BLUMEA 51 (2006) 000–000

A TAXONOMIC REVISION OF HYMENOPHYLLACEAE

ATSUSHI EBIHARA[1, 2], JEAN-YVES DUBUISSON[3], KUNIO IWATSUKI[4], SABINE HENNEQUIN[3] & MOTOMI ITO[1]

SUMMARY

A new classification of Hymenophyllaceae, consisting of nine genera (*Hymenophyllum*, *Didymoglossum*, *Crepidomanes*, *Polyphlebium*, *Vandenboschia*, *Abrodictyum*, *Trichomanes*, *Cephalomanes* and *Callistopteris*) is proposed. Every genus, subgenus and section chiefly corresponds to the monophyletic group elucidated in molecular phylogenetic analyses based on chloroplast sequences. Brief descriptions and keys to the higher taxa are given, and their representative members are enumerated, including some new combinations.

Key words: filmy ferns, Hymenophyllaceae, *Hymenophyllum*, *Trichomanes*.

INTRODUCTION

The Hymenophyllaceae, or 'filmy ferns', is the largest basal family of leptosporangiate ferns and comprises around 600 species (Iwatsuki, 1990). Members are easily distinguished by their usually single-cell-thick laminae, and the monophyly of the family has not been questioned. The intrafamilial classification of the family, on the other hand, is highly controversial – several fundamentally different classifications are used by individual researchers and/or areas. Traditionally, only two genera – *Hymenophyllum* with bivalved involucres and *Trichomanes* with tubular involucres – have been recognized in this family. This scheme was expanded by Morton (1968) who hierarchically placed many subgenera, sections and subsections under two larger genera *Hymenophyllum* and *Trichomanes* and recognized four monotypic genera, *Cardiomanes*, *Hymenoglossum*, *Rosenstockia* and *Serpyllopsis*, and all of which have specialized fronds. Since his system carefully covered New World taxa, most of the recent floristic works of Central and South America adopted his scheme (Stolze, 1976; De la Sota, 1977; Kramer, 1978; Smith, 1981; Tryon & Tryon, 1982; Proctor, 1985, 1989; Mickel & Beitel, 1988; Lellinger, 1989; Tryon & Stolze, 1989; Marticorena & Rodriguez, 1995; Pacheco, 1995; Baksh-Comeau, 2000; Sánchez, 2000). Conversely, Copeland (1938b, 1947) split the

1) Department of System Sciences, Graduate School of Arts and Sciences, The University of Tokyo, 3-8-1 Komaba, Meguro-ku, Tokyo 153-8902, Japan. Present address: Department of Botany, The National Science Museum, 4-1-1 Amakubo, Tsukuba 305-0005, Japan.
2) Research fellow of the Japan Society for the Promotion of Science.
3) Équipe 'Paléobiodiversité, Systématique et Évolution des Embryophytes' UMR 5143, Laboratoire de Paléobotanique et Paléoécologie, IFR 101 CNRS 'Institut d'Ecologie Fondamentale et Appliquée', Université Pierre et Marie Curie, 12 rue Cuvier, F-75005 Paris, France.
4) The Museum of Nature and Human Activities, Hyogo, Yayoigaoka 6-chome, Sanda 669-1546, Japan.

family into 34 genera, basing his work mainly on in situ and herbarium observation of Asian material. His scheme has been adopted in floristic works of Asia (Copeland, 1958; Ching, 1959; De Vol, 1975; Nakaike, 1975; Tagawa & Iwatsuki, 1979; Parris, 1992), but has not yet been applied to New World taxa. Another system consisting of 47 genera was proposed by Pichi Sermolli (1977b), but it has been adopted only in a limited number of publications on African plants (e.g., Pichi Sermolli, 1983). Finally, Iwatsuki integrated a series of his studies of morphological characters (Iwatsuki, 1975, 1977a, b, 1978, 1981, 1982) into a new hierarchical system consisting of eight genera (Iwatsuki, 1984, 1985). Although his system has been adopted in a few recently published floristic works (Iwatsuki, 1995; Du Puy & Orchard, 1993; Green, 1994; Bostock & Spokes, 1998), generic combinations for taxa in regions other than Asia and Australia are still wanting. These taxonomic inconsistencies were compounded with the typification problem of the Linnaean genus *Trichomanes* (see Holttum, 1976 and Pichi Sermolli, 1981) – *Trichomanes crispum* was considered the type in the systems devised by Copeland (1933, 1938b), Pichi Sermolli (1977b) and Iwatsuki (1984), while *T. scandens* was considered the type by Morton (1968) and Nakaike (1975).

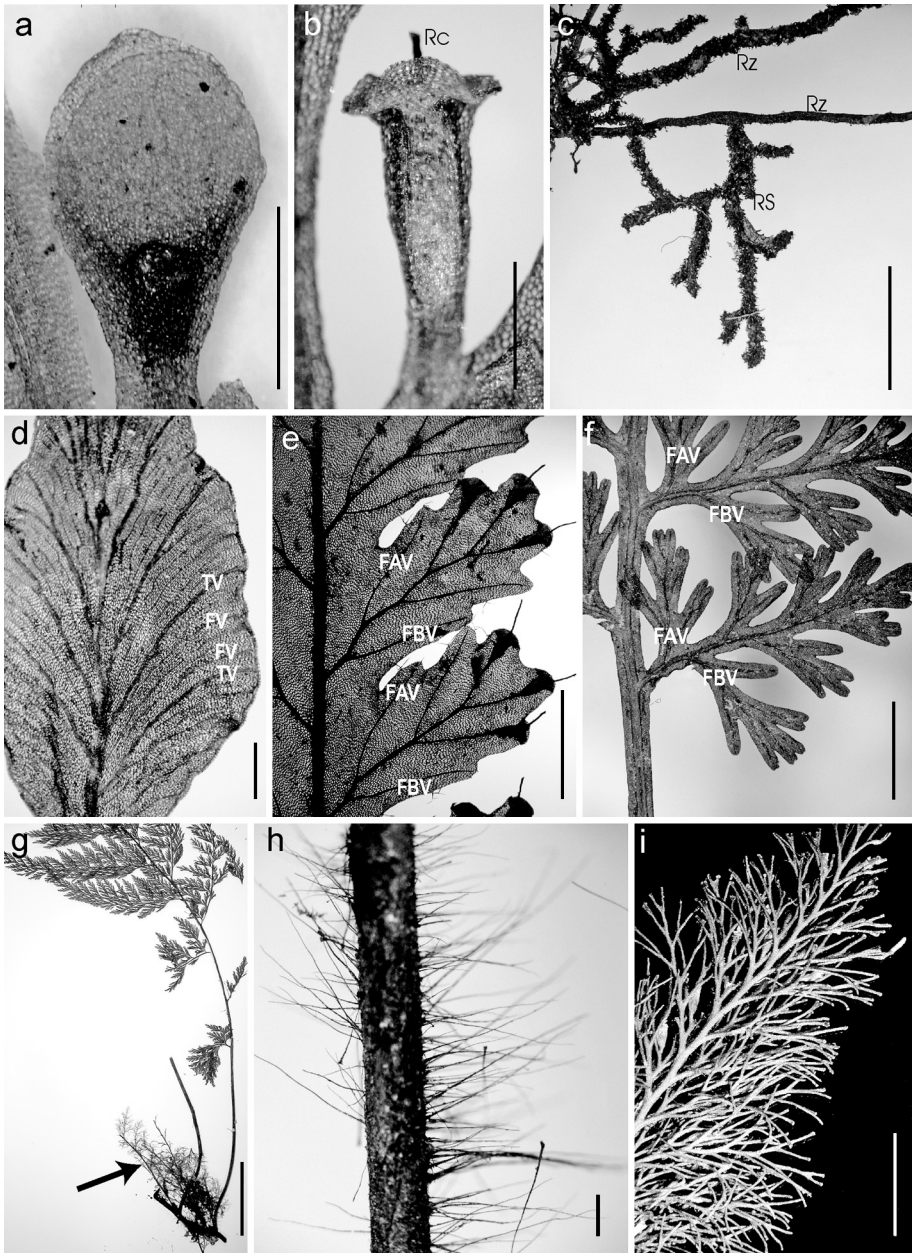
Recent molecular phylogenetic studies (Dubuisson, 1997; Pryer et al., 2001; Dubuisson et al., 2003a; Hennequin et al., 2003; Ebihara et al., 2004; Ebihara et al., submitted) have provided new insights into the systematic relationships within the Hymenophyllaceae. The presence of two large monophyletic groups (Pryer et al., 2001) can be interpreted to support the traditional bigeneric system; however some traditional *Trichomanes* taxa (*Cardiomanes*, *Microtrichomanes*, *Pleuromanes*) belong in fact to the *Hymenophyllum* lineage (Pryer et al., 2001; Hennequin et al., 2003; Ebihara et al., 2004; Ebihara et al., submitted). Moreover, the trichomanoid and hymenophylloid lineages, both consisting of nearly the same number of taxa, may possess different historical backgrounds – the *Hymenophyllum* lineage has likely diversified more recently than the *Trichomanes* lineage (Ebihara et al., 2004; Schuettpelz & Pryer, in press). This may explain why the *Trichomanes* lineage displays a greater variety of morphological features and ecological habits than the *Hymenophyllum* lineage. Earlier studies on *Trichomanes* (Dubuisson, 1997; Dubuisson et al., 2003a), as well as our latest study (Ebihara et al., submitted), also based on *rbcL* sequences and representing nearly all taxonomic lineages, did not support any of the above classifications. These inconsistencies are probably caused by strong homoplasy of taxonomic characters due to adaptive evolution (Dubuisson et al. 2003b; Ebihara et al., submitted). We therefore believe that a fundamental taxonomic revision of the Hymenophyllaceae is in order.

Even today, the principles of generic delimitation maintained by Copeland (1938b) seem quite reasonable: naturalness and convenience, and the latter is "subject always to the preceding principle (naturalness)". It is often argued that a classification completely based on the results of molecular phylogeny is difficult to put into practice, but recognition of unnatural (i.e., polyphyletic/paraphyletic) groups is a disadvantage for biological studies in general. Hence we prefer to reorganize the species into natural (i.e., monophyletic) and also morphologically recognizable groups. We propose to place all species of the hymenophylloid lineage under a single genus *Hymenophyllum* and to subdivide the trichomanoid lineage into eight genera corresponding to eight robust clades in our global analysis (Ebihara et al., submitted). We also treat many of the subclades retrieved (Ebihara et al., submitted) as subgenera if relationships within the

Fig. 1. An explanatory figure of the correspondence between the present system and the results of molecular phylogeny of Hymenophyllaceae. The phylogram is primarily based on the MP tree using chloroplast *rbcL* gene (Ebihara et al., submitted); the topology within the 'H' clade follows that of the MP tree using *rbcL*, *rbcL-accD* and *rps4-trnS* regions (Hennequin et al., in press). Bootstrap values (> 50%) supporting the clades are shown on their branches (bootstrap supports > 80% are shown by bold lines), but the values are replaced by asterisks in the taxa comprising a single sample. All the groups adopted as taxa in the present system are supported by high posterior probabilities (> 0.99) of Bayesian inference (Ebihara et al., submitted; Hennequin et al., in press). The clade names indicated in the tree correspond to those used in Ebihara et al. (submitted). — Ab: *Abrodictyum*; Ac: *Achomanes*; Ca: *Callistopteris*; Ce: *Cephalomanes*; Cr: *Crepidomanes*; Da: *Davalliopsis*; Di: *Didymoglossum*; Fe: *Feea*; H: *Hymenophyllum* s.l.; Le: *Lecanium*; Mg: *Microgonium*; Ne: *Nesopteris*; NT: Neotropical; Pa: *Pachychaetum*; PT: Paleotropical; Se: *Selenodesmium*; T: *Trichomanes* s.l.; TP: *Trichomanes pixidiferum*; Va: *Vandenboschia*.

clade are well resolved in our analysis (Fig. 1); in the absence of support, infrageneric classification within some genera is deferred. Although Ebihara et al. (submitted) illustrated that anatomical and cytological characters are more taxonomically informative than macroscopic characters, we selected macroscopic characters for the keys in this paper even though this makes the keys more complex.

