M. decipiens*), Kürschner (1990 as *M. decipiens*), Cheah (2017). Pahang, Sabah.

Metzgeria foliicola Schiffn. – Kuwahara (1965), Kitagawa and Kodama (1974). Sabah.

Metzgeria francana Steph. – Kuwahara (1965 as *Austrometzgeria francana*). Sabah.

Metzgeria furcata (L.) Corda – Kuwahara (1965 as *M. molokaiensis*), Tixier (1971). Pahang, Sabah.

Metzgeria kinabaluensis (Kuwah.) Masuzaki – Kuwahara (1965 as *Apometzgeria pubescens* var. *kinabaluensis*), Kitagawa and Kodama (1974 as *A. pubescens* var. *kinabaluensis*), Kürschner (1990 as *A. pubescens* var. *kinabaluensis*), Akiyama et al. (2001 as *A. pubescens* var. *kinabaluensis*), Masuzaki (2011). Sabah.

Metzgeria leptoneura Spruce – Herzog (1950 as *M. hamata*), Kuwahara (1965 as *M. borneensis*, *M. hamata* and *M. sandei*, 1976 as *M. thomeensis* and *M. papulosa*, 1984 as *M. sharpii*), Johnson (1972 as *M. hamata*), Kitagawa and Kodama (1974 as *M. hamata*), So (2003a). Pahang, Sarawak, Sabah.

Metzgeria lindbergii Schiffn. – Kuwahara (1965 as *M. conjugata* subsp. *japonica* and *M. pectinata*), So (2003a), Cheah (2017). Pahang, Sabah.

Metzgeria scobina Mitt. – Mitten (1886), Schiffner (1898), Kitagawa (1969c), Thiers (1983), So (2003a). Penang, Selangor, Sarawak.

Microlejeunea constricta (Grolle) Grolle – Mizutani (1973 as *Harpalejeunea constricta*), Pócs et al. (2020). Sabah.

Microlejeunea filicispis (Steph.) Heinrichs, Schäf.-Verw., Pócs et S.Dong – Mizutani (1970 as *Drepanolejeunea filicispis*, 1973 as *Harpalejeunea filicispis* and *H. riddleiana*), Pócs and Lee (2016), Cheah (2017 as *H. filicispis*), Pócs et al. (2020). Kelantan, Pahang, Sabah.

Microlejeunea kinabaluensis (Mizut.) Grolle – Mizutani (1973 as *Harpalejeunea kinabaluensis*), Grolle and Reiner-Drehwald (1999). Sabah.

Microlejeunea lunulatiloba Horik. – Bischler et al. (1962 as *M. gracillima*), Pócs et al. (2020). Malacca, Sabah.

Microlejeunea mammillosa (Mizut.) Grolle – Mizutani (1973 as *Harpalejeunea mammillosa*), Grolle and Reiner-Drehwald (1999). Sabah.

Microlejeunea minutissima (Mizut.) Grolle – Mizutani (1973 as *Harpalejeunea minutissima*), Grolle and Reiner-Drehwald (1999). Sabah.

Microlejeunea punctiformis (Taylor) Steph. – Kamimura (1974 as *Lejeunea punctiformis*), Pócs and Lee (2016), Pócs et al. (2020), Pesiu et al. (2021, in press). Kelantan, Terengganu, Sabah.

Microlejeunea spinosa (Mizut.) Grolle – Mizutani (1973 as *Harpalejeunea spinosa*), Grolle and Reiner-Drehwald (1999). Sabah.

Mizutania riccardiooides Furuki et Z.Iwats. – Furuki and Iwatsuki (1989), Masuzaki et al. (2010). Pahang, Johor, Sarawak, Sabah.

Mnioloma fuscum (Lehm.) R.M.Schust. – Grolle (1965 as *Calypogeia baldwinii*), Bisang et al. (2003 as *C. fusca*), Cheah (2017). Pahang, Sarawak.

Mohamedia borneensis (Steph.) R.L.Zhu et L.Shu – Mizutani (1972b as *Pycnolejeunea borneensis*), Pippo (1986 as *Lepidolejeunea borneensis*), Zhu et al. (2019). Sarawak, Sabah.

Mohamedia brunnea (Mizut.) R.L.Zhu et L.Shu – Mizutani (1970 as *Drepanolejeunea brunnea*), Pócs and Lee (2016 as *D. brunnea*), Zhu et al. (2019). Pahang, Sabah.

Myriocoleopsis minutissima (Sm.) R.L.Zhu, Y.Yu et Pócs – Pócs et al. (2020). Sabah.

Nardia assamica (Mitt.) Amakawa – Váňa (1991b). Sabah.

Neolepidozia longitudinalis (Herzog) E.D.Cooper – Herzog (1950 as *Lepidozia longitudinalis*), Engel and Merrill (2004 as *Telaranea longitudinalis*). Sarawak.

Neolepidozia mamillosa (Schiffn.) E.D.Cooper – Grolle (1967 as *Lepidozia mamillosa*), Mizutani (1974b as *L. mamillosa*). Sabah.

Neolepidozia ophiria (Gottsch) E.D.Cooper – Stephani (1909 as *Lepidozia ophiria*), Mizutani (1974b as *L. ophiria*), Pocock et al. (1984 as *L. ophiria*), Engel and Merrill (2004 as *Telaranea ophiria*). Pahang, Johor (“Mt. Ophir” (Gunung Ledang) was mistakenly listed as in Malacca), Sabah.

Neolepidozia papulosa (Steph.) Fulford et J.Taylor – Kitagawa (1973 as *Lepidozia papulosa*), Kitagawa and Kodama (1973 as *L. papulosa*). Sarawak, Sabah.

Neolepidozia wallichiana (Gottsch) Fulford et J.Taylor – De Notaris (1874 as *Lepidozia wallichiana*), Mitten and Wright (1894 as *L. wallichiana*), Herzog (1950 as *L. wallichiana*), Kitagawa and Kodama (1973 as *L. wallichiana*), Mizutani (1974 as *L. wallichiana*), Kamimura (1975 as *L. wallichiana*), Pocock et al. (1984 as *L. wallichiana*), Kürschner (1990 as *L. wallichiana*), Wolseley et al. (1996 as *L. wallichiana*), Bisang et al. (2003 as *L. wallichiana*). Penang, Pahang, Negeri Sembilan, Sarawak, Sabah.

Notoscyphus lutescens (Lehm. et Lindenb.) Mitt. – Herzog (1950 as *N. paroicus*), Inoue (1967a), Kitagawa (1969c as *N. paroicus*), Kitagawa and Kodama (1973 as *N. paroicus*). Penang, Pahang, Sarawak, Sabah.

Nowellia borneensis (De Not.) Schiffn. – De Notaris (1874 as *Jungermannia curvifolia* var. *borneensis*), Schiffner (1898), Herzog (1950), Grolle (1968), Kitagawa and Kodama (1974), Akiyama et al. (2001), Cheah (2017). Pahang, Sarawak, Sabah.

Nowellia curvifolia (Dicks.) Mitt. – Grolle (1968), Váňa (1993). Johor, Sabah.

Nowellia langii Pearson – Pearson (1922), Grolle (1968), Kitagawa and Kodama (1974), Váňa (1993). Perak, Johor, Sabah.

Odontoschisma denudatum (Mart.) Dumort. subsp. ***naviculare*** (Steph.) Gradst., S.C.Aranda et Vanderp. – Kitagawa and Kodama (1974 as *O. denudatum*), Gradstein and Váňa (1987 as *O. denudatum*), So (2004 as *O. denudatum*), Gradstein and Ilku-Borges (2015). Pahang, Johor, Sabah.

Odontoschisma jishibae (Steph.) L.Söderstr. et Váňa – Kitagawa (1964 as *Iwatsukia exigua*), Kürschner (1990 as *I. exigua*), Váňa (1993 as *I. exigua*), Gradstein and Ilku-Borges (2015). Sabah.

- Odontoschisma purpuratum*** Herzog – Herzog (1950, 1952b), So (2004), Gradstein and Ilkuu-Borges (2015). Pahang, Sarawak, Sabah.
- Pallavicinia ambigua*** (Mitt.) Steph. – Kitagawa and Kodama (1974 as *P. fistulosa*), Grolle and Piippo (1986). Sabah.
- Pallavicinia indica*** Schiffn. – Herzog (1950), Grolle (1969), Kitagawa (1971), Johnson (1972). Penang, Pahang, Sarawak, Sabah.
- Pallavicinia levieri*** Schiffn. – Johnson (1972), Grolle and Piippo (1986). Pahang, Sabah.
- Pallavicinia lyellii*** (Hook.) Gray – Grolle and Piippo (1986). Sarawak.
- Pedinophyllum autoicum*** (Steph.) Inoue – Kamimura (1975). Sabah.
- Pictolejeunea mizutanii*** Grolle – Mizutani (1970 as *Cheilolejeunea picta*), Kitagawa and Kodama (1974 as *C. picta*), Grolle (1977), Thiers (1986), Wolseley et al. (1996), Bi et al. (2019). Negeri Sembilan, Sarawak, Sabah.
- Plagiochila abietina*** (Nees) Mont. et Nees – Herzog (1950), Inoue (1984). Sarawak, Sabah.
- Plagiochila arbuscula*** (Lehm. et Lindenb.) Lindenb. – Kitagawa and Kodama (1974), Kamimura (1975), Inoue (1984, 1989), Kürschner (1990). Pahang, Terengganu, Sabah.
- Plagiochila bantamensis*** (Reinw., Blume et Nees) Mont. – De Notaris (1874 as *P. mutabilis*), Herzog (1950 as *P. mutabilis* and *P. richardsii*), Inoue (1967a as *P. lobulata*, 1984, 1989), Kitagawa and Kodama (1974), Wolseley et al. (1996), So and Grolle (2000), So (2001), Pesiu et al. (in press). Perak, Pahang, Negeri Sembilan, Terengganu, Sarawak, Sabah.
- Plagiochila bicornuta*** Steph. – Stephani (1903 as *P. laxissima*), Inoue (1989 as *P. laxissima*). Cheah (2017). Pahang, Sarawak, Sabah.
- Plagiochila blepharophora*** (Nees) Lindenb. – Herzog (1950 as *P. estipulata* and *P. elegantissima*), Inoue (1984, 1989), So and Grolle (2000), So (2001), Cheah (2017). Pahang, Sarawak, Sabah.
- Plagiochila borneensis*** Steph. – Stephani (1918). Sarawak.
- Plagiochila chauviniana*** Mont. – Herzog (1950 as *P. vanikorensis*). Sarawak.
- Plagiochila clavatosaccata*** Steph. – Inoue (1984), So and Grolle (2000 as *P. longifolia*), So (2001). Perak, Sabah.
- Plagiochila denigrata*** Inoue – Inoue (1989), So and Grolle (2000). Sabah.
- Plagiochila dolichoblasta*** – Herzog (1950), So and Grolle (2000). Sarawak.
- Plagiochila frondescens*** (Nees) Lindenb. – De Notaris (1874), Herzog (1950), Kitagawa and Kodama (1974), Kamimura (1975), Inoue (1967a, 1984, 1989). Pahang, Sarawak, Sabah.
- Plagiochila gymnoclada*** Sande Lac. – Inoue (1984, 1989), Kürschner (1990), So and Grolle (2000), So (2001). Sabah.
- Plagiochila hampeana*** Gottsche – Inoue (1968b, 1969, 1984 all as *P. cameronensis*, 1989), Kürschner (1990). Pahang, Sabah.
- Plagiochila integrilobula*** Schiffn. – Inoue (1989). Sabah.
- Plagiochila javanica*** (Sw.) Nees et Mont – Inoue (1989, also as *P. infirma*), Kamimura (1975), Cheah (2017). Pahang, Sabah.

Plagiochila junghuhniana Sande Lac. – Kitagawa and Kodama (1974), Kamimura (1975), Cheah (2017). Pahang, Sabah.

Plagiochila korthalsiana Molk. – Kitagawa and Kodama (1974 as *P. accedens*), Inoue (1989), So (2000). Sabah.

Plagiochila kuhliana Sande Lac. – Stephani (1903, 1906). Sarawak.

Plagiochila kurzii Steph. – Kitagawa and Kodama (1974 as *P. sambusana*), Inoue (1984), Wolseley et al. (1996), So and Grolle (2000), So (2001). Negeri Sembilan, Sarawak, Sabah.

Plagiochila massalongoana Schiffn. – Kitagawa and Kodama (1974), Inoue (1984). Pahang, Sabah.

Plagiochila nitens Inoue – Inoue (1989), So and Grolle (2000), So (2001). Sabah.

Plagiochila nobilis Gottsche – Inoue (1989). Sabah.

Plagiochila obtusa Lindenb. – Inoue (1968b). Pahang.

Plagiochila peculiaris Schiffn. – Inoue (1984, 1989), Kürschner (1990), Renner (2018). Pahang, Sarawak, Sabah.

Plagiochila perserrata Herzog – Inoue (1975, 1984 both as *P. hottae*), So and Grolle (2000), So (2001). Sabah.

Plagiochila philippinensis Steph. – Inoue (1989). Sabah.

Plagiochila propinqua Sande Lac. – De Notaris (1874), Schiffner (1898), Stephani (1903), Herzog (1950), Inoue (1984, 1989). Perak, Sarawak, Sabah.

Plagiochila renitens (Nees) Lindenb. – Inoue (1967a, 1984, 1989), Kürschner (1990). Pahang, Sabah.

Plagiochila sandei Dozy – De Notaris (1874), Schiffner (1898), Herzog (1950 as *P. sandei* f. *remotidens*), Kitagawa and Kodama (1974), Kamimura (1975), Inoue (1984, 1989), Müller and Schäfer-Verwimp (1999), Cheah (2017), Renner (2018). Pahang, Sarawak, Sabah.

Plagiochila sciophila Nees – Inoue (1984, 1989), So (2001), Cheah (2017). Pahang, Sarawak, Sabah.

Plagiochila spathulifolia Mitt. – Kitagawa and Kodama (1974), Inoue (1984, 1989). Sarawak, Sabah.

Plagiochila sumatrana Schiffn. – Inoue (1989). Sabah.

Plagiochila teysmannii Sande Lac. – Kitagawa and Kodama (1974), Inoue (1984, 1989), Grolle and So (1999 as *P. fraseri*). Perak, Sabah.

Plagiochila trapezoidea Lindenb. – Inoue (1989). Sabah.

Plagiochila ungarangana Sande Lac. – Stephani (1917 as *P. tridens*), Inoue (1975 as *P. tsutomui*, 1984), So and Grolle (2000). Perak, Sabah.

Pleurozia acinosa (Mitt.) Trevis. – De Notaris (1874 as *Physiotium myriangium*), Schiffner (1898), Inoue (1967a), Kitagawa (1979b), Thiers (1993). Selangor, Pahang, Sarawak, Sabah.

Pleurozia articulata (Lindb.) Lindb. et Lackström – Kürschner (1990). Sabah.

Pleurozia conchifolia (Hook. et Arn.) Austin – Herzog (1950), Kitagawa and Kodama (1974), Kürschner (1990), Thiers (1993), Akiyama et al. (2001). Sarawak, Sabah.

Pleurozia gigantea (F.Weber) Lindb. – De Notaris (1874 as *P. gigantea* var. *borneensis*), Herzog (1950 as *Eopleurozia simplicissima*), Inoue (1967a, 1968b), Kitagawa and Kodama (1974 also as *E. simplicissima*), Tixier (1974), Kürschner (1990), Thiers (1993), Akiyama et al. (2001), Ludwiczuk and Asakawa (2010). Kedah, Pahang, Malacca, Johor, Sarawak, Sabah.

Pleurozia jobannis-winkleri Herzog – Thiers (1993), Akiyama et al. (2001). Sabah.