To aid in characterization of taxa recognized by us, representative species of each genus, subgenus or section are enumerated here. Please note that the list includes the minimum number of taxa commonly accepted in recent floristic works, and therefore does not necessarily represent all the members.



TAXONOMIC TREATMENT

KEY TO THE GENERA

1a. Rhizomes long-creeping 2
b. Rhizomes short-creeping or erect 11
2a. Rhizomes nearly glabrous or sparsely covered with light-coloured hairs. Involucres usually bivalvate (Fig. 2a) . . . . . **1. Hymenophyllum**
b. Rhizomes covered with reddish to dark-coloured hairs. Involucres usually not bivalvate 3
3a. Roots absent or replaced by root-like shoots (Fig. 2c) 4
b. Roots present 5
4a. Continuous false veinlets parallel to true veins (Fig. 2d) present. Blade venation catadromous (Fig. 2e) . . . . . **2. Didymoglossum**
b. Continuous false veinlets parallel to true veins absent. Blade venation anadromous (Fig. 2f). . . . . **3. Crepidomanes** (subg. **Crepidomanes**)
5a. Roots few and fine . . . . . **4. Polyphlebium**
b. Roots numerous and robust 6
6a. Blades once-pinnate to bipinnatifid 7
b. Blades bipinnate to highly divided 8
7a. Pinnae asymmetric . . . . . **5. Vandenboschia**
b. Pinnae symmetric . . . . . **7. Trichomanes** (subg. **Lacostea**)
8a. Marginal laminar trichomes present . . . . **7. Trichomanes** (subg. **Trichomanes**)
b. Marginal laminar trichomes absent 9
9a. Abortive fronds (Fig. 2g) present. . . . . **3. Crepidomanes** (subg. **Nesopteris**)
b. Abortive fronds absent 10
10a. Minute clavate hairs present on stipes and rachises . . . . . **5. Vandenboschia**
b. Minute clavate hairs on stipes and rachises absent . . . . . **6. Abrodictyum**
11a. Involucres bivalvate (Fig. 2a) . . . . . **1. Hymenophyllum** (subg. **Fuciformia**)
b. Involucres tubular (Fig. 2b) 12
12a. Blade venation catadromous (Fig. 2e) 13
b. Blade venation anadromous (Fig. 2f) 14
13a. Lamina tough, more than one cell thick . . . . . **7. Trichomanes** (subg. **Feea**)
b. Lamina membranous, one cell thick . . . . **7. Trichomanes** (subg. **Trichomanes**)

←
Fig. 2. Examples of morphological characters used in the keys. a. Bivalvate involucres (*Hymenophyllum deplanchei*; *Ebihara 001228-05*, TI); b. tubular involucres with an exserted receptacle (Rc) (*Crepidomanes humile*; *Iwatsuki 99H06*, TI); c. root-like shoots (RS) grown out from rhizomes (Rz) (*Crepidomanes bipunctatum*; *Ebihara 000225-020*, TI); d. continuous false veinlets (FV) parallel to true veins (TV) (*Didymoglossum bipunctatum*; *S. Matsumoto 01-820*, TNS); e. catadromous venation – FAV: the first acroscopic vein; FBV: the first basiscopic vein in each pinna (*Trichomanes polypodioides*; *T.A. Ohsawa 178-15*, TI); f. anadromous venation (*Vandenboschia birmanica*; *A. Narita 1070b*, TNS); g. abortive fronds (pointed by an arrow) (*Crepidomanes aphlebioides*; *M. Kato et al. C-13883*, TI); h. long bristle-like light reddish hairs on a stipe (*Callistopteris apiifolia*; *Ebihara 040922-03*, TI); i. reduced lamina cells (*Abrodictyum pluma*; *R. Jaman s.n.*, TI). — Scale bars: a, b, d, h = 1 mm; c, e, f, i = 5 mm; g = 5 cm.

14a. Blades once-pinnate to bipinnatifid . . . . . **8. Cephalomanes**
b. Blades bipinnate or more divided 15
15a. Long bristle-like light reddish hairs (Fig. 2h) present on stipes and rachises . 16
b. Long bristle-like light reddish hairs absent on stipes and rachises 17
16a. Laminar cells reduced (Fig. 2i). Less than 3 rows of cells between midribs and margins . . . . . **6. Abrodictyum**
b. Laminar cells not reduced. More than 3 rows of cells between midribs and margins . . . . . **9. Callistopteris**
17a. Laminae more than one cell thick . . . . . **7. Trichomanes** (subg. **Davalliopsis**)
b. Laminae one cell thick 18
18a. Laminar cell-walls thin and straight . . . . **2. Crepidomanes** (subg. **Nesopteris**)
b. Laminar cell-walls slightly or quite thick, wavy or pitted . . . . . **6. Abrodictyum**

1. HYMENOPHYLLUM

Hymenophyllum Sm. (1793) 418. — Lectotype: *Hymenophyllum tunbrigense* (L.) Sm. (selected by Presl (1843) 31).

Rhizomes long-creeping, frequently branching, usually filiform or wiry, up to 2 mm diam., nearly glabrous or sparsely covered with multicellular hairs (exceptionally densely covered with hairs in subg. *Fuciformia*), protostele subcollateral, dorsiventral, or 'reduced' (with more or less central xylem-like parenchyma), cortices heterogeneous, with few and fine roots. *Stipes* various in length, at a distance from the adjacent ones. *Blades* usually pinnate to quadripinnate or occasionally simple, 165 by 17 cm, venation anadromous, laminae usually one cell thick, but sometimes two or more cells thick. *Sori* paratactic, lips usually bivalvate, receptacles usually included in involucres.

Distribution — Throughout the tropics to temperate regions; c. 250 species.

Habitat — Usually low- to middle-epiphytes on tree trunks, sometimes canopy sun-epiphytes, occasionally epilithic or terrestrial.

Chromosome base number — Various, x = 11 to 36.

Note — *Hymenophyllum* in our sense stands as the largest genus of Hymenophyllaceae, and almost corresponds to *Hymenophyllum* in the traditional and broad sense but also includes some taxa formerly regarded as *Trichomanes* s.l. Iwatsuki (1984) segregated *Sphaerocionium*, which is characterized by distinctive stellate hairs, from the remaining *Hymenophyllum* (s.l.) taxa. Recent studies (Hennequin et al., 2003, in press) suggest that *Sphaerocionium* is nested within *Mecodium,* another easily recognizable group of *Hymenophyllum* s.l., as currently defined. Under our strategy of classification – making each taxon a natural group – *Sphaerocionium* is to be treated as a genus, species belonging to *Mecodium* should be split into more than two genera. To avoid such inconvenience, all species of *Hymenophyllum* s.l. are placed in our *Hymenophyllum*. Because the systematic relationships within this genus are not fully clarified, the current revision treats only subgenera, with each subgenus monophyletic based on our latest study using molecular data (Hennequin et al., in press).

KEY TO THE SUBGENERA

1a. Rhizomes short-creeping or erect . . . . . **8**. Subg. **Fuciformia**
b. Rhizomes long-creeping 2
2a. Stellate hairs present on blades . . . . . **2.** Subg. **Sphaerocionium**
b. Stellate hairs absent on blades 3
3a. Blades dichotomously divided . . . . . **2.** Subg. **Sphaerocionium**
b. Blades not dichotomously divided 4
4a. Blades simple to pinnatifid. 5
b. Blades pinnate 7
5a. Blades kidney-shaped . . . . . **10.** Subg. **Cardiomanes**
b. Blades not kidney-shaped 6
6a. Veins of blades simple . . . . . **1.** Subg. **Hymenophyllum**
b. Veins of blades pinnately divided . . . . . **7.** Subg. **Hymenoglossum**
7a. Blades glaucous or covered with whitish multicellular hairs . . . . . **5.** Subg. **Pleuromanes**
b. Blades neither glaucous nor covered with whitish multicellular hairs 8
8a. Laminae more than two cells thick throughout . . . . . **9.** Subg. **Diploöphyllum**
b. Laminae one cell thick, or only partly multi-layered. 9
9a. Stipes with multicellular hairs present 10
b. Stipes glabrous or with only caducous hairs 11
10a. Sori on both acroscopic and basiscopic sides of pinnae . . . . . **6.** Subg. **Myrmecostylum**
b. Sori confined to acroscopic sides of pinnae . . . . . **1.** Subg. **Hymenophyllum**
11a. Rhizomes thick, more than 0.4 mm diam., nearly glabrous or with scattered pale hairs . . . . . **4.** Subg. **Globosa**
b. Rhizomes filiform, less than 0.4 mm diam., with scattered short brown hairs 12
12a. Margins of segments toothed . . . . . **1.** Subg. **Hymenophyllum**
b. Margins of segments entire 13
13a. Lamina cell walls thin and straight, sori lacking a thickened base . . . . . **3.** Subg. **Mecodium**
b. Lamina cell walls more or less thick, sori each with a thickened base, on short acroscopic segments near the rachis . . . . . **1.** Subg. **Hymenophyllum**

1. Subgenus **Hymenophyllum**

Didymoglossum Desv. subg. *Chilodium* C. Presl (1843) 23. — *Hymenophyllum* Sm. subg. *Chilodium* (C. Presl) Croxall (1975) 515. — *Hymenophyllum* Sm. sect. *Chilodium* (C. Presl) C. Chr. (1906) XVI. — Lectotype: *Didymoglossum neesii* (Blume) C. Presl (= *Hymenophyllum denticulatum* Sw.) (selected by Christensen (1906) XVI, as *H. denticulatum* Sw.).

Meringium C. Presl (1843) 24, t. VIII, f. B. — *Hymenophyllum* Sm. subg. *Meringium* (C. Presl) Copel. (1937) 14. — *Hymenophyllum* Sm. sect. *Meringium* (C. Presl) Diem & J.S. Licht. (1959) 666. — Type: *Meringium meyenianum* C. Presl (= *Hymenophyllum serrulatum* (C. Presl) C. Chr.).

Leptocionium C. Presl (1843) 26, t. XI, f. D. — *Hymenophyllum* Sm. sect. *Leptocionium* (C. Presl) Prantl (1875) 54. — *Hymenophyllum* Sm. subg. *Leptocionium* (C. Presl) H. Christ (1897) 20. — *Hymenophyllum* Sm. subsect. *Leptocionium* (C. Presl) C.V. Morton (1968) 170. — Type: *Leptocionium dicranotrichum* C. Presl (= *Hymenophyllum dicranotrichum* (C. Presl) Sadeb.).

Hymenophyllum Sm. subg. *Sphaerodium* C. Presl (1843) 31. — *Hymenophyllum* Sm. sect. *Sphaerodium* (C. Presl) C. Chr. (1906) XVI. — Lectotype: *Hymenophyllum wilsonii* Hook. (selected by Copeland (1938b) 14).

Hymenophyllum Sm. subsect. *Dimidiata* C. Presl (1843) 32. — Lectotype: *Hymenophyllum unilaterale* Bory ex Willd. (= *Hymenophyllum peltatum* (Poir.) Desv.) (selected by Morton (1968) 164).

Hymenophyllum Sm. subg. *Cycloglossum* C. Presl (1843) 32. — *Hymenophyllum* Sm. sect. *Cycloglossum* (C. Presl) C. Chr. (1906) XV. — Lectotype: *Hymenophyllum caespitosum* Gaudich. (selected by Copeland (1938b) 14).

Hymenophyllum Sm. subg. *Craspedophyllum* C. Presl (1843) 33. — *Hymenophyllum* Sm. sect. *Craspedophyllum* (C. Presl) C. Chr. (1906) XV. — *Craspedophyllum* (C. Presl) Copel. (1938b) 27. — Type: *Hymenophyllum marginatum* Hook. & Grev.

Serpyllopsis Bosch (1861a) 318. — *Trichomanes* L. subg. *Serpyllopsis* (Bosch) H. Christ (1897) 23. — Type: *Serpyllopsis caespitosa* (Gaudich.) C. Chr. (= *Hymenophyllum caespitosum* Gaudich.).

Hymenophyllum Sm. sect. *Pachyloma* H. Christ (1897) 15, based on *Pachyloma* Bosch (1861a) 318, nom. illeg., non DC. (1828) 122, nec Spach (1839) 194. — Type: *Hymenophyllum marginatum* Hook. & Grev.

Hymenophyllum Sm. subg. *Hemicyatheon* Domin (1913) 20. — *Hemicyatheon* (Domin) Copel. (1938b) 27. — *Hymenophyllum* Sm. sect. *Hemicyatheon* (Domin) K. Iwats. (1984) 172. — Type: *Hymenophyllum baileyanum* Domin.

Hymenophyllum Sm. sect. *Acanthotheca* Nakai (1926) 262. — Type: *Hymenophyllum acanthoides* (Bosch) Rosenst.

Hymenophyllum Sm. subg. *Buesia* C.V. Morton (1932) 336. — *Buesia* (C.V. Morton) Copel. (1938b) 47. — *Hymenophyllum* Sm. sect. *Buesia* (C.V. Morton) C.V. Morton (1968) 164. — Type: *Hymenophyllum mirificum* C.V. Morton.

Hymenophyllum Sm. subg. *Amphipterum* C. Presl ex Copel. (1937) 68, based on *Amphipterum* C. Presl (1849) 258, nom. nud. — *Amphipterum* (C. Presl ex Copel.) Copel. (1938b) 46. — *Hymenophyllum* Sm. sect. *Amphipterum* (C. Presl ex Copel.) C. Chr. ex K. Iwats. (1984) 171. — Type: *Hymenophyllum fuscum* (Blume) Bosch.

Hymenophyllum Sm. subg. *Myriodon* Copel. (1937) 73. — *Myriodon* (Copel.) Copel. (1938b) 47. — *Hymenophyllum* Sm. sect. *Myriodon* (Copel.) C.V. Morton (1968) 168. — Type: *Hymenophyllum odontophyllum* Copel. (= *Hymenophyllum brassii* C. Chr.).

Rosenstockia Copel. (1947) 36. — *Hymenophyllum* Sm. subg. *Rosenstockia* (Copel.) R.M. Tryon & A.F. Tryon (1981) 134. — Type: *Rosenstockia rolandi-principis* (Rosenst.) Copel. (= *Hymenophyllum rolandi-principis* Rosenst.).

Hymenophyllum Sm. sect. *Eupectinum* Diem & J.S. Licht. (1959) 635. — Type: *Hymenophyllum pectinatum* Cav.

Hymenophyllum Sm. sect. *Pseudomecodium* K. Iwats. (1984) 172. — *Pseudomecodium* (K. Iwats.) Satou (1997) 269. — Type: *Hymenophyllum exsertum* (Wall. ex Hook.) Copel.

Hymenophyllum Sm. subg. *Euhymenophyllum* C. Presl (1843) 31, nom. illeg.; originally includes the lectotype of the genus, *Hymenophyllum tunbrigense* (L.) Sm.

Hymenophyllum Sm. sect. *Serrulata* C. Presl (1843) 32, nom. illeg.; originally includes the lectotype of the genus, *Hymenophyllum tunbrigense* (L.) Sm.

Hymenophyllum Sm. subsect. *Evoluta* C. Presl (1843) 32, nom. illeg.; originally includes the lectotype of the genus, *Hymenophyllum tunbrigense* (L.) Sm.

Hymenophyllum Sm. sect. *Plumosa* K. Iwats. (1984) 172, nom. illeg., non *Hymenophyllum* Sm. subsect. *Plumosa* Prantl (1875) 55. — Type: *Hymenophyllum levingei* C.B. Clarke.

Rhizomes long-creeping, filiform, nearly glabrous or sparsely covered with thick-walled hairs. *Stipes* to 15 cm long. *Blades* simple to quadripinnatifid, narrowly elliptic to subdeltate, 30 by 15 cm, margins of segments entire. *Sori* usually at the tips of acroscopic segments of pinnae, lips bivalvate, entire or serrate, receptacles included or slightly extruded from involucres.

Distribution — Cosmopolitan; c. 100 species.

Habitat — Usually epiphytic, occasionally epilithic.

Chromosome base number — Various, x = 11 to 28.

Note — This is the largest subgenus of *Hymenophyllum* and shows great diversity both in morphology and cytology. Since recent molecular results (Ebihara et al., 2002; Hennequin et al., 2003; Hennequin et al., in press) suggest most of the subgroups included in this subgenus are probably polyphyletic, further study is necessary for the classification within this subgenus.

REPRESENTATIVE SPECIES:

New combinations:

Hymenophyllum trichophorum (Alderw.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes trichophorum* Alderw. (1924) 53, the earlier name for the plant formerly called *Amphipterum humatoides* Copel. (1941) 465].

Other species:

Hymenophyllum acanthoides (Bosch) Rosenst.; *H. armstrongii* (Baker) Kirk; *H. baileyanum* Domin; *H. barbatum* (Bosch) Baker; *H. bivalve* (G. Forst.) Sw.; *H. blandum* Racib.; *H. brassii* C. Chr.; *H. caespitosum* Gaudich.; *H. cupressiforme* Labill.; *H. dentatum* Cav.; *H. denticulatum* Sw.; *H. deplanchei* Mett. ex Kuhn; *H. dicranotrichum* (C. Presl) Sadeb.; *H. dimidiatum* Mett. ex Kuhn; *H. exsertum* Wall. ex Hook.; *H. feejeense* Brack.; *H. foersteri* Rosenst.; *H. fucoides* (Sw.) Sw.; *H. fuscum* (Blume) Bosch; *H. geluense* Rosenst.; *H. gorgoneum* Copel.; *H. holochilum* (Bosch) C. Chr.; *H. johorense* Holttum; *H. ledermanni* Brause; *H. levingei* C.B. Clarke; *H. lobbii* T. Moore ex Bosch; *H. macrosorum* Alderw.; *H. marginatum* Hook. & Grev.; *H. melanosorum* (Copel.) C.V. Morton; *H. minimum* A. Rich.; *H. mirificum* C.V. Morton; *H. multifidum* (G. Forst.) Sw.; *H. oligosorum* Makino; *H. pachydermicum* Ces.; *H. pectinatum* Cav.; *H. peltatum* (Poir.) Desv.; *H. penangianum* C.G. Matthew & H. Christ; *H. pumilum* C. Moore; *H. revolutum* Colenso; *H. rolandi-principis* Rosenst.; *H. rubellum* Rosenst.; *H. rugosum* C. Chr. & Skottsb.; *H. secundum* Hook. & Grev.; *H. serrulatum* (C. Presl) C. Chr.; *H. sibthorpioides* (Bory ex Willd.) Mett.; *H. simonsianum* Hook.; *H. tenellum* (Jacq.) Kuhn; *H. triangulare* Baker; *H. tunbrigense* (L.) Sm.; *H. walleri* Maiden & Betche; *H. wilsonii* Hook.

2. Subgenus **Sphaerocionium** (C. Presl) C. Chr.

Hymenophyllum Sm. subg. *Sphaerocionium* (C. Presl) C. Chr. (1934) 5. — *Sphaerocionium* C. Presl (1843) 33, t. IV, f. B, t. X, f. B, C. — *Hymenophyllum* Sm. sect. *Sphaerocionium* (C. Presl) C. Chr. (1906) XV. — Lectotype: *Hymenophyllum hirsutum* (L.) Sw. (selected by Copeland (1937) 10).

Trichomanes L. sect. *Flabellata* C. Presl (1843) 16. — Lectotype: *Trichomanes digitatum* Sw. (= *Hymenophyllum digitatum* (Sw.) Fosberg) (selected by Morton (1968) 199).

Hymenophyllum Sm. sect. *Pilosa* C. Presl (1843) 32. — Lectotype: *Hymenophyllum valvatum* Hook. & Grev. (selected by Morton (1968) 168).

Sphaerocionium C. Presl sect. *Pilosa* C. Presl (1843) 34. — Lectotype: *Sphaerocionium schiedeanum* C. Presl (= *Hymenophyllum crispum* Kunth) (selected by Morton (1968) 168).

Sphaerocionium C. Presl sect. *Stellata* C. Presl (1843) 34. — Lectotype: *Sphaerocionium interruptum* (Kunze) C. Presl (= *Hymenophyllum plumieri* Hook. & Grev.) (selected by Morton (1968) 169).

Gonocormus Bosch sect. *Microtrichomanes* Mett. ex Prantl (1875) 51, based on Gruppe *Microtrichomanes* Mett. (1864) 413, nom. nud. — *Trichomanes* L. sect. *Microtrichomanes* (Mett. ex Prantl) C. Chr. (1906) XIV. — *Microtrichomanes* (Mett. ex Prantl) Copel. (1938b) 35. — *Crepidomanes* (C. Presl) C. Presl subg. *Microtrichomanes* (Mett. ex Prantl) K. Iwats. (1984) 175. — Lectotype: *Gonocormus digitatus* (Sw.) Prantl (= *Hymenophyllum digitatum* (Sw.) Fosberg) (selected by Christensen (1906) XIV).

Hymenophyllum Sm. subsect. *Ciliata* Prantl (1875) 55. — Lectotype: *Hymenophyllum lineare* (Sw.) Sw. (selected by Morton (1968) 168).

Hymenophyllum Sm. subsect. *Hirsuta* Prantl (1875) 55. — Lectotype: *Hymenophyllum raddianum* Müll. Berol. (= *Hymenophyllum fragile* (Hedw.) C.V. Morton) (selected by Morton (1968) 170).

Hymenophyllum Sm. subsect. *Plumosa* Prantl (1875) 55. — Lectotype: *Hymenophyllum plumosum* Kaulf. (selected by Morton (1968) 169).

Hymenophyllum Sm. subg. *Apteropteris* Copel. (1937) 176. — *Apteropteris* (Copel.) Copel. (1938b) 34. — *Hymenophyllum* Sm. sect. *Apteropteris* (Copel.) C.V. Morton (1968) 170. — *Sphaerocionium* C. Presl subg. *Apteropteris* (Copel.) K. Iwats. (1984) 173. — Type: *Hymenophyllum malingii* (Hook.f.) Mett.

Rhizomes long-creeping, filiform, usually covered with stellate hairs. *Stipes* to 18 cm long. *Blades* pinnate to tripinnatifid, elliptic to subdeltate, 165 by 17 cm, covered with stellate hairs, or with simple hairs. *Sori* at the tips of ultimate segments, bivalvate or tubular, lips entire, receptacles included or slightly extruded from involucres.

Distribution — Cosmopolitan, highly diversified in the Neotropics; c. 70 species.

Habitat — Epiphytic on tree trunks.

Chromosome base number — x = 36.

Note — Though the *Sphaerocionium* species characterized by their stellate hairs have sometimes been treated as an independent genus (e.g., Copeland, 1938b; Iwatsuki, 1984), we reduced them to a subgenus of *Hymenophyllum* for the reason noted in the description of the genus. Our present definition of *Sphaerocionium* also includes most of the *Microtrichomanes* species (Ebihara et al., 2004) whose hairs have been transformed from stellate into simple. Although Morton (1947) subdivided this group chiefly by the nature and placement of the hairs, recent studies (Ebihara et. al., 2004, Hennequin et al., in press) suggest their phylogenetic relationships are more closely related to their geographical distributions.