Pleurozia subinflata (Austin) Austin – Kamada et al. (2020). Sabah.

Plicanthus hirtellus (F.Weber) R.M.Schust. – Herzog (1950 as *Chandonanthus hirtellus*), Kitagawa (1970 as *C. hirtellus*), Kitagawa and Kodama (1973 as *C. hirtellus*), Kürschner (1990 as *C. hirtellus*), Akiyama et al. (2001 as *C. hirtellus*), Ludwiczuk and Asakawa (2010 as *C. hirtellus*), Cheah (2017 as *C. hirtellus*). Pahang, Sarawak, Sabah.

Podomitrium malaccense (Steph.) Campb. – Kitagawa (1969c), Kitagawa and Kodama (1974), Grolle and Piippo (1986), Campbell (1915), Wolseley et al. (1996). Penang, Negeri Sembilan, Johor, Sarawak, Sabah.

Porella acutifolia (Lehm. et Lindenb.) Trevis. – Kitagawa and Kodama (1974 as *P. acutifolia* var. *elbertii*), Hattori (1967 as *P. jobannis-winkleri*, 1969 as *P. acutifolia* var. *johannis-winkleri*). Sarawak, Sabah.

Porella caespitans (Steph.) S.Hatt. subsp. ***latior*** (S.Hatt.) S.Hatt. – Hattori (1969 as *P. acutifolia* subsp. *latior*). Pahang.

Porella japonica (Sande Lac.) Mitt. – Hattori (1967). Sabah.

Porella javanica (Gottsche) Inoue – Inoue (1967a). Pahang.

Pseudolepicolea andoi (R.M.Schust.) Inoue – Hattori and Mizutani (1968 as *P. trollii* subsp. *andoi*). Sabah.

Pseudolepicolea trollii (Herzog) Grolle et Ando – Hattori (1966). Sabah.

Pseudomarsupidium borneensis (Grolle) Váňa, L.Söderstr., A.Hagborg et von Konrat – Grolle (1972 as *Adelanthus borneensis*), Kitagawa and Kodama (1974 as *A. borneensis*). Sabah.

Psiloclada clandestina Mitt. – Herzog (1950), Kitagawa and Kodama (1973), Mizutani (1974), Pocock et al. (1984), Kürschner (1990), Akiyama et al. (2001), Cheah (2017). Pahang, Sarawak, Sabah.

Ptychanthus striatus (Lehm. et Lindenb.) Nees – Verdoorn (1934a), Herzog (1950), Mizutani (1969), Tixier (1971), Kamimura (1974, 1975), Kitagawa and Kodama (1974). Pahang, Sarawak, Sabah.

Pycnolejeunea cavistipula (Steph.) Mizut. – Mizutani (1970 as *P. molaris*), Kitagawa and Kodama (1974), Kürschner (1990). Sabah.

Pycnolejeunea contigua (Nees) Grolle – Mizutani (1970 as *P. bancana*), Kürschner (1990 as *P. bancana*), He (1999). Sabah.

Pycnolejeunea grandiocellata Steph. – Kürschner (1990), Wolseley et al. (1996), He (1999), Schäfer-Verwimp (2006). Pahang, Negeri Sembilan, Sarawak.

Pycnolejeunea grossiloba Steph. – Hoffmann (1935). Johor.

Pycnolejeunea sphaeroides (Sande Lac.) J.B.Jack et Steph. – Kodama (1976 as *P. kinabaluensis*), He (1999), Schäfer-Verwimp (2006). Pahang, Sabah.

Radula acuminata Steph. – Yamada (1973, 1979, 1989), Wolseley et al. (1996), Pesiu et al. (2021, in press). Selangor, Negeri Sembilan, Terengganu, Sabah.

Radula amentulosa Mitt. – Herzog (1950), Yamada (1979, 1989), Cheah (2017). Pahang, Sarawak, Sabah.

Radula amoena Herzog – Yamada (1979), Yamada and Piippo (1989). Sarawak, Sabah.

Radula anceps Sande Lac. – De Notaris (1874), Schiffner (1898), Herzog (1950 as *R. laciniata*), Castle (1961), Inoue and Miller (1965), Yamada (1973, also as *R. apiculata*, 1979, 1989), Kitagawa and Kodama (1974), Wolseley et al. (1996), Cheah (2017 as *R. apiculata*). Perak, Pahang, Negeri Sembilan, Sarawak, Sabah.

Radula assamica Steph. – Pócs et al. (2014), Pesiu et al. (2021, in press). Selangor, Pahang, Terengganu.

Radula borneensis Steph. – Inoue (1967a), Castle (1936), Yamada (1979, 1989). Pahang, Sarawak, Sabah.

Radula caduca K.Yamada – Cheah (2017). Pahang.

Radula campanigera Mont. – Castle (1936), Yamada (1973, 1979, 1989). Perak, Sabah.

Radula cavifolia Gottsche, Lindenb. et Nees – Yamada (1973, 1979, 1989). Sabah.

Radula ceylanica K.Yamada – Yamada (1979). Pahang.

Radula densifolia Castle – Yamada (1973, 1979, 1989). Sabah.

Radula falcata Steph. – Cheah (2017). Pahang.

Radula formosa (Spreng.) Nees – Inoue (1967a as *R. novae-guineae*), Yamada (1973 as *R. novae-guineae*, 1979, 1989), Kitagawa and Kodama (1974), Tixier (1974). Kedah, Pahang, Sabah.

Radula gedena Gottsche – Yamada (1973, 1979, 1989). Sabah.

Radula grandilobula Promma et Chantanaorr. – Sarimi et al. (2021), Zhang et al. (2021), Pesiu et al. (in press). Terengganu, Sarawak.

Radula iwatsukii K.Yamada – Yamada (1979, 1989), Yamada and Piippo (1989). Sabah.

Radula javanica Gottsche – De Notaris (1874), Schiffner (1898), Herzog (1950), Yamada (1973, 1979 also as *R. yangii*, 1989), Kitagawa and Kodama (1974), Wolseley et al. (1996), Pesiu et al. (in press). Selangor, Pahang, Negeri Sembilan, Terengganu, Sarawak, Sabah.

Radula kinabaluensis K.Yamada – Yamada (1979, 1989). Sabah.

Radula lacerata Steph. – Castle (1961), Yamada (1979, 1989), Wolseley et al. (1996). Negeri Sembilan, Sarawak, Sabah.

Radula lingulata Gottsche – Cheah (2017). Pahang.

Radula madagascariensis Gottsche – Yamada (1979, 1989). Sabah.

Radula mizutanii K.Yamada – Yamada (1973, 1979, 1989), Yamada and Piippo (1989). Sabah.

Radula morobeana K.Yamada et Piippo – Kürschner (1990). Sabah.

Radula multiflora Schiffn. – Yamada (1979, 1989). Sabah.

Radula nymani Steph. – Tixier (1971, 1980a), Yamada (1973, 1979, 1989), Kitagawa and Kodama (1974), Pesiu et al. (2021, in press). Pahang, Terengganu, Sabah.

Radula obscura Mitt. – Yamada (1973, 1979, 1989). Sabah.

Radula philippinensis K.Yamada – Yamada (1979). Selangor.

Radula protensa Lindenb. – Herzog (1952b), Wolseley et al. (1996). Negeri Sembilan, Sarawak.

Radula retroflexa Taylor – Inoue (1968b as *R. miquelianana*), Tixier (1974 as *R. miquelianana*). Yamada (1979, also as *R. retroflexa* var. *fauciloba*, 1989). Kedah, Selangor, Pahang, Terengganu, Sabah.

Radula sumatrana Steph. – Kamimura (1975), Yamada (1979, 1989). Sarawak, Sabah.

Radula tabularis Steph. – Yamada (1973 as *R. indica*, 1979, 1989), Cheah (2017). Pahang, Sabah.

Radula tjibodensis K.I.Goebel – Kitagawa (1969c), Yamada (1973, 1979, 1989), Kamimura (1975), Kitagawa and Kodama (1974), Pócs et al. (2020), Pesiu et al. (2021, in press). Penang, Pahang, Terengganu, Sabah.

Radula ventricosa Steph. – Yamada (1973, 1979, 1989 all as *R. subpallens*), Kitagawa and Kodama (1974 as *R. subpallens*). Sarawak, Sabah.

Radula vrieseana Sande Lac. – Kitagawa and Kodama (1974), Yamada (1979, 1989), Wolseley et al. (1996). Negeri Sembilan, Sarawak, Sabah.

Reboulia hemisphaerica (L.) Raddi subsp. ***australis*** R.M.Schust. – Gepp (1914 as *R. hemisphaerica* var. *javanica*). Sabah.

Riccardia albomarginata (Steph.) Schiffn. – Furuki (1995), Cheah (2017). Pahang, Sabah.

Riccardia aspera (Steph.) Grolle – Furuki (1998). Sabah.

Riccardia baumannii Hürl. – Furuki (1994). Sabah.

Riccardia crassa (Schwägr.) C.Massal. – Herzog (1950 as *R. scabra*), Johnson (1958 as *R. scabra*), Kitagawa and Kodama (1974 as *R. scabra*). Pahang, Sarawak, Sabah.

Riccardia crassiretis Schiffn. – Furuki (2001). Pahang, Sabah.

Riccardia crenulata Schiffn. – Furuki (2001). Sabah.

Riccardia deguchi Furuki et K.T.Yong – Furuki et al. (2013). Pahang.

Riccardia elata (Steph.) Schiffn. – Herzog (1950 also as *R. ridleyi*), Cheah (2017). Pahang, Sarawak.

Riccardia fruticosa (Steph.) Furuki – Furuki (1998), Cheah (2017). Pahang, Sabah.

Riccardia grollei Furuki – Furuki (1999), Cheah (2017). Pahang, Sabah.

Riccardia grossitexta (Steph.) Furuki – Furuki (1994). Johor, Sarawak, Sabah.

Riccardia hattori Furuki – Furuki (1994). Sabah.

Riccardia heteroclada Schiffn. – Herzog (1950), Furuki (1998), Cheah (2017). Pahang, Sarawak.

Riccardia inconspicua (Steph.) Reeb et Bardat – Furuki (1994 as *R. tenuicostata*). Johor, Sarawak, Sabah.

Riccardia jackii Schiffn. – Johnson (1958). Pahang.

Riccardia nobilis (Steph.) Schiffn. – Stephani (1893, 1900), Schiffner (1898). Sarawak.

Riccardia parvula Schiffn. – Johnson (1958, 1972), Furuki (2001 as *Aneura subcrenulata*). Perak, Pahang, Sarawak, Sabah.

Riccardia pindensis Hewson – Furuki (1995). Sabah.

Riccardia planiflora (Steph.) S.Hatt. var. ***aequatorialis*** Furuki – Furuki (1997), Cheah (2017). Pahang, Sabah.

Riccardia sumatrana Schiffn. – Herzog (1950). Sarawak.

Riccia fluitans L. – Gepp (1914). Sabah.

Ricciocarpus natans (L.) Corda – Gepp (1914). Sabah.

Saccogynidium goebelii (Herzog) Grolle – Inoue (1967a, 1968b). Pahang.

Saccogynidium muricellum (De Not.) Grolle – De Notaris (1874 as *Chiloscyphus muricellus*), Schiffner (1898), Mitten and Wright (1894 as *Saccogyna muricella*), Schiffner (1898 as *C. muricellus*), Kitagawa and Kodama (1974), Piippo (1989). Sarawak, Sabah.

Saccogynidium rigidulum (Nees) Grolle – Herzog (1950 as *Saccogyna rigidula*), Grolle (1960, 1963 both as *Saccogynidium jugatum*), Inoue (1967a). Perak, Pahang, Johor, Sarawak, Sabah.

Sandeothallus radiculosus (Schiffn.) R.M.Schust. – Campbell and Williams (1914), Pocock et al. (1984), Crandall-Stotler and Stotler (2007). Perak, Pahang, Sabah.

Scapania javanica Gottsche – Herzog (1950 as *S. javanica* f. *amplifolia*), Schäfer-Verwimp (2009), Ludwiczuk and Asakawa (2010). Pahang, Sarawak, Sabah.

Scapania lepida Mitt. – Mitten and Wright (1894), Hattori (1964), Kitagawa and Kodama (1973), Akiyama et al. (2001). Sabah.

Scapania ornithopodioides (With.) Waddell. – Kodama and Narita (1974). Sabah.

Schiffneria byalina Steph. – Kitagawa (1973), Kitagawa and Kodama (1974), Grolle and Piippo (1984). Pahang, Sabah.

Schiffneriolejeunea cumingiana (Mont.) Gradst. – Lee et al. (2013). Perak.

Schiffneriolejeunea nymannii (Steph.) Gradst. et Terken. – Stephani (1912 as *Ptychocoleus longispicus*), Verdoorn (1934a as *P. longispicus*), Gradstein and Terken (1981). Sarawak.

Schiffneriolejeunea omphalanthoides Verd. – Gradstein (2015). Sabah.

Schiffneriolejeunea pulopenangensis (Gottsche) Gradst. – Gottsche et al. (1845 as *Phragmicoma pulopenangensis*), Stephani (1890 as *P. pulopenangensis*, 1912 as *Ptychocoleus cranstonii* and *P. tridens*), Schiffner (1898 as *Acrolejeunea pulopenangensis*), Verdoorn (1934a as *Ptychocoleus pulopenangensis*), Herzog (1950 as *Ptychocoleus pulopenangensis*), Kitagawa (1969a as *P. pulopenangensis*), Mizutani (1969 as *Ptychocoleus pulopenangensis*), Thiers and Gradstein (1989), Haerida et al. (2010), Lee et al. (2013). Penang, Pahang, Sarawak, Sabah.

Schiffneriolejeunea tumida (Nees) Gradst. – Nees (1838 as *Ptychanthus tumidus*), Stephani (1890 as *Phragmicoma tumida*, 1912 as *Ptychocoleus sarawakensis* and *P. squarrosifolius*), Schiffner (1898 as *Acrolejeunea tumida*), Verdoorn (1933 as *Phragmicoma tumida*, 1934a as *Ptychocoleus sarawakensis*), Inoue (1967a as *Ptychocoleus sarawakensis*), Mizutani (1969 as *Ptychocoleus sarawakensis* and *P. haskarlianus*), Kitagawa (1971 as *Ptychocoleus sarawakensis*), Gradstein and Terken (1981), Lee et al. (2013), Gradstein (2015), Pócs et al. (2020). Penang, Perak, Pahang, Sarawak, Sabah.

Schistochila acuminata Steph. – Herzog (1950), Kitagawa and Kodama (1973 as *S. wrayana*), So (2003b), Ng et al. (2016). Perak, Sarawak, Sabah.

Schistochila aligera (Nees et Blume) J.B.Jack et Steph. – De Notaris (1874 as *Gottschea aligera*, *G. aligeriformis* and *G. philippinensis*), Schiffner (1898 as *G. gaudichaudii* and *S. aligeriformis*), Herzog (1950 also as *S. philippinensis*), Kitagawa (1969c as *S. philippinensis*, 1973), Kitagawa and Kodama (1973, also as *S. philippinensis*), So (2003b). Penang, Selangor, Pahang, Johor, Sarawak, Sabah.

Schistochila beccariana (De Not.) Trevis. – De Notaris (1874 as *Gottschea beccariana*), Schiffner (1898), So (2003b). Sarawak, Sabah.

Schistochila blumei (Nees) Trevis. – Gepp (1914 as *S. wallisii*), Inoue (1967a), Kitagawa and Kodama (1973), So (2003b). Perak, Kelantan, Pahang, Sarawak, Sabah.

Schistochila doriae (De Not) Trevis. – De Notaris (1874 as *Gottschea doriae*), Schiffner (1898), So (2003b). Pahang, Sarawak, Sabah.

Schistochila reinwardtii (Nees) Schiffn. – So (2003b), Cheah (2017). Pahang, Sabah.

Schistochila rubriseta Steph. – Kürschner (1990). Sabah.

Schistochila sciurea (Nees) Schiffn. – De Notaris (1874 as *Gottschea sciurea*), Schiffner (1898), Herzog (1950), Inoue (1967a, 1968b), Kitagawa and Kodama (1973), Kürschner (1990), So (2003b). Perak, Pahang, Sarawak, Sabah.

Soella spinistipula (Mizut.) R.L.Zhu et L.Shu – Mizutani (1970 as *Pycnolejeunea spinistipula*), Bi et al. (2019 as *Leptolejeunea spinistipula*), Shu et al. (2021). Sarawak, Sabah.

Solenostoma appressifolium (Mitt.) Váňa et D.G.Long – Amakawa (1969b as *Jungermannia kinabalensis* and *J. decolyana*), Váňa (1991b as *J. appressifolia*). Sabah.

Solenostoma ariadne (Taylor) Váňa et D.G.Long – Inoue (1967a as *Jungermannia ariadne*), Amakawa (1968 as *J. ariadne*), Kitagawa and Kodama (1973 as *J. ariadne*), Váňa (1991b, 1972 both as *J. ariadne*). Penang, Perak, Pahang, Negeri Sembilan, Sabah.

Solenostoma borneense (Amakawa) Váňa, Hentschel et Heinrichs – Amakawa (1970 as *Jungermannia borneensis*), Váňa (1991b as *J. borneensis*). Sabah.

Solenostoma comatum (Nees) C.Gao – Inoue (1967a as *Jungermannia comata*). Pahang.

Solenostoma haskarlianum (Nees) Váňa et D.G.Long – Váňa (1972, 1975, 1991b all as *J. haskarliana*). Perak, Pahang, Sarawak, Sabah.

Solenostoma javanicum (Schiffn.) Steph. – Váňa (1991b as *Jungermannia herzogiana*). Sabah.

Solenostoma pseudocyclops (Inoue) Váňa et D.G.Long – Amakawa (1969b as *Jungermannia pseudocyclops*). Sabah.

Solenostoma riclefi Váňa et D.G.Long – Amakawa (1969b as *Jungermannia grollei*), Váňa (1991b as *J. grollei*). Sabah.

Solenostoma sphaerocarpum (Hook.) Steph. – Gradstein and Váňa (1987 as *Jungermannia sphaerocarpa*), Váňa (1991b as *J. sphaerocarpa*). Sabah.

Solenostoma stephanii (Schiffn.) Steph. – Amakawa (1969b as *Jungermannia stephanii* and *J. mizutani*), Váňa (1991b as *J. stephanii*). Sabah.

Solenostoma strictum (Schiffn.) Váňa, Hentschel et Heinrichs – Amakawa (1969b as *Jungermannia stricta*), Váňa (1991b as *J. stricta*). Sabah.

Solenostoma tetragonum (Lindenb.) Váňa et D.G.Long – Herzog (1950 as *Plectocolea parabolica*), Váňa (1991b as *Jungermannia tetragona*). Sarawak, Sabah.

Solenostoma truncatum (Nees) Váňa et D.G.Long – Stephani (1901 as *Jungermannia polyrhiza*), Horikawa (1943 as *Aplozia polyrhiza*), Herzog (1950 as *Plectocolea truncata*), Amakawa (1972 as *J. truncata*), Váňa (1991 as *J. truncata*). Penang, Sarawak, Sabah.

Solenostoma tuberculiferum (Herzog) Váňa, Hentschel et Heinrichs – Váňa (1991b as *Jungermannia tuberculifera*). Sabah.

Solenostoma virgatum (Mitt.) Váňa et D.G.Long – Váňa (1991b as *Jungermannia virgata*). Sabah.

Southbya organensis Herzog – Kodama and Narita (1974 as *S. grollei*). Sabah.

Sphenolobopsis pearsonii (Spruce) R.M.Schust. – Kitagawa (1970 as *Cephalozia pearsonii*), Kodama and Narita (1974), Kürschner (1990 as *S. kitagawai*), Váňa (1991c). Sabah.

Sphenolobus minutus (Schreb.) Berggr. – Kitagawa (1970 as *Anastrophyllum minutum*), Kitagawa and Kodama (1973 as *A. minutum*), Váňa (1991c as *A. minutum*). Sabah.

Spruceanthus planiusculus (Mitt.) X.Q.Shi, Gradst. et R.L.Zhu – Verdoorn (1934a as *Archilejeunea mariana* and *Spruceanthus marianus*), Mizutani (1969 as *S. marianus*), Kitagawa and Kodama (1974 as *S. marianus*), Lee et al. (2013 as *A. planiuscula*). Penang, Sarawak, Sabah.

Spruceanthus polymorphus (Sande Lac.) Verd. – Verdoorn (1934a), Mizutani (1969), Kitagawa and Kodama (1974), Wolseley et al. (1996), Lee et al. (2013). Perak, Pahang, Negeri Sembilan, Sabah.

Spruceanthus semirepandus (Nees) Verd. – Verdoorn (1934a), Sun et al. (2018). Kedah, Sabah.

Spruceanthus sulcatus (Nees) Gradst. – Verdoorn (1934a as *Ptychanthus sulcatus*), Mizutani (1969 as *P. sulcatus*). Sabah.

Stictolejeunea balfourii (Mitt.) E.W.Jones – Herzog (1950 as *S. richardsii*), Mizutani (1969 as *S. richardsii*), Gradstein (1985), Thiers and Gradstein (1989). Sarawak, Sabah.

Symphyogynopsis gottscheana (Mont. et Nees) Grolle – Grolle and Piippo (1986 as *S. filicum*), Cheah (2017). Perak, Pahang.

Syzygiella autumnalis (DC.) K.Feldberg, Váňa, Hentschel et Heinrichs – Akiyama et al. (2001 as *Jamesoniella autumnalis*). Sabah.

Syzygiella contracta (Reinw., Blume et Nees) Gradst. et G.E.Lee – Kitagawa (1970 as *Cuspidatula contracta*), Váňa (1991c as *Jamesoniella contracta*). Sabah.

Syzygiella flaccida (Steph.) Gradst. et G.E.Lee – Grolle (1971 as *Anomacaulis flaccidus*), Váňa (1991c as *A. flaccidus*). Sabah.

Syzygiella flexicaulis (Nees) Gradst. et G.E.Lee – Inoue (1967a as *Jamesoniella flexicaulis*), Amakawa (1969a as *J. flexicaulis* var. *mizutani*), Grolle (1971 as *J. flexicaulis*), Kürschner (1990 as *J. flexicaulis*), Váňa (1991c as *J. flexicaulis*). Pahang, Sabah.

Syzygiella nipponica (S.Hatt.) K.Feldberg, Váňa, Hentschel et Heinrichs – Amakawa (1969a as *Jamesoniella perverrucosa*), Grolle (1971 as *J. nipponica*), Kürschner (1990 as *J. nipponica*), Váňa (1991c as *J. nipponica*). Sabah.

Syzygiella ovalifolia Inoue – Váňa (1991c). Sabah.

Syzygiella securifolia (Nees) Inoue – Inoue (1966, 1967a, 1968b all as *S. variegata*), Kitagawa and Kodama (1974 as *S. variegata*). Pahang, Sabah.

Syzygiella sonderi (Gottsche) K.Feldberg, Váňa, Hentschel et Heinrichs – Amakawa (1969b as *Jungermannia iwatsukii*), Kitagawa and Kodama (1973 as *J. iwatsukii*), Váňa (1991c as *Cryptochila grandiflora*). Sabah.

Syzygiella subintegerrima (Reinw., Blume et Nees) Spruce – Inoue (1966, 1967a, 1968a), Kitagawa and Kodama (1974), Váňa (1991c). Pahang, Sabah.

Telaranea major (Herzog) J.J.Engel et G.L.Merr – Herzog (1950 as *Arachniopsis major*), Kitagawa and Kodama (1973 as *A. major*), Mizutani (1974b as *A. major*), Manuel (1981 as *A. major*), Engel and Merrill (2004). Pahang, Sarawak, Sabah.

Telaranea monocera (R.M.Schust. et Grolle) J.J.Engel et G.L.Merr. – Piippo (1985 as *Arachniopsis monocera*), Engel and Merrill (2004). Johor [“Mt. Ophir” (Gunung Ledang)].

Telaranea papulosa (Steph.) J.J.Engel et G.L.Merr. – Cheah (2017). Pahang.

Temnoma setigerum (Lindenb.) R.M.Schust. – Kitagawa and Kodama (1973). Sabah.

Tetralophozia filiformis (Steph.) Urmi – Kitagawa (1973 as *Chandonanthus filiformis*), Kitagawa and Kodama (1973 as *C. filiformis*), Kodama and Narita (1974 as *C. filiformis*). Sabah.

Tetralophozia pilifera (Steph.) R.M.Schust. – Kürschner (1990 as *Chandonanthus pilifer* [‘*piliferus*’]). Sabah.

Thiersianthus silamensis R.L.Zhu et L.Shu – Zhu et al. (2017). Sabah.

Thysananthus aculeatus Herzog – Verdoorn (1934a as *T. richardsianus*), Herzog (1950 as *T. richardsianus*), Inoue (1967a, 1968b), Mizutani (1969), Kamimura (1974), Thiers (1985), Sukkharak (2015). Pahang, Sarawak, Sabah.

Thysananthus ciliaris (Sande Lac.) Sukkharak – Sukkharak (2015). Perak.

Thysananthus comosus Lindenb. – Lehmann (1844), Stephani (1890), Schiffner (1898), Mizutani (1977), Sukkharak et al. (2011), Sukkharak (2015). Kedah, Penang, Perak, Selangor, Johor, Sarawak, Sabah.

Thysananthus convolutus Lindenb. – Stephani (1912 as *T. laceratus*), Verdoorn (1934a), Herzog (1950), Kamimura (1974), Kitagawa and Kodama (1974), Sukkharak et al. (2011), Sukkharak (2015). Penang, Selangor, Kelantan, Pahang, Johor, Sarawak, Sabah.

Thysananthus convolutus var. ***laceratus*** (Steph.) Sukkharak – Sukkharak (2015). Sabah.

Thysananthus fruticosus (Lindenb. et Gottsche) Schiffn. – Verdoorn (1934a), Herzog (1950 as *T. fruticosus* f. *pendulus*), Mizutani (1969, 1987), Kitagawa and Kodama (1974), Kürschner (1990), Wolseley et al. (1996), Sukkharak (2015). Pahang, Selangor, Negeri Sembilan, Johor, Sarawak, Sabah.

Thysananthus gottschei (J.B.Jack et Steph.) Steph. – Stephani (1912 as *T. borneensis*), Verdoorn (1934a), Kamimura (1974), Kitagawa and Kodama (1974), Thiers (1985), Sukkharak (2015). Penang, Pahang, Sarawak, Sabah.

Thysananthus gottschei var. ***continuus*** Sukkharak – Sukkharak (2015). Sarawak.

Thysananthus gradsteinii (Sukkharak) Sukkharak et Gradst. – Sukkharak and Gradstein (2014 as *Mastigolejeunea gradsteinii*). Kelantan, Pahang.

Thysananthus humilis (Gottsche) Sukkharak et Gradst. – Mizutani (1969 as *Mastigolejeunea humilis*, 1986b as *M. recurvifolia*), Kitagawa (1971 as *M. humilis*), Kamimura (1974 as *M. humilis*), Sukkharak and Gradstein (2014 as *M. humilis*), Cheah (2017 as *M. humilis*). Penang, Pahang, Sarawak, Sabah.

Thysananthus indicus (Steph.) Sukkharak et Gradst. – Sukkharak and Gradstein (2014 as *M. indica*). Kedah.

Thysananthus ligulatus (Lehm. et Lindenb.) Sukkharak et Gradst. – Stephani (1890 as *Phragmicomia ligulata*), Schiffner (1898 as *Mastigolejeunea ligulata*), Verdoorn (1934a as *M. ligulata*), Mizutani (1969 as *M. ligulata*), Kitagawa and Kodama (1974 as *M. ligulata*), Thiers and Gradstein (1989 as *M. ligulata*), Kürschner (1990), Gradstein et al. (2002 as *M. ligulata*), Lee et al. (2013 as *M. ligulata*), Sukkharak and Gradstein (2014 as *M. ligulata*). Penang, Pahang, Sarawak, Sabah.

Thysananthus reconditus (Steph.) Sukkharak et Gradst. – Mizutani (1969 as *Mastigolejeunea recondita*), Sukkharak and Gradstein (2014 as *M. recondita*), Sun et al. (2018). Pahang, Sarawak, Sabah.

Thysananthus repletus (Taylor) Sukkharak et Gradst. – Mizutani (1969 as *Mastigolejeunea atypos*, 1986b as *M. repleta*), Sukkharak and Gradstein (2014 as *M. repleta*). Kedah, Selangor, Sabah.

Thysananthus retusus (Reinw., Blume et Nees) B.M.Thiers et Gradst. – Mizutani (1969, 1987 both as *T. planus*), Tixier (1971). Pahang, Sabah.

Thysananthus spathulistipus (Reinw., Blume et Nees) Lindenb. – Verdoorn (1934a), Herzog (1950 as *T. spathulistipus* f. *borneensis*), Inoue (1967a, 1968b), Tixier (1971, 1974), Kamimura (1974), Kitagawa and Kodama (1974), Kodama (1976), Thiers (1985), Kürschner (1990), Sukkharak (2015), Cheah (2017 as *T. minor*). Kedah, Penang, Perak, Kelantan, Pahang, Negeri Sembilan, Malacca, Johor, Sarawak, Sabah.

Thysananthus truncatus (Mizut.) Sukkharak et Gradst. – Mizutani (1986b as *Mastigolejeunea truncata*), Sukkharak and Gradstein (2014 as *M. truncata*). Sabah.

Thysananthus virens Ångstr. – Mizutani (1986b as *Mastigolejeunea virens*), Sukkharak and Gradstein (2014 as *M. virens*). Penang, Sabah.

Treubia insignis K.I.Goebel – Akiyama et al. (2001). Sabah.

Triandrophillum heterophyllum (Steph.) Grolle – Cheah (2017). Pahang.

Trichocolea magna T.Katag. – Katagiri et al. (2013). Sarawak.

Trichocolea mollissima (Hook.f et Taylor) Gottsche – Katagiri et al. (2013). Sabah.

Trichocolea pluma (Reinw., Blume et Nees) Mont. – De Notaris (1874), Herzog (1950), Inoue (1965), Kitagawa (1971, 1973), Kitagawa and Kodama (1973), Tixier (1974), Pocock et al. (1984), Kürschner (1990), Akiyama et al. (2001), Ludwiczuk and Asakawa (2010), Katagiri et al. (2013). Kedah, Penang, Pahang, Sarawak, Sabah.

Trichocolea rudimentaris Steph. – Katagiri et al. (2013). Pahang.

Trichocolea tomentella (Ehrh.) Dumort. – Gottsche et al. (1845 as *T. tomentella* f. *javanica*), Johnson (1972), Katagiri et al. (2013). Penang, Pahang, Sabah.

Tricholepidozia neesii (Lindenb.) E.D.Cooper – De Notaris (1874), Herzog (1950 as *Lepidozia neesii*), Inoue (1967a, 1968b both as *Telaranea neesii*), Kitagawa and Kodama

(1973), Mizutani (1974 as *Telaranea neesii*), Akiyama et al. (2001 as *Telaranea neesii*), Engel and Merrill (2004 as *Telaranea neesii*). Pahang, Sarawak, Sabah.

Tricholepidozia octoloba (Del Ros.) E.D.Cooper – Shi and Zhu (2008 as *Telaranea octoloba*). Johor.