REPRESENTATIVE SPECIES:

Hymenophyllum adiantoides Bosch; *H. aeruginosum* (Poir.) Carmich.; *H. amabile* C.V. Morton; *H. angustum* Bosch; *H. antillense* (Jenman) Jenman; *H. braithwaitei* Ebihara & K. Iwats.; *H. capillare* Desv.; *H. consanguineum* C.V. Morton; *H. crispum* Kunth; *H. dependens* C.V. Morton; *H. digitatum* (Sw.) Fosberg; *H. elegans* A. Spreng.; *H. elegantulum* Bosch; *H. ferrugineum* Colla; *H. fragile* (Hedw.) C.V. Morton; *H. frankliniae* Colenso; *H. fusugasugense* H. Karst. ex Sturm; *H. glaziovii* Baker; *H. hemipteron* Rosenst.; *H. hirsutum* (L.) Sw.; *H. hirtellum* Sw.; *H. horizontale* C.V. Morton; *H. karstenianum* Sturm; *H. lanatum* Fée; *H. lanceolatum* Hook. & Arn.; *H. lindenii* Hook.; *H. lineare* (Sw.) Sw.; *H. lobato-alatum* Klotzsch; *H. lyallii* Hook.f.; *H. malingii* (Hook.f.) Mett.; *H. microcarpum* Desv.; *H. molle* C.V. Morton; *H. multialatum* C.V. Morton; *H. nitidulum* (Bosch) Ebihara & K. Iwats.; *H. obtusum* Hook. & Arn.; *H. palmatifidum* (Müll. Berol.) Ebihara & K. Iwats.; *H. pilosissimum* C. Chr.; *H. plumieri* Hook. & Grev.; *H. plumosum* Kaulf.; *H. pulchellum* Schltdl. & Cham.; *H. pyramidatum* Desv.; *H. roraimense* C.V. Morton; *H. ruizianum* (Klotzsch) Kunze; *H. semiglabrum* Rosenst.; *H. sericeum* (Sw.) Sw.; *H. sieberi* (C. Presl) Bosch; *H. simplex* C.V. Morton; *H. speciosum* Bosch; *H. splendidum* Bosch; *H. subobtusum* Rosenst.; *H. subrigidum* H. Christ; *H. tomaniiviense* (Brownlie) Ebihara & K. Iwats.; *H. tomentosum* Kunze; *H. trapezoidale* Liebm.; *H. trichophyllum* Kunth; *H. urbanii* Brause; *H. valvatum* Hook. & Grev.; *H. verecundum* C.V. Morton.

3. Subgenus **Mecodium** C. Presl ex Copel.

Hymenophyllum Sm. subg. *Mecodium* C. Presl ex Copel. (1937) 93, based on *Mecodium* C. Presl (1849) 258, nom. nud. — *Mecodium* (C. Presl ex Copel.) Copel. (1938b) 17. — Lectotype: *Hymenophyllum polyanthos* (Sw.) Sw. (selected by Copeland (1937) 10).

Hymenophyllum Sm. sect. *Glabra* Prantl (1875) 54. — Lectotype: *Hymenophyllum polyanthos* (Sw.) Sw. (selected by Morton (1968) 172).

Hymenophyllum Sm. sect. *Corrugatae* K. Iwats. (1984) 173. — Type: *Hymenophyllum ooides* F. Muell. & Baker.

Rhizomes long-creeping, filiform, nearly glabrous. *Stipes* up to 10 cm long. *Blades* pinnate to tripinnatifid, elliptic to subdeltate, 45 by 6 cm, margins of segments entire. *Sori* at the tips of ultimate segments, lips bivalvate, entire, receptacles included in involucres.

Distribution — Cosmopolitan; more than 35 species.

Habitat — Epiphytic on tree trunks.

Chromosome base number — x = 28.

Note — This subgenus corresponds to the cosmopolitan species *H. polyanthos* and its local derivatives; it also corresponds to the '*H. polyanthos* clade' in Hennequin et al. (in press). The chromosome base number of x = 28 is a synapomorphy of this subgenus. Although Presl (1849) originally used the generic name *Mecodium* for *H. sanguinolentum*, which is now referred to subg. *Myrmecostylum*, Copeland (1937) selected *H. polyanthos* as the type when he legitimized the name – the type designation may not be correctable even it was later corrected to *H. sanguinolentum* by Copeland himself (1938b).

REPRESENTATIVE SPECIES:

New combinations:

Hymenophyllum novoguineense (Rosenst.) K. Iwats., *comb. nov.* [based on *Hymenophyllum blumeanum* A. Spreng. var. *novoguineense* Rosenst. (1908b) 371].

Other species:

Hymenophyllum abruptum Hook.; *H. apiculatum* Mett. ex Kuhn; *H. axillare* Sw.; *H. brevifrons* Kunze; *H. copelandii* C.V. Morton; *H. corrugatum* H. Christ; *H. cuneatum* Kunze; *H. darwinii* Hook.; *H. fendlerianum* Sturm; *H. fumarioides* Bory ex Willd.; *H. inaequale* (Poir.) Desv.; *H. kuhnii* C. Chr.; *H. mnioides* Baker; *H. myriocarpum* Hook.; *H. ooides* F. Muell. & Baker; *H. paniculiflorum* C. Presl; *H. polyanthos* (Sw.) Sw.; *H. rarum* R. Br.; *H. recurvum* Gaudich.; *H. siliquosum* H. Christ; *H. undulatum* Sw.; *H. whitei* Goy; *H. wrightii* Bosch.

4. Subgenus **Globosa** (Prantl) Ebihara & K. Iwats., *comb. nov.*

Based on *Hymenophyllum* Sm. sect. *Globosa* Prantl (1875) 55. — Lectotype: *Hymenophyllum junghuhnii* Bosch (selected by Morton (1968) 172).

Sphaerocionium C. Presl sect. *Glabra* C. Presl (1843) 34, non *Hymenophyllum* Sm. sect. *Glabra* Prantl (1875) 54. — Lectotype: *Hymenophyllum caudiculatum* Mart. (selected by Morton (1968) 172).

Rhizomes long-creeping, filiform to wiry, nearly glabrous. *Stipes* to 15 cm long. *Blades* tri- to quadripinnate, elliptic to subdeltate, 60 by 15 cm, margin of segments usually entire, minutely serrate in some species. *Sori* at the tips of ultimate segments, lips bivalvate, entire or serrate, receptacles included in involucres, often capitate.

Distribution — Tropics to temperate regions of Asia and Pacific areas; at least one species is distributed in the southern part of South America; c. 25 species.

Habitat — Epiphytic, or occasionally epilithic.

Chromosome base number — x = 36.

Note — This subgenus corresponds to the '*H. australe* clade' in Hennequin et al. (in press). It has been confused with the *H. polyanthos* group (subg. *Mecodium* in the present system), but features of the rhizome (e.g., dorsiventral protostele) are clearly different (Hennequin et al., in press). The earliest name given to this group, '*Sphaerocionium* sect. *Glabra'* (Presl, 1843) becomes a later homonym of *Hymenophyllum* sect.

Glabra (Prantl, 1875) when it is placed under *Hymenophyllum* according to the latest Code (Greuter et al., 2000, Art. 21.3, Note 1). Therefore the name of this subgenus should be *Globosa*.

REPRESENTATIVE SPECIES:

Hymenophyllum australe Willd.; *H. badium* Hook. & Grev.; *H. caudiculatum* Mart.; *H. demissum* (G. Forst.) Sw.; *H. emarginatum* Sw.; *H. fimbriatum* J. Sm. ex Hook.; *H. flexuosum* A. Cunn.; *H. imbricatum* Blume; *H. javanicum* A. Spreng.; *H. junghuhnii* Bosch; *H. longifolium* Alderw.; *H. productum* Kunze; *H. reinwardtii* Bosch; *H. riukiuense* H. Christ; *H. salakense* Racib.; *H. thuidium* Harr.; *H. treubii* Racib.

5. Subgenus **Pleuromanes** (C. Presl) Ebihara & K. Iwats., *comb. nov.*

Based on *Trichomanes* L. subg. *Pleuromanes* C. Presl (1849) 17. — *Pleuromanes* (C. Presl) C. Presl (1849) 258. — *Crepidomanes* (C. Presl) C. Presl subg. *Pleuromanes* (C. Presl) K. Iwats. (1984) 174. — Type: *Trichomanes acutum* C. Presl (1843) 42 (= *Hymenophyllum acutum* (C. Presl) Ebihara & K. Iwats., *comb. nov.,* non *Hymenophyllum acutum* Mett., nom. nud.).

Craspedoneuron Bosch (1861a) 322. — *Trichomanes* L. sect. *Craspedoneuron* (Bosch) Prantl (1875) 52. — Type: *Trichomanes album* Blume (= *Hymenophyllum pallidum* (Blume) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes pallidum* Blume (1828) 225]).

Rhizomes long-creeping, filiform, sparsely covered with whitish/yellowish hairs. *Stipes* to 12 cm long. *Blades* bi- to tripinnate, elliptic to subdeltate, 35 by 6 cm, covered with whitish/yellowish multicellular hairs or almost glabrous, margins of segments entire. *Sori* at the tips of ultimate segments, lips slightly to distinctly bivalvate, entire, receptacles included or slightly exserted from involucres.

Distribution — Old World tropics, especially in the Pacific region; 5 species.

Habitat — Epiphytic on tree trunks (including tree ferns).

Chromosome base number — x = 36.

Note — This subgenus contains *H. flabellatum* plus its local forms and *Pleuromanes,* formerly considered a member of *Trichomanes* s.l.; it also corresponds to '*H. flabellatum* clade' in Hennequin et al. (in press).

REPRESENTATIVE SPECIES:

Hymenophyllum acutilobum Ebihara & K. Iwats.; *H. flabellatum* Labill.; *H. leratii* Rosenst.; *H. pallidum* (Blume) Ebihara & K. Iwats.; *H. rufescens* Kirk.

6. Subgenus **Myrmecostylum** (C. Presl) Ebihara & K. Iwats., *comb. nov.*

Based on *Myrmecostylum* C. Presl (1843) 27, t. X, f. A. — *Hymenophyllum* Sm. sect. *Myrmecostylum* (C. Presl) C. Chr. (1906) XVI. — Lectotype: *Myrmecostylum tortuosum* (Hook. & Grev.) C. Presl (= *Hymenophyllum tortuosum* Hook. & Grev.) (selected by Christensen (1906) XVI).

Ptychophyllum C. Presl (1843) 28, t. XI, f. E. — *Hymenophyllum* Sm. sect. *Ptychophyllum* (C. Presl) C. Chr. (1906) XVI. — Type: *Ptychophyllum plicatum* (Kaulf.) C. Presl (= *Hymenophyllum plicatum* Kaulf.).

Tetralasma Phil. (1860) 208. — Type: *Hymenophyllum quadrifidum* Phil. (= *Hymenophyllum plicatum* Kaulf.), no generic combination has been made for this genus.

Rhizomes long-creeping, filiform to wiry, sparsely covered with thick-walled hairs. *Stipes* to 15 cm long. *Blades* pinnatifid to quadripinnate, elliptic to subdeltate, 55 by 14 cm, margins of segments entire or serrate. *Sori* at the tips of ultimate segments, lips bivalvate, entire or serrate, receptacles included in involucres.

Distribution — Southern Chile, New Zealand and New Caledonia; at least 8 species are known.

Habitat — Epiphytic on tree trunks, occasionally terrestrial.

Chromosome base number — x = 36.

Note — This subgenus corresponds to the '*H. sanguinolentum* clade' in Hennequin et al. (in press), and is characterized by brown multicellular hairs on the stipes or blade margins, or alternatively by dentate blade margins. In exceptional cases, *H. sanguinolentum* has nearly glabrous fronds, almost indistinguishable from *H. polyanthos* – but containing of oils that make an impression of the blades on the mounting paper; this feature is a characteristic of this group.

REPRESENTATIVE SPECIES:

Hymenophyllum krauseanum Phil.; *H. magellanicum* (Desv.) Willd.; *H. paninese* Ebihara & K. Iwats.; *H. plicatum* Kaulf.; *H. sanguinolentum* (G. Forst.) Sw.; *H. scabrum* A. Rich.; *H. tortuosum* Hook. & Grev.; *H. villosum* Colenso.

7. Subgenus **Hymenoglossum** (C. Presl) R.M. Tryon & A.F. Tryon

Hymenophyllum Sm. subg. *Hymenoglossum* (C. Presl) R.M. Tryon & A.F. Tryon (1981) 134. — *Hymenoglossum* C. Presl (1843) 35. — *Hymenophyllum* Sm. sect. *Hymenoglossum* (C. Presl) T. Moore (1857) cxii. — Type: *Hymenoglossum cruentum* (Cav.) C. Presl (= *Hymenophyllum cruentum* Cav.).

Hymenophyllum Sm. sect. *Integra* C. Presl (1843) 32. — Lectotype: *Hymenophyllum asplenioides* Sw. (selected by Morton (1968) 172).

Rhizomes long-creeping, filiform, nearly glabrous. *Stipes* 7–15 cm long. *Blades* simple to pinnatifid, ovate to narrowly ovate, 15 by 4 cm, margins of segments entire. *Sori* at the frond margins, slightly immersed in the laminae, lips bivalvate, entire, receptacles included in involucres.