Tricholepidozia quadriseta (Steph.) E.D.Cooper – Pócs et al. (2014 as *Telaranea quadriseta*). Pahang.

Tricholepidozia semperiana (Steph.) E.D.Cooper – Mizutani (1974b as *Telaranea semperiana*). Sabah.

Tricholepidozia trichocoleoides (Herzog) E.D.Cooper – Herzog (1950 as *Lepidozia trichocoleoides*), Kitagawa and Kodama (1973 as *L. trichocoleoides*), Engel and Merrill (2004 as *Telaranea trichocoleoides*). Sarawak, Sabah.

Tritomaria exsecta (Schmidel) Loeske – Kitagawa (1970). Sabah.

Tuyamaella angulistipa (Steph.) R.M.Schust. et Kachroo – Stephani (1896 as *Pycnolejeunea angulistipa*), Schiffner (1898 as *P. angulistipa*), Mizutani (1966, 1970), Tixier (1971, 1973a), Zhu and So (2000b). Perak, Pahang, Johor, Sabah.

Tuyamaella borneensis Tixier – Tixier (1973a). Sabah.

Tuyamaella molischii (Schiffn.) S.Hatt. – Tixier (1973a), Pesiu et al. (2021). Kedah, Terengganu.

Tuyamaella serratistipa S.Hatt. – Herzog (1951 as *Pycnolejeunea appendiculata*), Mizutani (1966), Tixier (1973a), Kitagawa and Kodama (1974), Zhu and So (1998a, 2000c), Pócs et al. (2020). Sarawak, Sabah.

Wiesnerella denudata (Mitt.) Steph. – Akiyama et al. (2001), Ludwiczuk and Asakawa (2010). Sabah.

Zoopsis liukuensis Horik. – Herzog (1950 as *Z. argentea*), Kitagawa and Kodama (1973), Manuel (1981), Grolle and Piippo (1984), Pocock et al. (1984), Mizutani and Chang (1986), Bisang et al. (2003). Pahang, Sarawak, Sabah.

Zoopsis setigera K.I.Goebel – Kitagawa and Kodama (1973 as *Z. rigida*), Schuster (1999). Sarawak, Sabah.

Hornworts (Anthocerotophyta)

Anthoceros angustus Steph. – Mohamed and Yong (2005 as *A. formosae*), Mohamed et al. (2005 as *A. formosae*), Lee and Gradstein (2021). Langkawi.

Dendroceros cavernosus J.Haseg. – Hasegawa (1980). Sabah.

Dendroceros diffcilis Steph. – Chantanaorrapint et al. (2014). Pahang.

Folioceros glandulosus (Lehm. et Lindenb.) D.C.Bharadwaj – Meijer (1957 as *Anthoceros grandulosus*), Tixier (1971 as *A. grandulosus*). Pahang, Sarawak.

Megaceros flagellaris (Mitt.) Steph. – Herzog (1950 as *M. celebensis*), Hasegawa (1983), Lee and Gradstein (2021). Pahang, Sarawak, Sabah.

Phaeoceros carolinianus (Michx.) Prosk. – Johnson (1958 as *Anthoceros validus*). Perak, Pahang.

Phaeomegaceros foveatus (J.Haseg.) J.C.Villarreal – Hasegawa (2001 as *Phaeoceros foveatus*). Sabah.

Further records

The following records from Malaysia (Genting Highlands, Pahang; Cheah 2017) need verification.

- Cololejeunea denticulata* (Horik.) S.Hatt.
Cololejeunea dinghuiana R.L.Zhu et Y.F.Wang
Cololejeunea drepanolejeuneoides (Horik.) R.M.Schust.
Cololejeunea grossepapillosa (Horik.) N.Kitag.
Cololejeunea plagiophylla Benedix
Cololejeunea spinosa (Horik.) Pandé et R.N.Misra
Plagiochila fusca Sande Lac.
Plagiochila gracilis Lindenb. et Gottsche
Plagiochila salacensis Gottsche
Plagiochila stephani Schiffn.
Riccardia diminuta Schiffn.
Riccardia hattorii Furuki
Riccardia multifida (L.) Gray
Riccardia multifidoides Schiffn.
Riccardia pumila Furuki
Riccardia singapurensis Schiffn.

Doubtful records

- Anastrophyllum piligerum* f. *dentalyx* – Reported from Sarawak (Herzog 1950); status unclear.
- Aspiromitus vesiculosus* var. *latifrons* Herzog – Reported from Sarawak (Herzog 1950), but its status is unclear. *Aspiromitus* is now a synonym of *Anthoceros*.
- Bazzania everettii* (Steph.) Meijer nom. inval. (ICN Art. 41.5) – Reported from Sarawak (Stephani 1908 as *Mastigobryum everettii*); status unclear.
- Bazzania karcharias* Herzog, nom. inval. (ICN 38.1) – Sarawak (Herzog 1950).
- Bazzania stonii* Inoue nom. inval. (ICN Art. 38.1(a) – Reported from Pahang (Inoue 1968b); the record should be checked.
- Bazzania subhyalina* (Steph.) Chuah-Pet. nom. inval. (ICN Art. 41.5) – Reported from Sarawak (Stephani 1924 as *Mastigobryum subhyalinum*); status unclear.
- Cephaloziella stephani* Douin – Reported from Pahang (Cheah 2017); the record should be checked.
- Chiloscyphus ceylanicus* Tixier nom. inval. (ICN Art. 38.1a) – Reported from Kedah (Tixier 1974); the record should be checked.
- Chiloscyphus schiffneri* J.J.Engel et R.M.Schust. nom illeg. – Synonym of *Lophocolea javanica* Schiffn., its occurrence in Pahang (Cheah 2017) is doubtful.
- Chiloscyphus flaccidens* Steph. – Reported from Kedah (Tixier 1974); the record should be checked.

Drepanolejeunea blumei var. *angulistipa* Herzog nom inval. (ICN Art. 39.1) – Reported from Sabah (Herzog 1936); the record should be checked.

Drepanolejeunea malayana Tixier (“Grolle”) nom. inval. – Reported from Kedah (Tixier 1974); the record should be checked.

Drepanolejeunea vesiculosus subsp. *propagulifera* Herzog nom. inval. (ICN Art. 39.1) – Reported from Negeri Sembilan (Wolseley et al. 1996) and Pahang (Inoue 1967a); the record should be checked.

Frullania ornithocephala f. *magnilobula* and f. *retusa* – Reported from Sabah (Hattori 1976), but their status is unclear.

Gottschea integerrima (Steph.) Grolle et Zijlstra – Accepted name: *Schistochila integerrima* Steph., only known from Vanuatu and New Caledonia (Thouvenot 2021). Its occurrence in Pahang (Cheah 2017) is doubtful and the record is most likely *S. nuda* Horik., known from Thailand and Southeast Asia.

Radula kurzii Steph. – Reported from Pahang (Cheah 2017); not known in tropical Southeast Asia and very similar to the widespread Asian *R. javanica* Gottsche.

Symphyogyna similis Grolle – Reported from Pahang (Cheah 2017); the record should be checked, only known from the Huon Peninsula and Java (Grolle and Piippo 1986).

Telaranea wallichiana var. *remotifolia* Herzog – Reported from Sarawak (Herzog 1950), but its status is unclear.

Excluded and erroneous records (See Menzel 1988 for further excluded records)

Acrolejeunea aulacophora (Mont.) Steph. – The record from Sabah (Mizutani 1969 as *Ptychocoleus aulacophorus*) is doubtful.

Acrolejeunea borneensis Bonner, nom. inval. from Sarawak (Bonner 1962) is a *Schiffnerolejeunea* sp. fide Gradstein (1975).

Acrolejeunea sandvicensis (Gottsche) J.Wang et Gradst. – The record from Malaysia (Tixier (1975 as *Brachiolejeunea sandvicensis*) belongs to *Thysananthus reconditus* (Sun et al. 2018).

Bazzania tricrenata (Wahlenb.) Lindb. – This is a Holarctic species, not known in tropical Southeast Asia, and its occurrence in Malaysia (Pahang; Cheah 2017) is considered erroneous. Also reported from Sabah by Sande Lacoste (1864 as *Mastigobryum deflexum*).

Cheirolejeunea parvidens B.M.Thiers – The record from Sabah (Pócs et al. 2020) belongs to *C. intertexta*.

Chiloscyphus minor (Nees) J.J.Engel et R.M.Schust. – This is a Holarctic species, not known in tropical Southeast Asia, and its occurrence in Malaysia (Pahang; Cheah 2017) is considered erroneous.

Frullania integrifolia var. *emarginata* Verd. – Reported from Sabah by Chuah-Petiot (2011) based on Hattori (1982), but the latter author did not report this variety from Malaysia.

Frullania pulogensis Steph. – Reported from Sabah by Verdoorn (1932a) but it was rejected by Hattori (1978) due to the scarcity of the specimen. No material of *F. pulogensis* but fragmental shoots of *F. mizutanii* are present.

Kurzia mauiensis (H.A.Mill.) H.A.Mill. – Reported from Pahang (Cheah 2017).

Only known from the Pacific Islands and its occurrence in Malaysia needs verification.

Lejeunea dentata Mitt. – Reported from Pahang (Cheah 2017). Synonym of *Radula cuspidata* Steph., only known in New Zealand.

Lejeunea ulicina (Taylor) Gottsche, Lindenb. et Nees – Accepted name: *Microlejeunea ulicina* (Taylor) Steph., a Holarctic species, not known in tropical Southeast Asia.

Its occurrence in Malaysia (Pahang; Cheah 2017) is considered erroneous.

Metacalypogeia alternifolia (Nees) Grolle – Reported from Sarawak by Herzog (1950 as *Calypogeia alternifolia*). According to Grolle (1964), this record is erroneous.

Metzgeria albinea Spruce – This is a Neotropical species according to So (2002), and its occurrence in Malaysia (Pahang; Cheah 2017) needs verification.

Mnioloma stamatotonum M.A.M.Renner et E.A.Br. – Reported from Pahang (Cheah 2017); an Australasian species, not known in tropical Southeast Asia.

Riccia treubiana Steph. – Reported from Peninsular Malaysia by Chuah Petiot (2011) based on Meijer (1958) but the latter author reported this species from Singapore. *Riccia treubiana* is a common species and often found in gardens, recreational parks and secondary forests. Its occurrence in Malaysia is to be expected.

Odontoschisma denudatum (Nees) Dumort. – Reported from Sabah by various authors (see Chuah-Petiot 2011), but the material belongs to *O. denudatum* subsp. *naviculare* (see Gradstein and Ilkiu-Borges 2015).

Odontoschisma sphagni (Dicks.) Dumort. – Reported from Sabah by Mitten and Wright (1894), but the record is considered erroneous (Váňa 1993). According to Gradstein and Ilkiu-Borges (2015) *O. sphagni* is a species from Europe and North America that does not occur in Asia.

Saccogynidium irregularospinum C.Gao, T.Cao et M.J.Lai – Reported from Pahang (Cheah 2017); a temperate Asiatic species from Sikkim and China, not known in tropical Southeast Asia.

Schistochila nyamanii – Reported from Pahang (Cheah 2017), but the species name does not exist.

Solenostoma obliquifolium (Schiffn.) Váňa, Hentschel et Heinrichs – Reported from Sabah by Chuah-Petiot (2011) based on Váňa (1991b as *Jungermannia obliquifolia*) but the latter author did not report this species in Sabah.

Telaranea granulata J.J.Engel et G.L.Merr. – Reported from Pahang (Cheah 2017); endemic to New Zealand, not known in tropical Southeast Asia.

Telaranea patentissima (Hook.f et Taylor) E.A.Hodgs. – Reported from Pahang (Cheah 2017); an Australasian species from Australia and New Zealand, not known in tropical Southeast Asia.

Thysananthus auriculatus (Wilson et Hook.) Sukkharak et Gradst. – Reported from Pahang by Lee et al. (2013 as *Mastigolejeunea auriculata*). According to Sukkharak and Gradstein (2014, 2017) *T. auriculatus* is an Afro-American species; Asiatic records of this species belong to *T. humilis*.

Wettsteinia inversa (Sande Lac.) Schiffn. – Reported from Sabah by Frahm et al. (1990) and Chuah-Petiot (2011) based on Menzel (1988), but the latter author reported this species only from Kalimantan Selatan (leg. Korthals, paratype of *Plagiochila scabra* Sande Lac.). *Wettsteinia inversa* is a widespread Malesian species (see Piippo 1984) and its occurrence in Malaysia is to be expected.

Synonyms

New synonymy published after the appearance of World Checklist (Söderström et al. 2016) is provided with a reference.

Acantholejeunea spinistipula (Herzog) R.M.Schust. ≡ *Ceratolejeunea spinistipula* (Herzog) R.L.Zhu, L.Shu, Qiong He et Y.M.Wei

Acrolejeunea pulopenangensis (Gott sche) Schiffn. ≡ *Schiffnerolejeunea pulopenangensis* (Gott sche) Gradst.

Acrolejeunea tumida (Nees) Steph. ≡ *Schiffnerolejeunea tumida* (Nees) Gradst.

Acromastigum bidenticulatum A.Evans = *A. bancanum* (Sande Lac.) A.Evans

Acromastigum denticulatum A.Evans = *A. bifidum* (Steph.) A.Evans

Acromastigum emarginatum Herzog ≡ *Bazzania menzelii* E.D.Cooper

Acromastigum gemmiferum N.Kitag. et T.Kodama = *A. obliquatum* (Mitt.) A.Evans

Adelanthus borneensis Grolle ≡ *Pseudomarsupidium borneensis* (Grolle) Váňa, L.Söderstr., A.Hagborg et von Konrat

Allorgella changiana Tixier = *Otolejeunea semperiana* (Steph.) Grolle

Anastrophyllum appendiculatum N.Kitag. = *A. auritum* (Lehm.) Steph.

Anastrophyllum divergens Herzog = *A. fissum* Steph.

Anastrophyllum imbricatum (Gott sche, Lindenb. et Nees) Steph. = *A. piligerum* (Nees) Steph.

Anastrophyllum minutum (Schreb.) R.M.Schust. ≡ *Sphenolobus minutus* (Schreb.) Berggr.

Aneura subcrenulata Herzog = *Riccardia parvula* Schiffn.

Anomacaulis flaccidus (Steph.) Grolle ≡ *Syzygiella flaccida* (Steph.) Gradst. et G.E.Lee (Lee and Gradstein 2021)

Anthoceros formosae Steph. = *A. angustus* Steph.

Anthoceros glandulosus Lehm. et Lindenb. ≡ *Folioceros glandulosus* (Lehm. et Lindenb.) Bhardwaj

Anthoceros validus Steph. = *Phaeoceros carolinianus* (Michx.) Prosk.

Aplozia polyrhiza (Hook.) Horik. = *Solenostoma truncatum* (Nees) Váňa et D.G.Long

Apometzgeria pubescens var. *kinabaluensis* Kuwah. = *Metzgeria kinabaluensis* (Kuwah.) Masuzaki

Aphanolejeunea borneensis (Herzog) Pócs = *Cololejeunea papillosa* (K.I.Goebel) Mizut.

Aphanolejeunea microscopica var. *borneensis* Herzog = *Cololejeunea papillosa* (K.I.Goebel) Mizut.

Aphanolejeunea proboscidea (K.I.Goebel) R.M.Schust. = *Cololejeunea diaphana* A.Evans

Arachniopsis major Herzog ≡ *Telaranea major* (Herzog) J.J.Engel et G.L.Merr.

- Arachniopsis monocera* R.M.Schust. et Grolle ≡ *Telaranea monocera* J.J.Engel et G.L.Merr.
- Archilejeunea mariana* auct. (non (Gottsche) Steph.) = *Spruceanthus planiusculus* (Mitt.) X.Q.Shi, R.L.Zhu et Gradst. (Shi et al. 2015)
- Archilejeunea planiuscula* (Mitt.) Steph. ≡ *Spruceanthus planiusculus* (Mitt.) X.Q.Shi, R.L.Zhu et Gradst. (Shi et al. 2015)
- Austrometzgeria francana* (Steph.) Kuwah. ≡ *Metzgeria francana* Steph.
- Bazzania assamica* (Steph.) S.Hatt. = *B. tridens* var. *assamica* (Steph.) Pócs
- Bazzania australis* Gottsche, Lindenb. et Nees = *B. tridens* (Reinw., Blume et Nees) Trevis.
- Bazzania bancana* (Sande Lac.) Trevis. ≡ *Acromastigum bancanum* (Sande Lac.) A.Evans
- Bazzania concinna* (De Not.) Trevis. = *B. intermedia* (Gottsche et Lindenb.) Trevis.
- Bazzania coreana* Herzog = *B. tridens* (Reinw., Blume et Nees) Trevis.
- Bazzania echinatiformis* (De Not.) Trevis. ≡ *Acromastigum echinatiforme* (De Not.) A Evans
- Bazzania ferox* (De Not.) Trevis. = *B. harpago* (De Not.) Schiffn.
- Bazzania remotifolia* Herzog nom. illeg. ≡ *B. herzogiana* Meijer
- Bazzania palmatifida* (Steph.) Grolle = *B. subtilis* (Sande Lac.) Trevis.
- Bazzania fallax* f. *fissa* Herzog = *B. fallax* (Sande Lac.) Schiffn.
- Bazzania lingana* (De Not.) Trevis. ≡ *Acromastigum linganum* (De Not.) A.Evans
- Bazzania notarisii* (Steph.) Schiffn. = *Acromastigum inaequilaterum* (Lehm. et Lindenb.) A.Evans
- Bazzania pulvinulata* (De Not.) Schiffn. ≡ *Mastigopelma pulvinulatum* (De Not.) Grolle
- Bazzania recurva* var. *pallens* (De Not.) Schiffn. = *B. recurva* (Mont.) Trevis.
- Bazzania recurvolimbata* (Steph.) N.Kitag. = *B. revoluta* (Steph.) N.Kitag.
- Bazzania richardsii* Herzog = *B. calcarata* (Sande Lac.) Schiffn.
- Bazzania serrulata* (Mitt.) Steph. = *B. erosa* (Reinw., Blume et Nees) Trevis.
- Bazzania tridens* f. *minutissima* (Kamim.) Pócs = *B. tridens* (Reinw., Blume et Nees) Trevis.
- Bazzania vaga* (De Not.) Trevis. = *B. erosa* (Reinw., Blume et Nees) Trevis.
- Calypogeia baldwinii* Austin = *Mnioloma fuscum* (Lehm.) R.M.Schust.
- Calypogeia fusca* (Lehm.) Steph. ≡ *Mnioloma fuscum* (Lehm.) R.M.Schust.
- Campylolejeunea peculiaris* (Herzog) Amakawa = *Cololejeunea inflectens* (Mitt.) Benedix
- Campylolejeunea pusilla* Mizut. ≡ *Cololejeunea hattoriana* Mizut. et Pócs
- Caudalejeunea circinata* Steph. = *C. cristiloba* (Steph.) Gradst.
- Caudalejeunea serrata* Steph. = *C. reniloba* (Gottsche) Steph.
- Caudalejeunea recurvistipula* (Gottsche) Schiffn. = *C. reniloba* (Gottsche) Steph.
- Caudalejeunea stephanii* Steph. nom. inval. = *C. reniloba* (Gottsche) Steph.
- Cephalozia pearsonii* (Spruce) Steph. ≡ *Sphenolobopsis pearsonii* (Spruce) R.M.Schust.
- Cephaloziella tagawae* N.Kitag. = *Cylindrocolea tagawae* (N.Kitag.) R.M.Schust.
- Cephaloziella willisana* (Steph.) N.Kitag. = *Cylindrocolea kiaeri* (Austin) Douin
- Ceratolejeunea oceanica* (Mitt.) Steph. = *C. belangeriana* (Gottsche) Steph.
- Ceratolejeunea ryukyuensis* Amakawa = *C. belangeriana* (Gottsche) Steph.
- Ceratolejeunea tahitensis* Steph. = *C. cornuta* (Lindenb.) Steph.
- Chandonanthus filiformis* Steph. ≡ *Tetralophozia filiformis* (Steph.) Urmi
- Chandonanthus hirtellus* (F.Weber) Mitt. ≡ *Plicanthus hirtellus* (F.Weber) R.M.Schust.

- Chandonanthus pilifer* Steph. \equiv *Tetralophozia pilifera* (Steph.) R.M.Schust.
Cheilolejeunea excisula (Steph.) Mizut. = *C. incisa* (Gottsche) R.M.Schust.
Cheilolejeunea imbricata (Nees) S.Hatt. = *C. trapezia* (Nees) R.M.Schust. et Kachroo
Cheilolejeunea larsenii Mizut. = *C. adnata* var. *autoica* Gradst. et Ilk.-Borg. (Bastos and
Gradstein 2020).
Cheilolejeunea longiloba (G.Hoffm.) R.M.Schust. = *C. trapezia* (Nees) R.M.Schust.
et Kachroo
Cheilolejeunea luerssenii (Steph.) Mizut. = *C. lindenbergii* (Gottsche) Mizut.
Cheilolejeunea meyeniana (Nees, Lindenb. et Gottsche) R.M.Schust. et Kachroo
= *C. trapezia* (Nees) R.M.Schust. et Kachroo
Cheilolejeunea picta Mizut. \equiv *Pictolejeunea mizutanii* Grolle
Cheilolejeunea spathulata Mizut. = *C. decursiva* (Sande Lac.) R.M.Schust.
Cheilolejeunea viridula (Herzog) Mizut. = *C. trifaria* (Reinw., Blume et Nees) Mizut.
Chiloscyphus acutangulus Schiffn. \equiv *Heteroscyphus acutangulus* (Schiffn.) Schiffn.
Chiloscyphus argutus (Reinw., Blume et Nees) Nees \equiv *Heteroscyphus argutus* (Reinw.,
Blume et Nees) Schiffn.
Chiloscyphus aselliformis (Reinw., Blume et Nees) Nees \equiv *Heteroscyphus aselliformis*
(Reinw., Blume et Nees) Schiffn.
Chiloscyphus aselliformis var. *neesii* Schiffn. = *Heteroscyphus aselliformis* (Reinw., Blume
et Nees) Schiffn.
Chiloscyphus ciliolatus (Nees) J.J.Engel et R.M.Schust. \equiv *Cryptolophocolea ciliolata*
(Nees) L.Söderstr., Crand.-Stotl., Stotler et Váňa
Chiloscyphus coadunatus (Sw.) J.J.Engel et R.M.Schust. = *Lophocolea bidentata* (L.) Dumort.
Chiloscyphus communis Steph. = *Heteroscyphus coalitus* (Hook.) Schiffn.
Chiloscyphus concinnus De Not. = *Heteroscyphus succulentus* (Gottsche) Schiffn.
Chiloscyphus costatus (Nees) J.J.Engel et R.M.Schust. \equiv *Cryptolophocolea costata* (Nees)
L.Söderstr.
Chiloscyphus cuspidatus (Nees) J.J.Engel et R.M.Schust. = *Lophocolea bidentata* (L.)
Dumort.
Chiloscyphus decurrens (Reinw., Blume et Nees) Nees = *Heteroscyphus splendens* (Lehm.
et Lindenb.) Grolle
Chiloscyphus densifolius De Not. = *Heteroscyphus splendens* (Lehm. et Lindenb.) Grolle
Chiloscyphus diestianus Sande Lac. \equiv *Heteroscyphus diestianus* (Sande Lac.) Piippo
Chiloscyphus integerrimus Schiffn. \equiv *Heteroscyphus integerrimus* (Schiffn.) Gradst. et
G.E.Lee (Lee and Gradstein 2021).
Chiloscyphus kurzii (Sande Lac.) J.J.Engel et R.M.Schust. \equiv *Lophocolea kurzii* Sande Lac.
Chiloscyphus latifolius (Nees) J.J.Engel et R.M.Schust. = *Lophocolea bidentata* (L.) Dumort.
Chiloscyphus muricatus (Lehm.) J.J.Engel et R.M.Schust. \equiv *Lophocolea muricata*
(Lehm.) Nees
Chiloscyphus muricellus De Not. \equiv *Saccogynidium muricellum* (De Not.) Grolle
Chiloscyphus paroicus J.J.Engel et R.M.Schust. \equiv *Cryptolophocolea levieri* (Schiffn.)
L.Söderstr.
Chiloscyphus parvulus Schiffn. \equiv *Heteroscyphus parvulus* (Schiffn.) Schiffn.

- Chiloscyphus sikkimensis* (Steph.) J.J.Engel et R.M.Schust. ≡ *Lophocolea sikkimensis* (Steph.) Herzog et Grolle
Chiloscyphus stetziae (De Not.) J.J.Engel et R.M.Schust. ≡ *Lophocolea stetziae* De Not.
Chiloscyphus succulentus Gottsche ≡ *Heteroscyphus succulentus* (Gottsche) Schiffn.
Chiloscyphus wettsteinii Schiffn. ≡ *Heteroscyphus wettsteinii* (Schiffn.) Schiffn.
Chiloscyphus zollingeri var. *borneensis* Herzog = *Heteroscyphus zollingeri* (Gottsche) Schiffn.
Cololejeunea androgyna Benedix = *C. obliqua* (Nees et Mont.) Schiffn.
Cololejeunea amoena Benedix ≡ *C. floccosa* var. *amoena* (Benedix) Pócs
Cololejeunea astyla Mizut. = *C. platyneura* (Spruce) A.Evans
Cololejeunea balansae (Steph.) Mizut. = *C. trichomanis* (Gottsche) Steph.
Cololejeunea benedixii Tixier = *C. schmidtii* Steph.
Cololejeunea bolombensis (Steph.) Vanden Berghen = *C. lanciloba* Steph.
Cololejeunea ciliatilobula (Schiffn.) Schiffn. = *C. inflectens* (Mitt.) Benedix
Cololejeunea crenulata (Pearson) H.A.Mill. = *C. angustiflora* (Steph.) Mizut.
Cololejeunea falcatoides Benedix = *C. falcata* (Horik.) Benedix
Cololejeunea filicaulis Steph. = *C. hildebrandii* (Austin) Steph.
Cololejeunea formosana Mizut. = *C. ceratilobula* (P.C.Chen) R.M.Schust.
Cololejeunea goebelii (Schiffn.) Schiffn. = *C. trichomanis* (Gottsche) Steph.
Cololejeunea inflectidens (Mitt.) Benedix nom. inval. ≡ *C. inflectens* (Mitt.) Benedix
Cololejeunea javanica (Steph.) Mizut. = *C. angustiflora* (Steph.) Mizut.
Cololejeunea jelinekii Steph. = *C. obliqua* (Nees et Mont.) Schiffn.
Cololejeunea karstenii K.I.Goebel = *C. cordiflora* Steph.
Cololejeunea kinabalensis Mizut. = *C. macounii* (Underw.) A.Evans
Cololejeunea leonidens Benedix = *C. ocelloides* (Horik.) Mizut.
Cololejeunea leonidens var. *saccata* Benedix = *C. ocelloides* (Horik.) Mizut.
Cololejeunea mackeeana Tixier = *C. angustiflora* (Steph.) Mizut.
Cololejeunea meijeri Tixier = *C. ocelloides* (Horik.) Mizut.
Cololejeunea mutabilis f. *borneensis* Benedix = *C. mutabilis* Benedix
Cololejeunea mutabilis f. *floccodoides* Tixier = *C. mutabilis* Benedix
Cololejeunea mutabilis f. *subfalcata* Tixier = *C. mutabilis* Benedix
Cololejeunea nymannii (Steph.) Benedix = *C. obliqua* (Nees et Mont.) Schiffn.
Cololejeunea oshimensis (Horik.) Benedix = *C. inflata* Steph.
Cololejeunea pahangiana Tixier = *C. lanciloba* Steph.
Cololejeunea pakseana Tixier = *C. uchimae* Amakawa
Cololejeunea paroica Mizut. = *C. gottschei* (Steph.) Mizut.
Cololejeunea peculiaris (Herzog) Benedix = *C. inflectens* (Mitt.) Benedix
Cololejeunea peraffinis var. *elegans* Benedix = *C. peraffinis* (Schiffn.) Schiffn.
Cololejeunea planiflora Benedix = *Cololejeunea indica* Pandé et R.N.Misra
Cololejeunea pluripunctata Benedix = *C. siamensis* Steph.
Cololejeunea pusilla Steph. = *C. gradsteinii* M.J.Lai et R.L.Zhu
Cololejeunea scabriflora Steph. = *C. obliqua* (Nees et Mont.) Schiffn.
Cololejeunea tenella var. *vittata* Tixier = *C. tenella* Benedix
Cololejeunea trichomanis subsp. *cordiflora* (Steph.) Pócs ≡ *C. cordiflora* Steph.
Cololejeunea yulensis (Steph.) Benedix = *C. aequabilis* (Sande Lac) Schiffn.

- Colura acutifolia* Jovet-Ast = *C. conica* (Sande Lac.) K.I.Goebel
Colura apiculata (Schiffn.) Steph. = *C. leratii* (Steph.) Steph.
Colura javanica Steph. = *C. ari* (Steph.) Steph.
Colura trialata (Steph.) Herzog et Zwickel = *C. corynophora* (Nees, Lindenb. et Gottsche) Trevis.
Colurolejeunea ornata A.Evans ≡ *Colura ornata* K.I.Goebel
Conoscyphus inflexifolius Mitt. = *C. trapezoides* (Sande Lac.) Schiffn.
Crossotolejeunea borneensis Herzog = *Lejeunea stenodentata* M.A.M.Renner et Pócs
Cryptochila grandiflora (Lindenb. et Gottsche) Grolle = *Syzygiella sonderi* (Gottsche) K.Feldberg, Váňa, Hentschel et Heinrichs
Cuspidatula contracta (Reinw., Blume et Nees) Steph. ≡ *Syzygiella contracta* (Reinw., Blume et Nees) Gradst. et G.E.Lee (Lee and Gradstein 2021)
Cylindrocolea kiaeri (Austin) Váňa ≡ *Cephaloziella kiaeri* (Austin) Douin (Lee and Gradstein 2021)
Diplasirolejeunea brachyclada A.Evans = *D. cavifolia* Steph.
Diplasirolejeunea incurvata Ast et Tixier = *D. cobrensis* Steph.
Diplasirolejeunea javanica Steph. = *D. cavifolia* Steph.
Diplasirolejeunea neobrachyclada S.Hatt = *D. patelligera* Herzog
Diplasirolejeunea rudolphiana Steph. = *D. unidentata* (Lehm. et Lindenb.) Schiffn.
Diploscyphus borneensis De Not. = *Conoscyphus trapezoides* (Sande Lac.) Schiffn.
Drepanolejeunea brunnea Mizut. ≡ *Mohamedia brunnea* (Mizut.) R.L.Zhu et L.Shu
Drepanolejeunea dentata Steph. ≡ *Lejeunea stenodentata* M.A.M.Renner et Pócs
Drepanolejeunea filicispis (Steph.) Mizut. ≡ *Microlejeunea filicispis* (Steph.) Heinrichs, Schäf.-Verw., Pócs et S.Dong
Drepanolejeunea levicornua var. *longicornua* Herzog = *D. longicornua* (Herzog) Mizut.
Drepanolejeunea micholitzii Steph. = *D. pentadactyla* (Mont.) Steph.
Drepanolejeunea micholitzii var. *angustissima* Herzog = *D. pentadactyla* (Mont.) Steph.
Drepanolejeunea micholitzii var. *brevifolia* Herzog = *D. pentadactyla* (Mont.) Steph.
Drepanolejeunea micholitzii var. *dactylophoroides* Herzog ≡ *D. pentadactyla* var. *dactylophoroides* (Herzog) Pócs
Drepanolejeunea muricata (Gottsche) Schiffn. ≡ *Dactylophorella muricata* (Gottsche) R.M.Schust.
Drepanolejeunea spinistipula Herzog ≡ *Ceratolejeunea spinistipula* (Herzog) R.L.Zhu, L.Shu, Qiong He et Y.M.Wei
Drepanolejeunea tenera f. *goebelii* Herzog = *D. tenera* K.I.Goebel
Drepanolejeunea tenera var. *genuina* Herzog nom. illeg. = *D. tenera* K.I.Goebel
Drepanolejeunea tenuis (Nees) Schiffn. = *D. angustifolia* (Mitt.) Grolle
Drepanolejeunea ternatensis var. *lancispina* Herzog = *D. ternatensis* (Gottsche) Schiffn.
Drepanolejeunea vesiculosaa f. *robusta* Herzog = *D. vesiculosaa* (Mitt.) Steph.
Dumortiera calcicola Campb. = *D. hirsuta* subsp. *nepalensis* (Taylor) R.M.Schust.
Dumortiera nepalensis (Taylor) Nees ≡ *D. hirsuta* subsp. *nepalensis* (Taylor) R.M.Schust.
Dumortiera trichocephala (Hook.) Nees = *D. hirsuta* subsp. *nepalensis* (Taylor) R.M.Schust.
Eopleurozia simplicissima (Herzog) R.M.Schust. = *Pleurozia gigantea* (F.Weber) Lindb.