Distribution — Central to South America and Madagascar; 3 species known.

Habitat — Epiphytic on tree trunks.

Chromosome base number — x = 36?

Note — Hennequin et al. (in press) revealed that *H. heimii* of Madagascar probably has a sister relationship to *H. cruentum* of southern Chile (formerly treated as a monotypic genus, *Hymenoglossum*). A Central-South American species, *H. asplenioides,* is also placed here because of its morphological resemblance to the two species above.

REPRESENTATIVE SPECIES:

Hymenophyllum asplenioides Sw.; *H. cruentum* Cav.; *H. heimii* Tardieu.

8. Subgenus **Fuciformia** Ebihara & K. Iwats., *subg. nov.*

A subgenere *Globosa* rhizomatibus brevibus et erectis differt.

Based on *Hymenophyllum* Sm. sect. *Fuciformia* H. Christ (1897) 20, nom. nud. — Type: *Hymenophyllum fuciforme* Sw.

Rhizomes erect or short-creeping, thick, densely covered with reddish hairs. *Stipes* 3–15 cm long. *Blades* tri- to quadripinnate, ovate to narrowly ovate, 65 by 15 cm, margins of segments entire. *Sori* at the tips of ultimate segments, lips bivalvate, entire or wavy, receptacles included or slightly extruded from involucres.

Distribution — Southern temperate regions (Chile and New Zealand); 2 species.

Chromosome base number — x = 36.

Habitat — Epiphytic, epilithic or terrestrial.

Note — This subgenus comprises only two species having tufted rhizomes, an exceptional feature in *Hymenophyllum*. Evidence suggests that these two species, which are disjunctly distributed in southern Chile and New Zealand, form a monophyletic group (Hennequin et al., in press).

REPRESENTATIVE SPECIES:
Hymenophyllum fuciforme Sw.; *H. pulcherrimum* Colenso.

9. Subgenus **Diploöphyllum** (Bosch) Ebihara & K. Iwats., *comb. nov.*

Based on *Diploöphyllum* Bosch (1861a) 322, non *Diplophyllum* (Dumort.) Dumort. (1835) 15, nom. cons., ICBN 2000. — *Hymenophyllum* Sm. sect. *Diploöphyllum* C. Chr. (1906) XV. — *Hymenophyllum* Sm. subsect. *Diploöphyllum* (C. Chr.) C.V. Morton (1968) 174, as '*Diplophyllum*'. — Lectotype and sole species (in the present treatment): *Hymenophyllum dilatatum* (G. Forst.) Sw. (selected by Christensen (1906) XV).

Rhizomes long-creeping, wiry, sparsely covered with dark hairs. *Stipes* 2–15 cm long. *Blades* tri- to quadripinnate, ovate or narrowly ovate, 55 by 15 cm, laminae more than two cells thick, margins of segments entire. *Sori* at the tips of ultimate segments, lips bivalvate, entire, receptacles included in involucres.

Distribution — New Zealand, monotypic.

Habitat — Epiphytic on tree trunks.

Chromosome base number — x = 36.

Note — This monotypic subgenus is characterized by multilayered laminar cells throughout its blades and long-creeping rhizomes. Molecular data (Hennequin et al., in press) suggest this is closely related to the subgenera *Fuciformia* and *Cardiomanes*. Van den Bosch's (1861a) original spelling of this taxon was *Diploöphyllum*, neither '*Diploophyllum*' as used by Copeland (1938b) nor '*Diplophyllum*' by Morton (1968), and its inclusion of a diacritical sign as a diaeresis is legitimate in the latest Code (Greuter et al., 2000, Art. 60.6).

10. Subgenus **Cardiomanes** (C. Presl) Ebihara & K. Iwats., *comb. nov.*

Based on *Cardiomanes* C. Presl (1843) 12. — *Trichomanes* L. subg. *Cardiomanes* (C. Presl) H. Christ (1897) 33. — Type and sole species: *Trichomanes reniforme* G. Forst. (1786) 84 (= *Hymenophyllum nephrophyllum* Ebihara & K. Iwats., *nom. nov.* = *Cardiomanes reniforme* (G. Forst.) C. Presl, non *Hymenophyllum reniforme* Hook.).

Rhizomes long-creeping, wiry, sparsely covered with dark hairs. *Stipes* 5–25 cm long. *Blades* simple, kidney-shaped, 35 by 13 cm, laminae more than two cells thick, margins of segments entire. *Sori* at the blade margins, tubular, lips entire, receptacles exserted from involucres.

Distribution — New Zealand, monotypic.

Habitat — Epiphytic.

Chromosome base number — x = 36.

Note — One of the most distinct subgenera of *Hymenophyllum* (formerly included in *Trichomanes* s.l. due to its cup-shaped involucres). A replacement name is necessary when *Cardiomanes reniforme* is moved to *Hymenophyllum*.

2. DIDYMOGLOSSUM

Didymoglossum Desv. (1827) 330. — *Trichomanes* L. sect. *Didymoglossum* (Desv.) T. Moore (1857) cx. — *Trichomanes* L. subg. *Didymoglossum* (Desv.) C. Chr. (1906) XIV. — Lectotype: *Didymoglossum muscoide*s (Sw.) Desv. (= *Didymoglossum hymenoides* (Hedw.) Copel.) (selected by Christensen (1906) XIV, as '*Trichomanes hymenoides* Hedw.').

Distribution — Throughout the tropics; more than 30 species.

Chromosome base number — x = 34.

Note — Corresponding to the Di clade in Ebihara et al. (submitted), and also to Morton's (1968) *Trichomanes* subgenus *Didymoglossum*. This genus contains three genera sensu Copeland (1938b): *Didymoglossum*, *Microgonium* and *Lecanium (Lecanolepis)*. All species in *Didymoglossum* are dwarf epiphytes, mainly in tropical regions, and false veinlets are present. Though both Copeland (1938b) and Morton (1968) used the presence of marginal setae as the primary character to distinguish *Microgonium* from *Didymoglossum*, there was evidently secondary loss of marginal hairs in some '*Microgonium*' species (Ebihara et al., submitted). Therefore, submarginal false veinlets stand as the primary character to separate the two subgenera.

KEY TO THE SUBGENERA

1a. Submarginal false veinlets absent . . . . . **1.** Subg. **Didymoglossum**
b. Submarginal false veinlets present . . . . . **2.** Subg. **Microgonium**

1. Subgenus **Didymoglossum**

Hemiphlebium C. Presl sect. *Lecanium* Prantl (1875) 46, based on *Lecanium* C. Presl (1843) 11, t. I, nom. illeg., non Reinw. (1825) 48. — *Trichomanes* L. sect. *Lecanium* (Prantl) H. Christ (1897) 25. — *Lecanolepis* Pic.Serm. (1973) 449. — Type: *Lecanium membranaceum* (L.) C. Presl (= *Didymoglossum membranaceum* (L.) Vareschi).

Didymoglossum Desv. sect. *Flabellata* C. Presl (1843) 23. — Lectotype: *Didymoglossum sphenoides* (Kunze) C. Presl (= *Didymoglossum punctatum* (Poir.) Desv.) (selected by Morton (1968) 191).

Didymoglossum Desv. sect. *Pinnata* C. Presl (1843) 23. — Lectotype: *Didymoglossum muscoides* (Sw.) Desv. (= *Didymoglossum hymenoides* (Hedw.) Copel.) (selected by Morton (1968) 191).

Hemiphlebium C. Presl (1843) 25, t. IX. — *Trichomanes* L. sect. *Hemiphlebium* (C. Presl) T. Moore (1857) cx. — *Trichomanes* L. subg. *Hemiphlebium* (C. Presl) H. Christ (1897) 23. — Type: *Hemiphlebium pusillum* (Sw.) C. Presl (= *Didymoglossum pusilum* (Sw.) Desv.).

Rhizomes long-creeping, frequently branching, usually filiform, to 0.5 mm diam., densely covered with dark-coloured hairs, protostele collateral to regressed, cortex petiole-like, roots absent, root-like shoots present (sensu Schneider, 2000). *Stipes* often quite reduced, up to 1 cm, at a distance from the adjacent ones. *Blades* usually simple, or sometimes lobed to pinnatifid, elliptic to narrowly ovate, 6 by 6 cm, venation catadromous, often flabelliform, submarginal false veinlets absent, longitudinal false veinlets parallel to the true veins present, internal cell walls thin and straight, setae or scale-like projections sometimes. *Sori* epitactic or pantotactic, often immersed in the laminae, campanulate, lips bilabiate or occasionally truncate, often dark-margined, receptacles exserted.

Distribution — Throughout the tropics, mainly in the New World; more than 20 species.

Habitat — Epilithic or low-epiphytic.

Note — Corresponding to the Le subclade in Ebihara et al. (submitted).

REPRESENTATIVE SPECIES:

New combinations:

Didymoglossum hildebrandtii (Kuhn) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes hildebrandtii* Kuhn (1879) 70]; *D. lorencei* (Tardieu) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes lorencei* Tardieu (1977) 147]; *D. motleyi* (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes motleyi* Bosch (1861b) 145]; *D. sublimbatum* (Müll.Berol.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes sublimbatum* Müll.Berol. (1854) 737]; *D. tahitense* (Nadeaud) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes tahitense* Nadeaud (1873) 18].

Other species:

Didymoglossum angustifrons Fée; *D. curtii* (Rosenst.) Pic.Serm.; *D. exiguum* (Bedd.) Copel.; *D. gourlianum* (Grev. ex J. Sm.) Pic.Serm.; *D. hymenoides* (Hedw.) Copel.; *D. krausii* (Hook. & Grev.) C. Presl; *D. liberiense* (Copel.) Copel.; *D. lineolatum* Bosch; *D. melanopus* (Baker) Copel.; *D. membranaceum* (L.) Vareschi; *D. nummularium* Bosch; *D. ovale* E. Fourn.; *D. petersii* (A. Gray) Copel.; *D. pinnatinervium* (Jenman) Pic.Serm.; *D. punctatum* (Poir.) Desv.; *D. pusillum* (Sw.) Desv.; *D. reptans* (Sw.) C. Presl; *D. rhipidophyllum* (Sloss.) Pic.Serm.

2. Subgenus **Microgonium** (C. Presl) Ebihara & K. Iwats., *comb. nov.*

Based on *Microgonium* C. Presl (1843) 19, t. VI, f. A, B. — *Hemiphlebium* C. Presl sect. *Microgonium* (C. Presl) Prantl (1875) 46. — *Trichomanes* L. sect. *Microgonium* (C. Presl) H. Christ (1897) 24. — Lectotype: *Microgonium cuspidatum* (Willd.) C. Presl (= *Didymoglossum cuspidatum* (Willd.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes cuspidatum* Willd. (1810) 499]) (selected by Christensen (1906) XIV).

Rhizomes long-creeping, frequently branching, filiform, to 0.5 mm diam., densely covered with dark hairs, protostele collateral to regressed (see Ebihara et al., submitted), cortex petiole-like, roots absent, root-like shoots present. *Stipes* often quite reduced, to 1 cm, at a distance from the adjacent ones. *Blades* usually simple, or sometimes lobed to pinnatifid, elliptic to narrowly ovate, 3 by 2 cm, venation catadromous, continuous submarginal false veinlets present, longitudinal false veinlets parallel to the true veins present, internal cell walls thin and straight, margins entire and glabrous. *Sori* epitactic or pantotactic, often immersed in the laminae, tubular, lips often dilate, receptacles exserted.

Distribution — Throughout the tropics, mainly in the Old World; more than 10 species.

Habitat — Epilithic or low-epiphytic.

Note — Corresponding to the Mg subclade in Ebihara et al. (submitted).

REPRESENTATIVE SPECIES:

New combinations:

Didymoglossum bimarginatum (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Microgonium bimarginatum* Bosch (1861b) 143]; *D. ekmanii* (Wess. Boer) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes ekmanii* Wess.Boer (1962) 319, f. 33a, b]; *D. godmanii* (Hook.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes godmanii* Hook. in Baker (1866) 337, t. 8, f. A]; *D. kapplerianum* (Sturm) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes kapplerianum* Sturm in Martius (1859) 276]; *D. kirkii* (Hook.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes kirkii* Hook. in Hook. & Baker (1867) 78]; *D. lenormandii* (Bosch) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes lenormandii* Bosch (1861b) 144]; *D. mindorense* (H. Christ) K. Iwats., *comb. nov.* [based on *Trichomanes mindorense* H. Christ (1908a) 270]; *D. pygmaeum* (C. Chr.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes pygmaeum* C. Chr. (1920) 10, f. 2]; *D. sinuatum* (Bonap.)

Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes sinuatum* Bonap. (1920) 25]; *D. wesselsboeri* Ebihara & Dubuisson, *nom. nov*. [based on *Trichomanes hookeri* C. Presl (1843) 16, non *Didymoglossum hookeri* C. Presl].

Other species:

Didymoglossum cuspidatum (Willd.) Ebihara & Dubuisson.

3. CREPIDOMANES

Crepidomanes (C. Presl) C. Presl (1849) 258. — *Trichomanes* L. subg. *Crepidomanes* C. Presl (1849) 17. — *Trichomanes* L. sect. *Crepidomanes* (C. Presl) Prantl (1875) 51. — Type: *Trichomanes intramarginale* Hook. & Grev. (= *Crepidomanes intramarginale* (Hook. & Grev.) C. Presl).

Distribution — Throughout the Old World tropics to northern temperate regions; more than 30 species.

Chromosome base number — x = 36.

Note — This genus corresponds to the PT clade in Ebihara et al. (submitted), and also to Copeland's (1938b) genera *Crepidomanes*, *Gonocormus*, *Crepidopteris* (*Reediella*) p.p., *Vandenboschia* p.p. and *Microtrichomanes* p.p. Copeland's (1938b) genera *Crepidomanes* and *Gonocormus* are placed here, and a part of *Crepidopteris, Vandenboschia* and *Microtrichomanes* are also included. Most species of *Crepidomanes* are epiphytes, mainly in rain forests of the Paleotropics; however, *Nesopteris,* with a short, erect rhizomes, is also included here.

KEY TO THE SUBGENERA AND SECTIONS

1a. Fronds smaller, less than 15 cm long 2
b. Fronds larger, more than 15 cm long . . . . . **2.** Subg. **Nesopteris**
2a. Elongate marginal cells present in laminae . . . . . **1c.** Subg. **Crepidomanes** sect. **Crepidium**
b. Elongate marginal cells absent in laminae 3
3a. Proliferation present on stipes . . . . **1b.** Subg. **Crepidomanes** sect. **Gonocormus**
b. Proliferations absent on stipes 4
4a. Blades flabellate. . . . . **1b.** Subg. **Crepidomanes** sect. **Gonocormus**
b. Blades pinnate . . . . . **1a.** Subg. **Crepidomanes** sect. **Crepidomanes**

1. Subgenus **Crepidomanes**

Distribution — Throughout the Paleotropics.

Note — Corresponding to the Cr subclade in Ebihara et al. (submitted). Three sections are recognized in this subgenus.

1a. Section **Crepidomanes**

Trichomanes L. subg. *Minora* Prantl (1875) 51. — Lectotype: *Trichomanes intramarginale* Hook. & Grev. (= *Crepidomanes intramarginale* (Hook. & Grev.) Copel.) (selected by Morton (1968) 181).

Trichomanes L. sect. *Taschneria* C. Presl ex C. Chr. (1906) XV, based on *Taschneria* C. Presl (1849) 258, nom. nud. — *Crepidomanes* (C. Presl) C. Presl sect. *Taschneria* (C. Presl ex C. Chr.) K. Iwats. (1984) 175. — Type: *Trichomanes filicula* Bory ex Willd. (= *Crepidomanes bipunctatum* (Poir.) Copel.).

Rhizomes long-creeping, frequently branching, filiform, 0.1–0.5 mm diam., densely covered with dark hairs, protostele subcollateral, cortex with centrifuge sclerification, roots absent, root-like shoots present. *Stipes* sometimes reduced, or to 8 cm long, at a distance from the adjacent ones. *Blades* simple to quadripinnatifid, elliptic to subdeltate, 12 by 6 cm, venation anadromous, false veinlets often present, submarginally (continuous or interrupted) and/or parallel (but not connected) to true veins, laminae almost always one cell thick, exceptionally thicker (*C. intramarginale*), internal cell walls thin and straight. *Sori* paratactic, tubular, lips usually bilabiate, often deltate, sometimes dilate, receptacles exserted.

Distribution — Throughout the Paleotropics; more than 20 species.

Habitat — Usually epilithic on wet rocks along streams, sometimes epiphytic on tree trunks.

Note — *Crepidomanes* in the strict sense contains only those species that have false veinlets, but recent study (Ebihara et al., submitted) has shown that some species lacking false veinlets (formerly placed under *Vandenboschia* by Copeland) are closely related to species that have them and/or are nested in a clade consisting of species with false veinlets.

REPRESENTATIVE SPECIES:

New combinations:

Crepidomanes africanum (H. Christ) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes africanum* H. Christ (1909a) 21]; *C. chevalieri* (H. Christ) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes chevalieri* H. Christ (1908b) 106]; *C. draytonianum* (Brack.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes draytonianum* Brack. (1854) 252, pl. 36, f. 3]; *C. fallax* (H. Christ) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes fallax* H. Christ (1909b) 24]; *C. mettenii* (C. Chr.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes mettenii* C. Chr. (1906) 644].

Other species:

Crepidomanes barnardianum (F.M. Bailey) Tindale; *C. bipunctatum* (Poir.) Copel.; *C. christii* (Copel.) Copel.; *C. clarenceanum* (F. Ballard) Pic. Serm.; *C. frappieri* (Cordem.) J.P. Roux; *C. inopinatum* (Pic.Serm.) J.P. Roux; *C. intramarginale* (Hook. & Grev.) Copel.; *C. kurzii* (Bedd.) Tagawa & K. Iwats.; *C. latealatum* (Bosch) Copel.; *C. latemarginale* (D.C. Eaton) Copel.; *C. melanotrichum* (Schltdl.) J.P. Roux; *C. rupicolum* (Racib.) Copel.; *C. schmidtianum* (Zenker ex Taschner) K. Iwats.; *C. vitiense* (Baker) Bostock.

1b. Section **Gonocormus** (Bosch) K. Iwats.

Crepidomanes (C. Presl) C. Presl sect. *Gonocormus* (Bosch) K. Iwats. (1984) 174. — *Gonocormus* Bosch (1861a) 321. — *Trichomanes* L. sect. *Gonocormus* (Bosch) H. Christ (1897) 27. — *Trichomanes* L. subg. *Gonocormus* (Bosch) C. Chr. (1906) XIV. — Lectotype: *Gonocormus prolifer* (Blume) Prantl (= *Crepidomanes minutum* (Blume) K. Iwats.) (selected by Christensen (1906) XIV).

Rhizomes long-creeping, frequently branching, filiform, c. 0.15 mm diam., covered with dark brown hairs or glabrescent, protostele subcollateral, cortex with centrifugal sclerification, roots absent, root-like shoots present. *Stipes* very short, or to 3 cm long, at a distance from the adjacent ones, proliferations often observed. *Blades* simple to quadripinnatifid, flabellate to narrowly ovate, 12 by 3 cm, venation anadromous, false veinlets absent, internal cell walls thin and straight. *Sori* paratactic or pantotactic, campanulate, lips dilate, receptacles long-exserted.

Distribution — Throughout the Paleotropics; 1 polymorphic species, *Crepidomanes minutum* (Blume) K. Iwats., is recognized here.

Habitat — Epilithic or epiphytic on tree trunks.

Note — The single species ranges from Africa to the Pacific according to Yoroi & Iwatsuki (1977). There is much genetic variation in the *rbcL* sequences of this species from various localities, but it corresponds neither to morphological features nor to geographical distribution (A. Ebihara, unpublished data). Further studies are needed.

1c. Section **Crepidium** (C. Presl) Ebihara & K. Iwats., *comb. nov.*

Based on *Didymoglossum* Desv. subg. *Crepidium* C. Presl (1843) 23. — *Trichomanes* L. sect. *Crepidium* (C. Presl) C. Chr. (1906) XV. — *Crepidopteris* Copel. (1938b) 57, nom. illeg., non Benth. (1862). — *Crepidophyllum* C.F. Reed (1948) 88, nom. illeg., non Herzog (1926) 356. — *Reediella* Pic.Serm. (1970) 719. — *Crepidomanes* (C. Presl) C. Presl subg. *Crepidium* (C. Presl) K. Iwats. (1984) 174. — Type: *Didymoglossum humile* (G. Forst.) C. Presl (= *Crepidomanes humile* (G. Forst.) Bosch).

Rhizomes long-creeping, frequently branching, filiform, 0.3–0.4 mm diam., densely covered with dark brown or blackish hairs, protostele subcollateral, cortex with centrifugal sclerification, roots absent, root-like shoots present. *Stipes* 0.2–1.2 cm long, at a distance from the adjacent ones. *Blades* bipinnatifid to tripinnatifid, ovate to narrowly ovate, 1–8 by 2–3 cm wide, venation anadromous, double rows of elongate marginal cells present, false veinlets absent, internal cell walls thin and straight. *Sori* paratactic, tubular, lips dilate, receptacles long-exserted.

Distribution — Old World tropics (Asia to Pacific); at least 1 species, *Crepidomanes humile* (G. Forst.) Bosch.

Habitat — Epilithic or low-epiphytic.

Note — *Crepidium* (*Reediella*), a group characterized by marginal elongated cell rows, has been shown to be an unnatural group (Ebihara et al., submitted) – species having single rows of elongated cells are attributed to another genus, *Polyphlebium,* in the present system. As a result, this section contains only *C. humile*.

2. Subgenus **Nesopteris** (Copel.) Ebihara & K. Iwats., *comb. nov.*

Based on *Nesopteris* Copel. (1938b) 65. — *Trichomanes* L. sect. *Nesopteris* (Copel.) C.V. Morton (1968) 190. — *Cephalomanes* C. Presl subg. *Nesopteris* (Copel.) K. Iwats. (1984) 176. — Type: *Nesopteris grandis* (Copel.) Copel. (= *Crepidomanes grande* (Copel.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes grande* Copel. (1911) 70].

Rhizomes suberect, ascending or long-creeping, quite thick, 2.8–3.5 mm diam., densely covered with dark hairs, protostele massive, cortex homogeneous, roots numerous and robust. *Stipes* to 25 cm long, very close to each other except in *C. aphlebioides*. *Blades* 4- or 5-pinnate, elliptic to narrowly ovate, 15–50(–70) by 10–20(–25) cm, venation anadromous, false veinlets absent, internal cell walls thin and straight. *Sori* paratactic, tubular, lips often dilate, receptacles long-exert.

Distribution — Old World tropics (Asia to Pacific); at least 4 species.

Habitat — Terrestrial or epilithic, occasionally climbing tree trunks.

Note — Large fronds and stout rhizomes observed in members of this subgenus are apparently quite different from those of subgenus *Crepidomanes*. Our study (Ebihara

et al., submitted) revealed that the erect rhizomes of the *Nesopteris* species are probably the result of an exceptional evolution from creeping rhizomes to erect ones, which is in the direction opposite to the evolutional trait of Hymenophyllaceae. We assume that *C. aphlebioides*, the only species of this subgenus having long-creeping rhizomes, is transitional between the two subgenera.

REPRESENTATIVE SPECIES:

New combinations:

Crepidomanes intermedium (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes intermedium* Bosch (1861b) 179]; *C. thysanostomum* (Makino) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes thysanostomum* Makino (1899) 46].

Other species:

Crepidomanes aphlebioides (H. Christ) I.M. Turner; *C. grande* (Copel.) Ebihara & K. Iwats.

4. POLYPHLEBIUM

Polyphlebium Copel. (1938b) 55. — *Phlebiophyllum* Bosch (1861a) 321, non *Phlebophyllum* Nees in Wallich (1832) 75, 102. — *Trichomanes* L. sect. *Phlebiophyllum* (Bosch) Prantl (1875) 52. — *Trichomanes* L. subg. *Polyphlebium* (Copel.) Allan (1961) 34. — Type: *Polyphlebium venosum* (R.Br.) Copel.