Euosmolejeunea luerssenii Steph. = *Cheilolejeunea lindenbergii* (Gottsche) Mizut.

Frullania altemammillata S.Hatt. = *F. armatifolia* Verd.

Frullania borneensis Steph. = *F. sublignosa* Steph.

Frullania hampeana Nees = *F. monocera* (Hook.f. et Taylor) Gottsche, Lindenb. et Nees

Frullania hasskarliana var. *integribracteata* (Verd.) S.Hatt. = *F. hasskarliana* Lindenb.

Frullania intermedia f. *billardieriana* (Nees et Mont.) Verd. = *F. intermedia* (Reinw., Blume et Nees) Nees

Frullania intermedia var. *submorokensis* S.Hatt. = *F. intermedia* (Reinw., Blume et Nees) Nees

Frullania junghuhniana var. *minutissima* Verd. = *F. junghuhniana* var. *tenella* (Sande Lac.) Grolle et S.Hatt.

Frullania minor Sande Lac. = *F. gracilis* (Reinw., Blume et Nees) Nees

Frullania moniliata subsp. *breviramea* (Steph.) Verd. = *F. moniliata* (Reinw., Blume et Nees) Mont.

Frullania ornithocephala f. *magnilobula* S.Hatt. = *F. ornithocephala* (Reinw., Blume et Nees) Nees

Frullania ornithocephala f. *retusa* S.Hatt. = *F. ornithocephala* (Reinw., Blume et Nees) Nees

Frullania perminuta S.Hatt. = *F. junghuhniana* var. *tenella* (Sande Lac.) Grolle et S.Hatt.

Frullania perversa Steph. = *F. junghuhniana* var. *tenella* (Sande Lac.) Grolle et S.Hatt.

Frullania philippinensis Steph. = *F. reflexistipula* Sande Lac.

Frullania picta Steph. = *F. trichodes* Mitt.

Frullania repandistipula subsp. *spinifera* S.Hatt. nom. inval. = *F. repandistipula* subsp. *spinibractea* S.Hatt.

Frullania serrata f. *crispulodentata* Verd. = *F. serrata* Gottsche

Frullania squarrosa (Mont.) Nees = *F. ericoides* (Nees) Mont.

Frullania tamarisci var. *breviramea* (Steph.) S.Hatt. = *F. moniliata* (Reinw., Blume et Nees) Mont.

Frullania tenuicaulis Mitt. = *F. trichodes* Mitt.

Frullania vethii Sande Lac. = *F. trichodes* Mitt.

Frullania vethii f. *acutiloba* S.Hatt. = *F. trichodes* Mitt.

Frullania wallichiana Mitt. = *F. obscura* (Sw.) Mont.

Gottschea aligera (Nees et Blume) Nees ≡ *Schistochila aligera* (Nees et Blume) J.B.Jack et Steph.

et Steph.

Gottschea aligeriformis De Not. = *Schistochila aligera* (Nees et Blume) J.B.Jack et Steph.

Gottschea beccariana De Not. ≡ *Schistochila beccariana* (De Not.) Trevis.

Gottschea doriae De Not. ≡ *Schistochila doriae* De Not) Trevis.

Gottschea gaudichaudii Gottsche = *Schistochila aligera* (Nees et Blume) J.B.Jack et Steph.

Gottschea philippinensis Mont. = *Schistochila aligera* (Nees et Blume) J.B.Jack et Steph.

Gottschea sciurea (Nees) Sande Lac. ≡ *Schistochila sciurea* (Nees) Schiffn.

Gymnomitrion laceratum var. *borneense* N.Kitag. = *G. incompletum* (Gottsche) Váňa

Harpalejeunea constricta Grolle ≡ *Microlejeunea constricta* (Grolle) Grolle

Harpalejeunea filicuspis (Steph.) Mizut. ≡ *Microlejeunea filicuspis* (Steph.) Heinrichs, Schäf.-Verw., Pócs et S.Dong

Harpalejeunea kinabaluensis Mizut. ≡ *Microlejeunea kinabaluensis* (Mizut.) Grolle

- Harpalejeunea mammillosa* Mizut. ≡ *Microlejeunea mammillosa* (Mizut.) Grolle
Harpalejeunea minutissima Mizut. ≡ *Microlejeunea minutissima* (Mizut.) Grolle
Harpalejeunea riddleana (Steph.) Mizut. = *Microlejeunea filicispis* (Steph.) Heinrichs,
 Schäf.-Verw., Pócs et S.Dong
- Harpalejeunea spinosa* Mizut. ≡ *Microlejeunea spinosa* (Mizut.) Grolle
Hattoriella subcrispa (Herzog) Bakalin ≡ *Mesoptychia subcrispa* (Herzog) L.Söderstr. et Váňa
Herbertus armitanus (Steph.) H.A.Mill. = *H. sendtneri* (Nees) Lindb.
Herbertus circinatus (Steph.) H.A.Mill. = *H. sendtneri* (Nees) Lindb.
Herbertus dicranus (Taylor) Trevis. = *H. aduncus* (Dicks.) Gray
Herbertus longispinus J.B.Jack et Steph. = *H. aduncus* (Dicks.) Gray
Herpetium recurvum Mont. ≡ *Bazzania recurva* (Mont.) Trevis.
Heteroscyphus bescherellei (Steph.) S.Hatt. = *H. coalitus* (Hook.) Schiffn.
Heteroscyphus communis (Steph.) Schiffn. = *H. coalitus* (Hook.) Schiffn.
Hygrobiella mollusca (De Not.) Steph. ≡ *Cephalozia mollusca* (De Not.) Váňa
Hygrobiella mollusca f. *subintegerrima* Herzog = *Cephalozia stolonacea* (Herzog) R.M.Schust.
Hygrolejeunea lindenbergii (Gottsche) Steph. ≡ *Cheilolejeunea lindenbergii* (Gottsche) Mizut.
Iwatsukia exigua N.Kitag. = *Odontoschisma jishibae* (Steph.) L.Söderstr. et Váňa
Jamesoniella autumnalis (DC.) Steph. ≡ *Syzygiella autumnalis* (DC.) K.Feldberg, Váňa,
 Hentschel et Heinrichs
Jamesoniella contracta (Reinw., Blume et Nees) N.Kitag. ≡ *Syzygiella contracta* (Reinw.,
 Blume et Nees) Gradst. et G.E.Lee (Lee and Gradstein 2021)
Jamesoniella flexicaulis (Nees) Schiffn. ≡ *Syzygiella flexicaulis* (Nees) Gradst. et G.E.Lee
 (Lee and Gradstein 2021)
Jamesoniella flexicaulis f. *affinis* (Schiffn.) Amakawa = *Denotarisia linguifolia* (De
 Not.) Grolle
Jamesoniella flexicaulis var. *mizutanii* Amakawa = *Syzygiella flexicaulis* (Nees) Gradst. et
 G.E.Lee (Lee and Gradstein 2021)
Jamesoniella microphylla (Gottsche, Lindenb. et Nees) Schiffn. = *Gottschelia schizopleura*
 (Spruce) Grolle
Jamesoniella minutissima Amakawa = *Andrewsianthus mizutanii* N.Kitag.
Jamesoniella nipponica S.Hatt. ≡ *Syzygiella nipponica* (S.Hatt.) K.Feldberg, Váňa,
 Hentschel et Heinrichs
Jamesoniella ovifolia (Schiffn.) Schiffn. = *Denotarisia linguifolia* (De Not.) Grolle
Jamesoniella pverrucosa Amakawa = *Syzygiella nipponica* (S.Hatt.) K.Feldberg, Váňa,
 Hentschel et Heinrichs
Jamesoniella pulchra N.Kitag. = *Denotarisia linguifolia* (De Not.) Grolle
Jensenia zollingeri (Gottsche) Grolle = *J. decipiens* (Mitt.) Grolle
Jubula hutchinsiae subsp. *javanica* (Steph.) Verd. = *J. javanica* Steph.
Jungermannia appressifolia Mitt. ≡ *Solenostoma appressifolium* (Mitt.) Váňa
Jungermannia ariadne Taylor ≡ *Solenostoma ariadne* (Taylor) Váňa et D.G.Long
Jungermannia borneensis Amakawa ≡ *Solenostoma borneense* (Amakawa) Váňa,
 Hentschel et Heinrichs

- Jungermannia comata* Nees \equiv *Solenostoma comatum* (Nees) C.Gao
Jungermannia curvifolia var. *borneensis* De Not. \equiv *Nowellia borneensis* (De Not.) Schiffn.
Jungermannia decolyana Steph. = *Solenostoma appressifolium* (Mitt.) Váňa
Jungermannia grollei Amakawa = *Solenostoma riclefii* Váňa et D.G.Long
Jungermannia haskariana (Nees) Mitt. \equiv *Solenostoma haskarlianum* (Nees) Váňa et D.G.Long
Jungermannia herzogiana Váňa \equiv *Solenostoma javanicum* (Schiffn.) Steph.
Jungermannia iwatsukii Amakawa = *Syzygiella sonderi* (Gottsche) K.Feldberg, Váňa, Hentschel et Heinrichs
Jungermannia kinabalensis Amakawa = *Solenostoma appressifolium* (Mitt.) Váňa
Jungermannia mizutanii Amakawa = *Solenostoma stephanii* (Schiffn.) Steph.
Jungermannia mollusca De Not. \equiv *Cephalozia mollusca* (De Not.) Váňa
Jungermannia piligera Nees \equiv *Anastrophyllum piligerum* (Nees) Steph.
Jungermannia polyrhiza Lehm. et Lindenb. = *Solenostoma truncatum* (Nees) Váňa et D.G.Long
Jungermannia pseudocyclops Inoue \equiv *Solenostoma pseudocyclops* (Inoue) Váňa et D.G.Long
Jungermannia sphaerocarpa Hook. \equiv *Solenostoma sphaerocarpum* (Hook.) Steph.
Jungermannia stephanii (Schiffn.) Amakawa \equiv *Solenostoma stephanii* (Schiffn.) Steph.
Jungermannia stricta (Schiffn.) Steph. \equiv *Solenostoma strictum* (Schiffn.) Váňa, Hentschel et Heinrichs
Jungermannia tetragona Lindenb. \equiv *Solenostoma tetragonum* (Lindenb.) Váňa et D.G.Long
Jungermannia truncata Nees \equiv *Solenostoma truncatum* (Nees) Váňa et D.G.Long
Jungermannia tuberculifera (Herzog) Váňa \equiv *Solenostoma tuberculiferum* (Herzog) Váňa, Hentschel et Heinrichs
Jungermannia virgata (Mitt.) Steph. \equiv *Solenostoma virgatum* (Mitt.) Váňa et D.G.Long
Lejeunea anisophylla Mont. = *L. adpressa* Nees (Gradstein 2021)
Lejeunea boninensis Horik. = *L. adpressa* Nees (Gradstein 2021)
Lejeunea borneensis Steph. = *L. adpressa* Nees (Gradstein 2021)
Lejeunea caespitosa Lindenb. = *L. adpressa* Nees (Gradstein 2021)
Lejeunea chalmersii (Steph.) Mizut. = *L. microloba* Taylor
Lejeunea comosa (Lindenb.) Mitt. = *Thysananthus comosus* Lindenb.
Lejeunea cucullata (Reinw., Blume et Nees) Nees \equiv *Metalejeunea cucullata* (Reinw., Blume et Nees) Grolle
Lejeunea cuculliflora (Steph.) Mizut. = *L. umbilicata* (Nees) Nees
Lejeunea diversitexta (Steph.) Mizut. nom illeg. = *L. papilionacea* Prantl
Lejeunea goebelii Schiffn. = *Cololejeunea trichomanis* (Gottsche) Steph.
Lejeunea herzogii Mizut. = *L. papilionacea* Prantl
Lejeunea imbricata (Nees) Nees = *Cheilolejeunea trapezia* (Nees) R.M.Schust. et Kachroo
Lejeunea infestans (Steph.) Mizut. = *L. papilionacea* Prantl
Lejeunea luteola (Steph.) Mizut. nom. illeg. \equiv *L. mimula* Hürl.
Lejeunea mitracalyx (Eifrig) Mizut. = *L. alata* Gottsche

- Lejeunea ornata* (K.I.Goebel) Schiffn. \equiv *Colura ornata* K.I.Goebel
Lejeunea pilifera Tixier nom.illeg. \equiv *L. patriciae* Schäf.-Verw.
Lejeunea pseudostipulata Schiffn. \equiv *Cololejeunea pseudostipulata* (Schiffn.) Benedix
Lejeunea pterota (Herzog) Mizut. $=$ *L. papilionacea* Prantl
Lejeunea punctiformis Taylor \equiv *Microlejeunea punctiformis* (Taylor) Steph.
Lejeunea tamariscii G.E.Lee $=$ *L. pulchriflora* (Pearson) G.E.Lee, Bechteler, Pócs,
 Schäf.-Verw. et Heinrichs
Lejeunea zollingeri (Steph.) Mizut. \equiv *L. mizutanii* Grolle
Lepicolea lorianae Steph. $=$ *L. rara* (Steph.) Grolle
Lepidolejeunea borneensis (Steph.) R.M.Schust. \equiv *Mohamedia borneensis* (Steph.)
 R.L.Zhu et L.Shu (Zhu et al. 2019)
Lepidozia abietinella Herzog \equiv *Kurzia abietinella* (Herzog) Grolle
Lepidozia cladorhiza var. *macgregorii* (Steph.) Herzog $=$ *L. cladorhiza* (Reinw., Blume
 et Nees) Nees
Lepidozia gonyotricha Sande Lac. \equiv *Kurzia gonyotricha* (Sande Lac.) Grolle
Lepidozia longitudinalis Herzog \equiv *Neolepidozia longitudinalis* (Herzog) E.D.Cooper
Lepidozia mamillosa Schiffn. \equiv *Neolepidozia mamillosa* (Schiffn.) E.D.Cooper
Lepidozia neesii Lindenb. \equiv *Tricholepidozia neesii* (Lindenb.) E.D.Cooper
Lepidozia ophiria Steph. \equiv *Neolepidozia ophiria* (Steph.) E.D.Cooper
Lepidozia papulosa Steph. \equiv *Neolepidozia papulosa* (Steph.) Fulford et J.Taylor
Lepidozia trichocoleoides Herzog \equiv *Tricholepidozia trichocoleoides* (Herzog) R.M.Schust.
Lepidozia wallichiana Gottsche \equiv *Neolepidozia wallichiana* (Gottsche) Fulford et J Taylor
Leptolejeunea elliptica auct. (Asian plants; non typus) $=$ *L. subacuta* A.Evans (Bechteler
 et al. 2017, Shu et al. 2021)
Leptolejeunea elliptica subsp. *subacuta* (A.Evans) R.M.Schust. \equiv *L. subacuta* A.Evans
Leptolejeunea picta Herzog $=$ *L. amphiophthalma* Zwickel
Leptolejeunea radiata (Mitt.) Steph. $=$ *L. maculata* (Mitt.) Schiffn.
Leptolejeunea schiffneri (Schiffn.) Steph. $=$ *L. maculata* (Mitt.) Schiffn.
Leptolejeunea schiffneri f. *angustifolia* Herzog $=$ *L. maculata* (Mitt.) Schiffn.
Leptolejeunea schiffneri f. *latifolia* Herzog $=$ *L. maculata* (Mitt.) Schiffn.
Leptolejeunea schiffneri var. *subintegerima* Herzog $=$ *L. maculata* (Mitt.) Schiffn.
Leptolejeunea serrulata Herzog $=$ *L. tripuncta* (Mitt.) Steph. (Shu et al. 2016).
Leptolejeunea spinistipula (Mizut.) Xiao L.He \equiv *Soella spinistipula* (Mizut.) R.L.Zhu et
 L.Shu (Shu et al. 2021)
Leucolejeunea decurrens (Steph.) Mizut. \equiv *Cheilolejeunea mizutanii* W.Ye et R.L.Zhu
Leucolejeunea lorianae (Steph.) Mizut. \equiv *Cheilolejeunea lorianae* (Steph.) W.Ye et R.L.Zhu
Leucolejeunea xanthocarpa (Lehm. et Lindenb.) A.Evans \equiv *Cheilolejeunea xanthocarpa*
 (Lehm. et Lindenb.) Malombe
Lobatiriccardia lobata (Schiffn.) Furuki $=$ *L. coronopus* (Steph.) Furuki
Lophocolea ciliolata (Nees) L.Söderstr. \equiv *Cryptolophocolea ciliolata* (Nees) L.Söderstr.
Lophocolea costata (Nees) L.Söderstr. \equiv *Cryptolophocolea costata* (Nees) L.Söderstr.
Lophocolea massalongoana Schiffn. \equiv *Cryptolophocolea massalongoana* (Schiffn.)
 L.Söderstr.

- Lopholejeunea cranstonii* Steph. = *L. eulopha* (Taylor) Schiffn.
Lopholejeunea javanica (Nees) Schiffn. = *L. nigricans* (Lindenb.) Schiffn.
Lopholejeunea latialata Mizut. = *L. zollingeri* (Steph.) Schiffn.
Lopholejeunea nicobarica Steph. = *L. eulopha* (Taylor) Schiffn.
Lopholejeunea nipponica Horik = *L. zollingeri* (Steph.) Schiffn.
Makednothallus obtusidens Herzog = *Jensenia decipiens* (Mitt.) Grolle
Marsupella integra N.Kitag. = *Gymnomitrion subintegrum* (S.W.Arnell) Váňa
Marsupella revoluta (Nees) Dumort. ≡ *Gymnomitrion revolutum* (Nees) H.Philib.
Marsupella subintegra S.W.Arnell ≡ *Gymnomitrion subintegrum* (S.W.Arnell) Váňa
Mastigobryum bancanum Sande Lac. ≡ *Acromastigum bancanum* (Sande Lac.) A.Evans
Mastigobryum borneense De Not. = *Bazzania fallax* (Sande Lac.) Schiffn.
Mastigobryum brotheri Steph. ≡ *Acromastigum brotheri* (Steph.) A.Evans
Mastigobryum calcaratum Sande Lac. ≡ *Bazzania calcarata* (Sande Lac.) Schiffn.
Mastigobryum cincinnatum De Not. ≡ *Bazzania cincinnata* (De Not.) Trevis.
Mastigobryum concinnum De Not. = *Bazzania intermedia* (Gottsche et Lindenb.) Trevis.
Mastigobryum crenatistipulum Steph. = *Bazzania manillana* (Steph.) Steph.
Mastigobryum duplex De Not. = *Bazzania involutiformis* (De Not.) Trevis.
Mastigobryum echinatiforme De Not. ≡ *Acromastigum echinatiforme* (De Not.) A.Evans
Mastigobryum elegantulum De Not. = *Acromastigum inaequilaterum* (Lehm. et Lindenb.) A.Evans
Mastigobryum erosum δ *pulopenangense* Lindenb. et Göttsche ≡ *Bazzania erosa* var. *pulopenangensis* (Lindenb. et Göttsche) Schiffn.
Mastigobryum ferox De Not. = *Bazzania harpago* (De Not.) Schiffn.
Mastigobryum fimbriatum Steph. ≡ *Acromastigum fimbriatum* (Steph.) A.Evans
Mastigobryum fleischeri Steph. ≡ *Bazzania fleischeri* (Steph.) Abeyw.
Mastigobryum harpago De Not. ≡ *Bazzania harpago* (De Not.) Schiffn.
Mastigobryum inaequitextum (Steph.) Steph. ≡ *Bazzania inaequithexa* Steph.
Mastigobryum insigne De Not. ≡ *Bazzania insignis* (De Not.) Trevis.
Mastigobryum intermedium var. *sarawakianum* De Not. ≡ *Bazzania intermedia* var. *sarawakiana* (De Not.) Schiffn.
Mastigobryum involutiforme De Not. ≡ *Bazzania involutiformis* (De Not.) Trevis.
Mastigobryum linganum De Not. ≡ *Acromastigum linganum* (De Not.) A.Evans
Mastigobryum linguiforme Sande Lac. ≡ *Bazzania linguiformis* (Sande Lac.) Trevis.
Mastigobryum loricatum (Reinw., Blume et Nees) Göttsche, Lindenb. et Nees ≡ *Bazzania loricata* (Reinw., Blume et Nees) Trevis.
Mastigobryum lowii Sande Lac. ex Steph. ≡ *Bazzania lowii* (Steph.) Schiffn.
Mastigobryum malaccense Steph. ≡ *Bazzania malaccensis* (Steph.) Tixier
Mastigobryum muricatum Herzog = *Bazzania horridula* Schiffn.
Mastigobryum natunense Steph. = *Bazzania paradoxa* (Sande Lac.) Steph.
Mastigobryum notarisii (De Not.) Steph. nom. illeg. = *Acromastigum inaequilaterum* (Lehm. et Lindenb.) A.Evans
Mastigobryum pulvinulatum De Not. ≡ *Mastigopelma pulvinulatum* (De Not.) Grolle
Mastigobryum recurvum (Mont.) Lindenb. ≡ *Bazzania recurva* (Mont.) Trevis.
Mastigobryum recurvum var. *pallens* De Not. = *Bazzania recurva* (Mont.) Trevis.

- Mastigobryum repandistipulum* Steph. = *Bazzania tridens* (Reinw., Blume et Nees) Trevis.
Mastigobryum subtile Sande Lac. ≡ *Bazzania subtilis* (Sande Lac.) Trevis.
Mastigobryum vagum De Not. = *Bazzania erosa* (Reinw., Blume et Nees) Trevis.
Mastigobryum vittatum var. *luxurians* De Not. ≡ *Bazzania vittata* var. *luxurians* (De Not.) Schiffn.
Mastigobryum zollingeri Lindenb. ≡ *Bazzania zollingeri* (Lindenb.) Trevis.
Mastigolejeunea atypos Sydow = *Thysananthus repletus* (Taylor) Sukkharak et Gradst.
Mastigolejeunea auriculata auct. (Asian plants; non typus) = *Thysananthus humilis* (Steph.) Sukkharak et Gradst.
Mastigolejeunea gradsteinii Sukkharak ≡ *Thysananthus gradsteinii* (Sukkharak) Sukkharak et Gradst.
Mastigolejeunea humilis (Gottsche) Schiffn. ≡ *Thysananthus humilis* (Gottsche) Sukkharak et Gradst.
Mastigolejeunea indica Steph. ≡ *Thysananthus indicus* (Steph.) Sukkharak et Gradst.
Mastigolejeunea ligulata (Lehm. et Lindenb.) Schiffn. ≡ *Thysananthus ligulatus* (Lehm. et Lindenb.) Sukkharak et Gradst.
Mastigolejeunea recondita (Steph.) Mizut. ≡ *Thysananthus reconditus* (Steph.) Sukkharak et Gradst.
Mastigolejeunea recurvifolia Mizut. ≡ *Thysananthus humilis* (Gottsche) Sukkharak et Gradst.
Mastigolejeunea repleta (Taylor) A.Evans ≡ *Thysananthus repletus* (Taylor) Sukkharak et Gradst.
Mastigolejeunea truncata Mizut. ≡ *Thysananthus truncatus* (Mizut.) Sukkharak et Gradst.
Mastigolejeunea virens (Ångstr.) Steph. ≡ *Thysananthus virens* (Ångstr.) Sukkharak et Gradst.
Mastigopelma bilobum Herzog = *Mastigopelma pulvinulatum* (De Not.) Grolle
Megaceros celebensis Steph. = *Megaceros flagellaris* (Mitt.) Steph.
Metahygrobiella acuminata (Herzog) R.M.Schust. ≡ *Cephalozia acuminata* (Herzog)
R.M.Schust.
Metahygrobiella acutiloba Inoue ≡ *Cephalozia acutiloba* Inoue
Metahygrobiella mollusca (De Not.) R.M.Schust. ≡ *Cephalozia mollusca* (De Not.)
R.M.Schust.
Metahygrobiella stolonacea (Herzog) R.M.Schust. ≡ *Cephalozia stolonacea* (Herzog)
R.M.Schust.
Metzgeria borneensis Kuwah. = *M. leptoneura* Spruce
Metzgeria conjugata subsp. *japonica* (S.Hatt.) Kuwah. = *M. lindbergii* Schiffn.
Metzgeria decipiens (C.Massal.) Schiffn. = *M. ciliata* Raddi
Metzgeria hamata Lindb. = *M. leptoneura* Spruce
Metzgeria molokaiensis Kuwah. = *M. furcata* (L.) Corda
Metzgeria papulosa Steph. = *M. leptoneura* Spruce
Metzgeria pectinata Steph. = *M. lindbergii* Schiffn.
Metzgeria sandei Schiffn. = *M. leptoneura* Spruce
Metzgeria sharpii Kuwah. = *M. leptoneura* Spruce
Metzgeria thomeensis Steph. = *M. leptoneura* Spruce
Metzgeriopsis pusilla K.I.Goebel = *Cololejeunea metzgeriopsis* (K.I.Goebel) Gradst.,
R.Wilson, Ilk.-Borg, et Heinrichs

Microlejeunea cucullata (Reinw., Blume et Nees) J.B.Jack et Steph. ≡ *Metalejeunea cucullata* (Reinw., Blume et Nees) Grolle

Microlejeunea gracillima (Mitt.) Steph. = *M. lunulatiloba* Horik.

Microlejeunea sundaica Steph. = *Metalejeunea cucullata* (Reinw., Blume et Nees) Grolle
Neohattoria perversa (Steph.) R.M.Schust. = *Frullania junguhniiana* var. *tenella* (Sande Lac.) Grolle et S.Hatt.

Notoscyphus paroicus Schiffn. = *N. lutescens* (Lehm. et Lindenb.) Mitt.

Otolejeunea semperiana (Steph.) Grolle ≡ *Allorgella semperiana* (Steph.) Bechteler, G.E.Lee, Schäf.-Verw. et Heinrichs

Pallavicinia fistulosa Steph. = *Pallavicinia ambigua* (Mitt.) Steph.

Phaeoceros foveatus J.Haseg. ≡ *Phaeomegaceros foveatus* (J.Haseg.) J.C.Villarreal

Phragmnicoma ligulata (Lehm. et Lindenb.) Gottsche, Lindenb. et Nees ≡ *Thysananthus ligulatus* (Lehm. et Lindenb.) Sukkharak et Gradst.

Phragmnicoma pulopenangensis Gottsche ≡ *Schiffneriolejeunea pulopenangensis* (Gottsche) Gradst.

Phragmnicoma tumida (Nees) Nees et Mont. ≡ *Schiffneriolejeunea tumida* (Nees) Gradst.

Physiotium myriangium De Not. = *Pleurozia acinosa* (Mitt.) Trevis.

Placolejeunea subarrhyncha Herzog = *Cheirolejeunea trapezia* (Nees) R.M.Schust. et Kachroo

Plagiochila accedens Steph. = *P. korthalsiana* Molk.

Plagiochila cameronensis Inoue = *P. hampeana* Gottsche

Plagiochila dendroides (Nees) Lindenb. ≡ *Chiastocaulon dendroides* (Nees) Carl

Plagiochila elegantissima Herzog nom. illeg. = *P. blepharophora* (Nees) Lindenb.

Plagiochila estipulata Steph. = *P. blepharophora* (Nees) Lindenb.

Plagiochila fraseri Steph. = *P. teysmannii* Sande Lac.

Plagiochila hottae Inoue = *P. perserrata* Herzog

Plagiochila infirma (Sande Lac.) Sande Lac. = *P. javanica* (Sw.) Nees et Mont

Plagiochila laxissima Schiffn. = *P. bicornuta* Steph.

Plagiochila linguifolia De Not. ≡ *Denotarisia linguifolia* (De Not.) Grolle

Plagiochila lobulata Schiffn. = *P. bantamensis* (Reinw., Blume et Nees) Mont

Plagiochila longifolia Steph. = *P. clavatosaccata* Steph.

Plagiochila mutabilis De Not. = *P. bantamensis* (Reinw., Blume et Nees) Mont

Plagiochila opposita Dumort. ≡ *Chiastocaulon oppositum* (Reinw., Blume et Nees)
 S.D.F.Patzak, M.A.M Renner, Schäf.-Verw. et Heinrichs

Plagiochila pachycephala De Not. ≡ *Chiastocaulon pachycephalum* (De Not.) Herzog

Plagiochila richardsii Herzog = *P. bantamensis* (Reinw., Blume et Nees) Mont.

Plagiochila sambusana (Steph.) Beauverd = *P. kurzii* Steph.

Plagiochila sandei f. *remotidens* Herzog = *P. sandei* Dozy

Plagiochila singularis Schiffn. ≡ *Dinckleria singularis* (Schiffn.) M.A.M.Renner, Schäf.-
 Verw. et Heinrichs

Plagiochila tridens Steph. = *P. ungarangana* Sande Lac.

Plagiochila tsutomui Inoue = *P. ungarangana* Sande Lac.