Rhizomes long-creeping, frequently branching, filiform, 0.1–0.8 mm diam., densely covered with light brown hairs, protostele subcollateral, cortex with centrifuge sclerification, roots few and fine. *Stipes* 0.3–5.5 cm long, at a distance from the adjacent ones. *Blades* pinnate to quadripinnate, ovate to narrowly ovate, 30 by 6.5 cm, venation anadromous, sometimes a single row of elongate marginal cells present, false veinlets absent, internal cell walls thin and straight. *Sori* paratactic, tubular, lips usually dilate, receptacle long-exserted.

Distribution — Temperate regions of the southern hemisphere, and mountain forests of low altitude regions; c. 15 species.

Habitat — Epilithic on wet rocks or epiphytic on tree-fern trunks.

Chromosome base number — x = 36.

Note — Corresponding to the Tp clade in Ebihara et al. (submitted). Though constituents of this genus have so far been confused with those of *Crepidomanes* and *Vandenboschia* of the present system, their stem and root features well differentiate them from the others.

REPRESENTATIVE SPECIES:

New combinations:

Polyphlebium angustatum (Carmich.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes angustatum* Carmich. (1818) 513]; *P. borbonicum* (Bosch) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes borbonicum* Bosch (1861b) 158]; *P. capillaceum* (L.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes capillaceum* L. (1753) 1099]; *P. colensoi* (Hook.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes colensoi* Hook. (1854) t. 979]; *P. diaphanum* (Kunth) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes diaphanum* Kunth (1815) 25]; *P. endlicherianum* (C. Presl) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes endlicherianum* C. Presl (1848) 333]; *P. exsectum* (Kunze) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes exsectum* Kunze (1837) 47, t. 29, f. 2]; *P. hymenophylloides* (Bosch) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes hymenophylloides* Bosch (1863) 209]; *P. ingae* (C. Chr.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes ingae* C. Chr. in C. Chr. & Skottsb. (1920) 3, f. 2]; *P. philippianum* (Sturm) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes philippianum* Sturm (1858) 188]; *P. pyxidi-*

ferum (L.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes pyxidiferum* L. (1753) 1098]; *P. vieillardii* (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes vieillardii* Bosch (1861c) 90]; *P. werneri* (Rosenst.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes werneri* Rosenst. (1908a) 35].

Other species:

Polyphlebium venosum (R.Br.) Copel.

5. VANDENBOSCHIA

Vandenboschia Copel. (1938b) 51. — *Trichomanes* L. subg. *Vandenboschia* (Copel.) Allan (1961) 34. — Type: *Vandenboschia radicans* (Sw.) Copel.

Distribution — Throughout the tropics, extending to northern temperate regions; more than 15 species.

Habitat — Hemi-epiphytic on tree trunks or epilithic, occasionally terrestrial.

Chromosome base number — x = 36.

Note — Corresponding to the Va clade in Ebihara et al. (submitted). Our molecular analysis shows Copeland's genus *Vandenboschia* evidently of polyphyletic origin – he included species of at least four different lineages (the Va, Po, PT, NT clades in Ebihara et al., submitted). *Vandenboschia,* in the present system, refers to *V. radicans*, type of *Vandenboschia*, and its relatives. Nakaike (1975) advocated the application of the generic name *Lacosteopsis* instead of *Vandenboschia* on the grounds that *Vandenboschia* was an invalid generic name since Copeland (1938b) included the type of an existing genus (*T. scandens*) when he established *Vandenboschia* (T. Nakaike, pers. comm.). This confusion was attributed to the controversial typification of *Trichomanes* as noted above. Recent nomenclatural conservation of *T. crispum* against *T. scandens* (Greuter et al., 2000) denied the claim that *Vandenboschia* is an illegitimate name (Morton, 1968; Holttum, 1976).

KEY TO THE SUBGENERA

1a. Blades bipinnate or more finely divided, hemi-epiphytic or epilithic . . . . . **1.** Subg. **Vandenboschia**

b. Blades simply pinnate, hemi-epiphytic . . . . . **2.** Subg. **Lacosteopsis**

1. Subgenus **Vandenboschia**

Rhizomes short- or long-creeping, irregularly branching, rather thick, to 1.7 mm diam., densely covered with brown to bright brown multicellular hairs, protostele reduced, cortex heterogeneous, roots numerous and robust. *Stipes* 1–16 cm long, clustered or irregularly distanced. *Blades* bipinnate to 5-pinnatifid, ovate to linear-ovate, 40 by 20 cm, venation anadromous, false veinlets absent, laminae often reduced, regular arrangement of elongate cells observed in some species, internal cell walls various (thin to thick, straight to coarsely pitted). *Sori* paratactic, tubular to campanulate, lips sometimes dilate, receptacles long-exserted.

Distribution — Throughout the tropics, extending to northern temperate regions; more than 15 species.

Habitat — Terrestrial in humid places, or epiphytic on tree trunks including tree ferns.

REPRESENTATIVE SPECIES:

New combinations:

Vandenboschia boschiana (Sturm ex Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes boschianum* Sturm ex Bosch (1861b) 160]; *V. collariata* (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes collariatum* Bosch (1859) 368]; *V. gigantea* (Bory ex Willd.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes giganteum* Bory ex Willd. (1810) 514].

Other species:

Vandenboschia birmanica (Bedd.) Ching; *V. cyrtotheca* (Hillebr.) Copel.; *V. davallioides* (Gaudich.) Copel.; *V. johnstonensis* (F.M. Bailey) Copel.; *V. liukiuensis* (Y. Yabe) Copel.; *V. maxima* (Blume) Copel.; *V. radicans* (Sw.) Copel.; *V. speciosa* (Willd.) G. Kunkel; *V. subclathrata* K. Iwats.

2. Subgenus **Lacosteopsis** (Prantl) Ebihara & K. Iwats., *comb. nov.*

Based on *Trichomanes* L. sect. *Lacosteopsis* Prantl (1875) 53. — *Lacosteopsis* (Prantl) Nakaike (1975) 21. — Lectotype: *Trichomanes luschnatianum* C. Presl (= *Vandenboschia rupestris* Ebihara & K. Iwats., *comb. nov.* [based on *Hymenophyllum rupestre* Raddi (1825) 67, t. 80]) (selected by Christensen (1906) XV, as *Trichomanes rupestre* (Raddi) Bosch).

Rhizomes suberect, or short- to long-creeping, irregularly branching, wiry, densely covered with brown to bright brown multicellular hairs, or nearly glabrous in climbing parts, protostele reduced, cortex heterogeneous, roots numerous and robust at the terrestrial parts. *Stipes* 1–16 cm long, clustered or irregularly distanced. *Blades* usually pinnate, narrowly elliptic to linear-ovate, 50 by 6 cm, venation anadromous, false veinlets absent, laminae often reduced, regular arrangement of elongated cells observed in some species, internal cell walls various (thin to thick, straight to coarsely pitted). *Sori* paratactic, tubular to campanulate, lips sometimes dilate, receptacles long-exserted.

Distribution — Both New World and Old World tropics (excl. Africa); at least 2 species.

Habitat – Hemi-epiphytic, climbing on tree trunks.

REPRESENTATIVE SPECIES:

Vandenboschia auriculata (Blume) Copel.; *V. rupestris* (Raddi) Ebihara & K. Iwats.

6. ABRODICTYUM

Abrodictyum C. Presl (1843) 20, t. VII. — *Trichomanes* L. sect. *Abrodictyum* (C. Presl) T. Moore (1857) cx. — *Cephalomanes* C. Presl subg. *Abrodictyum* (C. Presl) K. Iwats. (1984) 176. — *Habrodictyon* C. Presl ex Bosch (1861a) 321. — Type: *Abrodictyum cumingii* C. Presl.

Distribution — Throughout the tropics; c. 25 species.

Chromosome base number — x = 33 (a few doubtful records x = 36).

Note — Corresponding to the Pa clade in Ebihara et al. (submitted). Circumscription of this genus is very similar to Morton's subgenus *Pachychaetum* except for the inclusion of *Abrodictyum* and the exclusion of *Davalliopsis*. Dissected fronds consisting primarily of the axis (lacking laminar cells) is a unique character observed in some species of this genus, but according to molecular results such fronds evolved several times in parallel within this genus.

KEY TO THE SUBGENERA

1a. Distribution in Asia/Pacific 2
b. Distribution in Africa/America . . . . . **2.** Subg. **Pachychaetum**
2a. Rhizomes long-creeping . . . . . **1.** Subg. **Abrodictyum**
b. Rhizomes erect or short-creeping 3
3a. Lamina texture membranous . . . . . **1.** Subg. **Abrodictyum**
b. Lamina texture not membranous . . . . . **2.** Subg. **Pachychaetum**

1. Subgenus **Abrodictyum**

Trichomanes L. sect. *Leptomanes* Prantl (1875) 52, nom illeg.; one of the five original species, *Trichomanes smithii* Hook. (= *Abrodictyum cumingii* C. Presl), is also the type of *Trichomanes* L. sect. *Abrodictyum* (C. Presl) T. Moore (1857).

Rhizomes suberect, or short- to long-creeping, irregularly branching, rather thick, to 1.7 mm diam., densely covered with brown to bright brown multicellular hairs, protostele massive, cortex homogeneous, roots numerous and robust. *Stipes* 1–16 cm long, clustered or irregularly distanced. *Blades* bipinnate to 5-pinnatifid, narrowly ovate to linear-ovate, 40 by 6 cm, venation anadromous, false veinlets absent, laminae often reduced, regular arrangement of elongate cells observed in some species, internal cell walls various (thin to thick, straight to coarsely pitted). *Sori* paratactic, tubular to campanulate, lips sometimes dilate, receptacles long-exserted.

Distribution — Paleotropics (Asia to the Pacific); c. 15 species.

Habitat — Terrestrial in humid places, or epiphytic on tree trunks including tree ferns.

Note — Corresponding to the Ab clade in Ebihara et al. (submitted).

Representative species:

New combinations:

Abrodictyum asae-grayi (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes asae-grayi* Bosch (1861b) 180]; *A. brassii* (Croxall) Ebihara & K. Iwats., *comb. nov.* [based on *Macroglena brassii* Croxall (1975) 543]; *A. caudatum* (Brack.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes caudatum* Brack. (1854) 256, pl. 36, f. 5]; *A. clathratum* (Tagawa) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes clathratum* Tagawa (1939) 164]; *A. flavofuscum* (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes flavofuscum* Bosch (1861c) 88]; *A. idoneum* (C.V. Morton) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes idoneum* C.V. Morton (1973) 272] (Old World plants formerly called '*T. gemmatum*' are this species, because *T. gemmatum* J. Sm. ex Baker was originally applied to a Neotropical plant (see Morton, 1973)); *A. pluma* (Hook.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes pluma* Hook. (1854) t. 997] (Asian plants formerly identified as '*T. meifoli*um' are this species); *A. schlechteri* (Brause) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes schlechteri* Brause (1912) 10]; *A. strictum* (Menzies ex Hook. & Grev.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes strictum* Menzies ex Hook. & Grev. (1831) t. 122].

Other species:

Abrodictyum boninense Tagawa & K. Iwats.; *A. cumingii* C. Presl.

2. Subgenus **Pachychaetum** (C. Presl) Ebihara & K. Iwats., *comb. nov.*

Based on *Trichomanes* L. subg. *Pachychaetum* C. Presl (1843) 16. — *Cephalomanes* C. Presl subg. *Pachychaetum* (C. Presl) K. Iwats. (1984) 177. — Lectotype: *Trichomanes rigidum* Sw. (= *Abrodictyum rigidum* (Sw.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes rigidum* Sw. (1788) 137]) (selected by Christensen (1906) XV).

Trichomanes L. subg. *Macroglena* C. Presl (1848) 333. — *Macroglena* (C. Presl) Copel. (1938a) 49. — *Cephalomanes* C. Presl subg. *Macroglena* (C. Presl) K. Iwats. (1984) 176. — Lectotype: *Trichomanes meifolium* Bory ex Willd. (1810) 509 (= *Abrodictyum meifolium* (Bory ex Willd.) Ebihara & K. Iwats., *comb. nov.*) (selected by Christensen (1906) XV).