Plagiochila vanikorensis Steph. = *P. bantamensis* (Reinw., Blume et Nees) Mont

Plagiochilion braunianum (Nees) S.Hatt. ≡ *Chiastocaulon braunianum* (Nees)
 S.D.F.Patzak, M.A.M Renner, Schäf.-Verw. et Heinrichs

- Plagiochilion oppositum* (Reinw., Blume et Nees) S.Hatt. ≡ *Chiastocaulon oppositum* (Reinw., Blume et Nees) S.D.F.Patzak, M.A.M Renner, Schäf.-Verw. et Heinrichs
- Plagiochilion pachycephalum* (De Not.) Inoue ≡ *Chiastocaulon pachycephalum* (De Not.) Herzog
- Plagiochilion theriotianum* (Steph.) Inoue ≡ *Chiastocaulon theriotianum* (Steph.) S.D.F.Patzak, M.A.M Renner, Schäf.-Verw. et Heinrichs
- Plectocolea parabolica* Herzog = *Solenostoma tetragonum* (Lindenb.) Váňa et D.G.Long
- Plectocolea truncata* (Nees) Herzog ≡ *Solenostoma truncatum* (Nees) Váňa et D.G.Long
- Pleurozia gigantea* var. *borneensis* (De Not.) Schiffn. = *P. gigantea* (F.Weber) Lindb.
- Porella acutifolia* subsp. *latior* S.Hatt. = *P. caespitans* subsp. *latior* (S.Hatt.) S.Hatt.
- Porella acutifolia* var. *elbertii* (Steph.) S.Hatt. = *P. acutifolia* (Lehm. et Lindenb.) Trevis.
- Porella acutifolia* var. *johannis-winkleri* (Herzog) S.Hatt. = *P. acutifolia* (Lehm. et Lindenb.) Trevis.
- Porella johannis-winkleri* (Herzog) S.Hatt. = *P. acutifolia* (Lehm. et Lindenb.) Trevis.
- Prionolejeunea unguis* Herzog = *Lejeunea apiculata* Sande Lac.
- Pseudolepicolea trollii* subsp. *andoi* (R.M.Schust.) S.Hatt. et Mizut. = *P. andoi* (R.M.Schust.) S.Hatt. et Mizut.
- Ptychanthus pycnocladus* Taylor ≡ *Acrolejeunea pycnoclada* (Taylor) Schiffn.
- Ptychanthus sulcatus* (Nees) Nees ≡ *Spruceanthus sulcatus* (Nees) Gradst.
- Ptychanthus tumidus* Nees ≡ *Schiffnerolejeunea tumida* (Nees) Gradst.
- Ptychocoleus coroniformis* T.Kodama et N.Kitag. = *Acrolejeunea arcuata* (Nees) Grolle et Gradst.
- Ptychocoleus cranstonii* Steph. = *Schiffnerolejeunea pulopenangensis* (Gott sche) Gradst.
- Ptychocoleus fertilis* (Reinw., Blume et Nees) Trevis. ≡ *Acrolejeunea fertilis* (Reinw., Blume et Nees) Schiffn.
- Ptychocoleus haskarlianus* (Gott sche) Steph. = *Schiffnerolejeunea tumida* (Nees) Gradst.
- Ptychocoleus longispicus* Steph. = *Schiffnerolejeunea nymannii* (Steph.) Gradst. et Terken.
- Ptychocoleus pulopenangensis* (Gott sche) Trevis. ≡ *Schiffnerolejeunea pulopenangensis* (Gott sche) Gradst.
- Ptychocoleus pycnocladus* (Taylor) Steph. ≡ *Acrolejeunea pycnoclada* (Taylor) Schiffn.
- Ptychocoleus sarawakensis* Steph. = *Schiffnerolejeunea tumida* (Nees) Gradst.
- Ptychocoleus squarrosifolius* Steph. = *Schiffnerolejeunea tumida* (Nees) Gradst.
- Ptychocoleus tjibodensis* Verd. ≡ *Acrolejeunea tjibodensis* (Verd.) Grolle et Gradst.
- Ptychocoleus tridens* Steph. = *Schiffnerolejeunea pulopenangensis* (Gott sche) Gradst.
- Ptychocoleus wichurae* (Schiffn.) Steph. = *Acrolejeunea fertilis* (Reinw., Blume et Nees) Schiffn.
- Pycnolejeunea angulistipa* Steph. ≡ *Tuyamaella angulistipa* (Steph.) R.M.Schust. et Kachroo
- Pycnolejeunea appendiculata* Herzog = *Tuyamaella serratistipa* S.Hatt.
- Pycnolejeunea arietina* Tixier = *Cheilolejeunea ceylanica* (Gott sche) R.M.Schust. et Kachroo
- Pycnolejeunea badia* f. *parvistipa* Herzog = *Lepidolejeunea bidentula* (Steph.) R.M.Schust.
- Pycnolejeunea bancana* Steph. = *P. contigua* (Nees) Grolle

- Pycnolejeunea bidentula* Steph. ≡ *Lepidolejeunea bidentula* (Steph.) R.M.Schust.
- Pycnolejeunea borneensis* Steph. ≡ *Mohamedia borneensis* (Steph.) R.L.Zhu et L.Shu (Zhu et al. 2019).
- Pycnolejeunea ceylanica* (Gottsche) Schiffn. = *Cheilolejeunea ceylanica* (Gottsche) R.M.Schust. et Kachroo
- Pycnolejeunea corticola* Steph. = *Lepidolejeunea bidentula* (Steph.) R.M.Schust.
- Pycnolejeunea decurvifolia* (Steph.) Steph. = *Lepidolejeunea bidentula* (Steph.) R.M.Schust.
- Pycnolejeunea excisula* Steph. = *Cheilolejeunea incisa* (Gottsche) R.M.Schust.
- Pycnolejeunea flava* (Mitt.) Steph. ≡ *Lejeunea flava* Mitt.
- Pycnolejeunea gigantea* Steph. ≡ *Cheilolejeunea gigantea* (Steph.) R.M.Schust. et Kachroo
- Pycnolejeunea imbricata* (Nees) Schiffn. = *Cheilolejeunea trapezia* (Nees) R.M.Schust. et Kachroo
- Pycnolejeunea integriflora* J.B.Jack et Steph. ≡ *Lepidolejeunea integriflora* (J.B.Jack et Steph.) R.M.Schust.
- Pycnolejeunea kinabaluensis* T.Kodama = *P. sphaeroides* (Sande Lac.) J.B.Jack et Steph.
- Pycnolejeunea malaccensis* G.Hoffm. ≡ *Cheilolejeunea malaccensis* (G.Hoffm.) Xiao L.He
- Pycnolejeunea meyeniana* (Nees, Lindenb. et Gottsche) Steph. = *Cheilolejeunea trapezia* (Nees) R.M.Schust. et Kachroo
- Pycnolejeunea meyeniana* var. *ligulata* G.Hoffm. = *Cheilolejeunea trapezia* (Nees) R.M.Schust. et Kachroo
- Pycnolejeunea micholitzii* Steph. ≡ *Cheilolejeunea micholitzii* (Steph.) R.M.Schust. et Kachroo
- Pycnolejeunea molaris* Mizut. = *P. cavistipula* (Steph.) Mizut.
- Pycnolejeunea nicobarica* Steph. = *Lepidolejeunea bidentula* (Steph.) R.M.Schust.
- Pycnolejeunea punctata* Steph. = *Lepidolejeunea bidentula* (Steph.) R.M.Schust.
- Pycnolejeunea spinistipula* Mizut. ≡ *Soella spinistipula* (Mizut.) R.L.Zhu et L.Shu (Shu et al. 2021)
- Pycnolejeunea utriculata* Steph. ≡ *Lejeunea utriculata* (Steph.) Mizut.
- Pycnolejeunea ventricosa* (Schiffn.) P.Syd. ≡ *Cheilolejeunea ventricosa* (Schiffn.) Xiao L.He
- Radula apiculata* Steph. = *R. anceps* Sande Lac.
- Radula indica* Steph. = *R. tabularis* Steph.
- Radula laciniata* Herzog = *R. anceps* Sande Lac.
- Radula miquelianae* Taylor = *R. retroflexa* Taylor
- Radula novae-guineae* Steph. = *R. formosa* (Spreng.) Nees
- Radula retroflexa* var. *fauciloba* (Steph.) K.Yamada = *R. retroflexa* Taylor
- Radula subpallens* Steph. = *R. ventricosa* Steph.
- Radula yangii* (B.Y.Yang) K.Yamada = *R. javanica* Gottsche
- Reboulia hemisphaerica* var. *javanica* (Nees) Schiffn. = *R. hemisphaerica* subsp. *australis* R.M.Schust.
- Rhaphidolejeunea cyclops* (Sande Lac.) Herzog ≡ *Drepanolejeunea cyclops* (Sande Lac.) Grolle et R.L.Zhu
- Rhaphidolejeunea longicruris* (Steph.) Herzog ≡ *Drepanolejeunea longicruris* (Steph.) Grolle et R.L.Zhu

- Rhaphidolejeunea spicata* (Steph.) Grolle \equiv *Drepanolejeunea spicata* (Steph.) Grolle et R.L.Zhu
- Riccardia lobata* Schiffn. = *Lobatiriccardia coronopus* (Steph.) Furuki
- Riccardia lobata* f. *gigantea* Herzog nom. inval. = *Lobatiriccardia coronopus* (Steph.) Furuki
- Riccardia pinguis* (L.) Gray \equiv *Aneura pinguis* (L.) Dumort.
- Riccardia ridleyi* Schiffn. = *R. elata* (Steph.) Schiffn.
- Riccardia scabra* Schiffn. = *R. crassa* (Schwägr.) C.Massal.
- Riccardia tenuicostata* Schiffn. = *R. inconspicua* (Steph.) Reeb et Bardat
- Saccogyna muricella* (De Not.) Mitt. \equiv *Saccogynidium muricellum* (De Not.) Grolle
- Saccogyna rigidula* (Nees) Schiffn. \equiv *Saccogynidium rigidulum* (Nees) Grolle
- Saccogynidium iwatsukii* S.Hatt. \equiv *Heteroscyphus iwatsukii* (S.Hatt.) Piippo
- Saccogynidium jugatum* (Mitt.) Grolle = *S. rigidulum* (Nees) Grolle
- Scapania javanica* f. *amplifolia* Herzog nom. inval. = *S. javanica* Gottsche
- Schistochila aligeriformis* (De Not.) Schiffn. = *S. aligera* (Nees et Blume) J.B.Jack et Steph.
- Schistochila philippinensis* (Mont.) Steph. = *S. aligera* (Nees et Blume) J.B.Jack et Steph.
- Schistochila wallisii* J.B.Jack et Gottsche = *S. blumei* (Nees) Trevis.
- Schistochila wrayana* Steph. = *S. acuminata* Steph.
- Sendtnera diclados* var. *borneensis* De Not. = *Mastigophora diclados* (F.Weber) Nees
- Southbya grollei* N.Kitag. = *S. organensis* Herzog
- Sphenolobopsis kitagawae* R.M.Schust. = *Sphenolobopsis pearsonii* (Spruce) R.M.Schust.
- Spruceanthus marianus* sensu Mizut. (non typus) = *S. planiuscula* (Mitt.) X.Q.Shi, R.L.Zhu et Gradst. (Shi et al. 2015).
- Steereea clemensiana* (Verd.) S.Hatt. \equiv *Frullania clemensiana* Verd.
- Steereea mastigophoroides* S.Hatt. et Kamim. = *Frullania clemensiana* Verd.
- Stenolejeunea apiculata* (Sande Lac.) R.M.Schust. \equiv *Lejeunea apiculata* Sande Lac.
- Stenorhipis rhizomatica* Herzog = *Kymatocalyx rhizomaticus* (Herzog) Gradst. et Váňa
- Stictolejeunea richardsii* Herzog = *S. balfourii* (Mitt.) E.W.Jones
- Strepsilejeunea occlusa* Herzog \equiv *Cheilolejeunea occlusa* (Herzog) T.Kodama et N.Kitag.
- Symphyogynopsis filicum* (Nadeaud) Grolle = *S. gottscheana* (Mont. et Nees) Grolle
- Szygyiella variegata* (Lindenb.) Spruce = *S. securifolia* (Nees) Inoue
- Taeniolejeunea peraffinis* (Schiffn.) Zwickel \equiv *Cololejeunea peraffinis* (Schiffn.) Schiffn.
- Taxilejeunea albescens* Steph. \equiv *Lejeunea albescens* (Steph.) Mizut.
- Taxilejeunea compressiuscula* Steph. \equiv *Lejeunea compressiuscula* Steph. (Lee et al. 2018)
- Taxilejeunea lumbricoides* (Nees) Steph. \equiv *Lejeunea lumbricoides* (Nees) Nees
- Taxilejeunea luteola* (Steph.) Eifrig \equiv *Lejeunea mimula* Hürl.
- Taxilejeunea patersonii* (Steph.) Eifrig = *Lejeunea leratii* (Steph.) Mizut.
- Taxilejeunea sordida* (Nees) Eifrig \equiv *Lejeunea sordida* (Nees) Nees
- Taxilejeunea umbilicata* (Nees) J.B.Jack et Steph. \equiv *Lejeunea umbilicata* (Nees) Nees
- Telaranea longitudinalis* (Herzog) R.M.Schust. \equiv *Neolepidozia longitudinalis* (Herzog) E.D.Cooper
- Telaranea neesii* (Lindenb.) Fulford \equiv *Tricholepidozia neesii* (Lindenb.) E.D.Cooper
- Telaranea octoloba* Del Ros. \equiv *Tricholepidozia octoloba* (Del Ros.) E.D.Cooper

- Telaranea ophiria* (Gottsche) J.J.Engel et G.L.Merr. ≡ *Neolepidozia ophiria* (Gottsche)
E.D.Cooper
- Telaranea quadriseta* (Steph.) J.J.Engel et G.L.Merr. ≡ *Tricholepidozia quadriseta*
(Steph.) E.D.Cooper
- Telaranea semperiana* (Steph.) Del Ros. ≡ *Tricholepidozia semperiana* (Steph.)
E.D.Cooper
- Telaranea trichocoleoides* (Herzog) R.M.Schust. ≡ *Tricholepidozia trichocoleoides* (Her-
zog) R.M.Schust.
- Thysananthus borneensis* Steph. = *T. gottscbei* (J.B.Jack et Steph.) Steph.
- Thysananthus fruticosus* f. *pendulus* Herzog = *T. fruticosus* (Lindenb. et Gottsche) Schiffn.
- Thysananthus laceratus* Steph. = *T. convolutus* Lindenb.
- Thysananthus minor* Verd. = *T. spathulistipus* (Reinw., Blume et Nees) Lindenb.
- Thysananthus planus* Sande Lac. = *T. retusus* (Reinw., Blume et Nees) B.M.Thiers et Gradst.
- Thysananthus richardsianus* Verd. = *T. aculeatus* Herzog
- Thysananthus spathulistipus* f. *borneensis* (Herzog) Herzog = *T. spathulistipus* (Reinw.,
Blume et Nees) Lindenb.
- Trichocolea merrillana* Steph. ≡ *Leiomitra merrillana* (Steph.) T.Katag.
- Trocholejeunea crassicaulis* (Steph.) Mizut. ≡ *Acrolejeunea crassicaulis* (Steph.) J.Wang
bis et Gradst.
- Tylimanthus saccatus* (Hook.) Carrington et Pearson ≡ *Acrobolbus saccatus*
(Hook.) Briscoe
- Xenolejeunea ceylanica* (Steph.) Tixier nom. inval. ≡ *Cheilolejeunea ceylanica* (Gottsche)
R.M.Schust. et Kachroo
- Xenolejeunea falsinervis* (Sande Lac.) Tixier nom. inval. ≡ *Cheilolejeunea falsinervis*
(Sande Lac.) R.M.Schust. et Kachroo
- Xenolejeunea longiloba* (Steph.) Tixier nom. inval. = *Cheilolejeunea trapezia* (Nees)
R.M.Schust. et Kachroo
- Xenolejeunea meyeniana* (Steph.) Tixier nom. inval. ≡ *Cheilolejeunea trapezia* (Nees)
R.M.Schust. et Kachroo
- Zoopsis argentea* (Hook.f. et Taylor) Gottsche, Lindenb. et Nees = *Z. liukiensis* Horik.
Zoopsis rigida Pearson = *Z. setigera* K.I.Goebel

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