Trichomanes L. sect. *Selenodesmium* Prantl (1875) 53. — *Selenodesmium* (Prantl) Copel. (1938b) 80. — Lectotype: *Trichomanes rigidum* Sw. (= *Abrodictyum rigidum* (Sw.) Ebihara & Dubuisson) (selected by Christensen (1906) XV).

Rhizomes erect or short-creeping, quite thick, about 2 mm diam., covered with brown to blackish hairs, protostele massive, cortex homogeneous, roots numerous and robust. *Stipes* 7–15 cm long, clustered or more or less distanced. *Blades* bipinnate to quadripinnatifid, linear-ovate to subdeltate, 30 by 18 cm, venation anadromous, false veinlets absent, laminae reduced in some species, internal cell walls thick and coarsely pitted. *Sori* paratactic, tubular, lips truncate, receptacles long-exserted.

Distribution — Throughout the tropics; more than 10 species.

Habitat — Usually terrestrial in humid places, occasionally low-epiphytic.

Note — Corresponding to the Pa subclade in Ebihara et al. (submitted).

REPRESENTATIVE SPECIES:

New combinations:

Abrodictyum cellulosum (Klotzsch) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes cellulosum* Klotzsch (1844) 531]; *A. cupressoides* (Desv.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes cupressoides* Desv. (1827) 330]; *A. dentatum* (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes dentatum* Bosch (1861b) 182]; *A. elongatum* (A. Cunn.) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes elongatum* A. Cunn. (1836) 368]; *A. kalimantanense* (K. Iwats. & M. Kato) Ebihara & K. Iwats., *comb. nov.* [based on *Macroglena kalimantanensis* K. Iwats. & M. Kato (1980) 31, f. 1]; *A. laetum* (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes laetum* Bosch (1861c) 90]; *A. obscurum* (Blume) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes obscurum* Blume (1828) 227] (there are two varieties under this species: var. *obscurum* and var. *siamense* (H. Christ) K. Iwats., *comb. nov.* [based on *Trichomanes siamense* H. Christ (1901) 103]); *A. setaceum* (Bosch) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes setaceum* Bosch (1861b) 176]; *A. sprucei* (Baker) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes sprucei* Baker in Hook. & Baker (1867) 87]; *A. tamarisciforme* (Jacq.) Ebihara & Dubuisson, *comb. nov.* [based on *Trichomanes tamarisciforme* Jacq. (1789) 285, t. 21, f. 2].

Other species:

Abrodictyum meifolium (Bory ex Willd.) Ebihara & K. Iwats.; *A. rigidum* (Sw.) Ebihara & Dubuisson.

7. TRICHOMANES

Trichomanes L. (1753) 1097. — Type: *Trichomanes crispum* L., type. cons., ICBN 2000 (vs *Trichomanes scandens* L.).

Distribution — The Neotropics, and at least one species in continental Africa; more than 60 species. Unpublished molecular data suggest inclusion of a few other Paleotropical taxa (from Madagascar and the Indian Ocean), but further phylogenetic investigations are needed.

Chromosome base number — x = 32 (a few doubtful records x = 36).

Note — Corresponding to the NT clade in Ebihara et al. (submitted). Constituents of this genus include Morton's subgenus *Achomanes* and sect. *Davalliopsis* (placed under subg. *Pachychaetum*) along with *T. scandens* (placed under subg. *Trichomanes*). In

contrast to its long-term acceptance in New World floras, Morton's subgenus *Achomanes* shared few morphological characters other than geographical distribution and chromosome base number. Recent inclusion of *Davalliopsis* in this group (Dubuisson et al., 2003a; Ebihara et al, submitted) made it even more difficult to define morphologically. We therefore recognize four subgenera under this genus, which are easily definable. Monophyly of subgenus *Davalliopsis* and subg. *Lacostea* is clearly shown by our molecular analysis (as the Da subclade), but they are very different in most morphological features.

KEY TO THE SUBGENERA

1a. Lamina texture membranous, one cell thick 2
b. Lamina texture tough, more than one cell thick 5
2a. Rhizomes short-creeping or erect . . . . . **1.** Subg. **Trichomanes**
b. Rhizomes long-creeping 3
3a. Blades tripinnate or more finely divided . . . . . **1.** Subg. **Trichomanes**
b. Blades once-pinnate. 4
4a. Margins of blades hairy . . . . . **1.** Subg. **Trichomanes**
b. Margins of blades glabrous . . . . . **4.** Subg. **Lacostea**
5a. Venation catadromous in sterile blades . . . . . **2.** Subg. **Feea**
b. Venation anadromous in sterile blades . . . . . **3.** Subg. **Davalliopsis**

1. Subgenus **Trichomanes**

Trichomanes L. subg. *Eutrichomanes* C. Presl (1843) 16. — *Trichomanes* L. sect. *Eutrichomanes* (C. Presl) T. Moore (1857) cx. — Lectotype: *Trichomanes scandens* L. (selected by Morton (1968) 180; his idea that this and several subsequent synonyms include the type species of *Trichomanes* led him to designate *T. scandens* as lectotypes for these taxa. Although *T. crispum* has recently been fixed to the type of the genus as noted above, Morton's lectotypifications do not need to be changed since they were validly published).

Trichomanes L. sect. *Pinnata* C. Presl (1843) 16. — Lectotype: *Trichomanes scandens* L. (selected by Morton (1968) 180).

Ragatelus C. Presl (1843) 16. — *Trichomanes* L. sect. *Ragatelus* (C. Presl) C. Chr. (1906) XIV. — Type: *Ragatelus crinitus* (Sw.) C. Presl (= *Trichomanes crinitum* Sw.).

Homoeotes C. Presl (1848) 331. — *Ptilophyllum* Bosch sect. *Homoeotes* (C. Presl) Prantl (1875) 48. — *Trichomanes* L. sect. *Homoeotes* (C. Presl) C. Chr. (1906) XIV. — Type: *Homoeotes heterophylla* (Willd.) C. Presl (= *Trichomanes humboldtii* (Bosch) Lellinger).

Trichomanes L. subg. *Pseudoachomanes* C. Presl (1849) 16. — *Trichomanes* L. sect. *Pseudoachomanes* (C. Presl) C. Chr. (1906) XIV. — Lectotype: *Trichomanes sinuosum* Rich. ex Willd. (= *Trichomanes polypodioides* L.) (selected by Christensen (1906) XIV, as *T. polypodioides* L.).

Odontomanes C. Presl (1849) 20. — *Trichomanes* L. sect. *Odontomanes* (C. Presl) C. Chr. (1906) XIV. — Type: *Odontomanes hostmannianum* (Klotzsch) C. Presl (= *Trichomanes hostmannianum* (Klotzsch) Kunze).

Trichomanes L. sect. *Neurophyllum* T. Moore (1857) cx, based on *Neurophyllum* C. Presl (1843) 18, t. IV, f. C, nom. illeg., non Torr. & A. Gray. (1840) 612. — *Neuromanes* Trevis. ex Bosch (1859) 347. — Type: *Neurophyllum pinnatum* (Hedw.) C. Presl (= *Trichomanes pinnatum* Hedw.) (selected by Christensen (1906) XIV).

Ptilophyllum Bosch subsect. *Sinuosa* Prantl (1875) 47. — Lectotype: *Ptilophyllum sinuosum* (Rich. ex Willd.) Prantl (= *Trichomanes polypodioides* L.) (selected by Morton (1968) 198).

Ptilophyllum Bosch sect. *Acarpacrium* Prantl (1875) 48. — *Trichomanes* L. sect. *Acarpacrium* (Prantl) C. Chr. (1906) XIV. — Lectotype: *Ptilophyllum ptilodes* (Bosch) Prantl (= *Trichomanes alatum* Sw.) (selected by Christensen (1906) XIV, as *T. alatum* Sw.).

Ptilophyllum Bosch sect. *Trigonophyllum* Prantl (1875) 48. — *Trichomanes* L. sect. *Trigonophyllum* (Prantl) C. Chr. (1906) XIV. — Lectotype: *Ptilophyllum bancroftii* (Hook. & Grev.) Prantl (= *Trichomanes arbuscula* Desv.) (selected by Christensen (1906) XIV, as *T. arbuscula* Desv.).

Ptilophyllum Bosch subsect. *Lamellata* Prantl (1875) 48. — *Trichomanes* L. subsect. *Lamellata* (Prantl) C.V. Morton (1968) 194. — Type: *Ptilophyllum martiusii* (C. Presl) Prantl (= *Trichomanes martiusii* C. Presl).

Trichomanes L. sect. *Maiora* Prantl (1875) 52. – *Crepidomanes* (C. Presl) C. Presl subg. *Maiora* K. Iwats. (1984) 174. — Lectotype: *Trichomanes scandens* L. (selected by Morton (1968) 181).

Trichomanes L. subg. *Holophlebium* H. Christ (1897) 27. — Lectotype: *Trichomanes scandens* L. (selected by Morton (1968) 181).

Mortoniopteris Pic.Serm. (1977a) 243. — *Trichomanes* L. sect. *Mortoniopteris* (Pic.Serm.) C. Sánchez (2000) 39. — Type: *Mortoniopteris scandens* (L.) Pic.Serm. (= *Trichomanes scandens* L.).

Pteromanes Pic.Serm. (1977a) 244. — Type: *Pteromanes martiusii* (C. Presl) Pic.Serm. (= *Trichomanes martiusii* C. Presl).

Trichomanes L. subg. *Achomanes* C. Presl (1843) 15, nom. illeg.; originally including *Trichomanes crispum* L., the type of the genus.

Ptilophyllum Bosch (1861a) 321, nom. illeg., non Morris in C.W. Grant (1840) 327, nec (Nutt.) Rchb. (1841) 169; originally including *Trichomanes crinitum* Sw., the type of *Ragatelus* C. Presl (1843).

Ptilophyllum Bosch subsect. *Crispa* Prantl (1875) 47, nom. illeg.; originally including *Trichomanes crispum* L., type of the genus.

Rhizomes erect, short- or long-creeping, usually fine to quite thick, 1–5 mm diam., occasionally filiform, sparsely or sometimes densely covered with brown to blackish hairs, protostele massive, cortex homogeneous, or occasionally heterogeneous (in *T. scandens*), roots numerous and robust. *Stipes* to 30 cm long, usually close to each other, sometimes more or less distant. *Blades* usually pinnate with symmetric pinnae, occasionally simple or more finely pinnate, ovate to linear-ovate, 70 by 25 cm, venation usually catadromous, or anadromous (in *T. scandens* and *T. anadromum*), sometimes pubescent with unicellular or multicellular hairs, false veinlets present in some species (perpendicular to true veins), internal cell walls slightly thick and wavy, margins sometimes hairy with simple or stellate hairs. *Sori* paratactic, or epitactic (in *T. scandens*), often immersed in the laminae, rarely pedicellate (in *T. pinnatum*), tubular, lips sometimes dilate, receptacles usually long-exserted.

Distribution — Same as that of the genus; more than 30 species.

Habitat — Usually terrestrial in humid places, sometimes epiphytic on tree trunks, exceptionally as canopy epiphytes (*T. pilosum*). Some taxa such as *T. crispum* appear ecologically opportunistic.

Note — Corresponding to the Ac subclade in Ebihara et al. (submitted).

REPRESENTATIVE SPECIES:

Trichomanes accedens C. Presl; *T. alatum* Sw.; *T. anadromum* Rosenst.; *T. anomalum* Maxon & C.V. Morton; *T. arbuscula* Desv.; *T. bicorne* Hook.; *T. crenatum* Bosch; *T. crinitum* Sw.; *T. crispum* L.; *T. cristatum* Kaulf.; *T. dactylites* Sodiro; *T. delicatum* Bosch; *T. egleri* P.G. Windisch; *T. fimbriatum* Backh. ex T. Moore; *T. galeottii* E. Fourn.; *T. guidoi* P.G. Windisch; *T. holopterum* Kunze; *T. hostmannianum* (Klotzsch) Kunze; *T. humboldtii* (Bosch) Lellinger; *T. kalbreyeri* Baker; *T. lucens* Sw.; *T. ludovicinum* Rosenst.; *T. macilentum* Bosch; *T. martiusii* C. Presl; *T. micayense* Hieron.; *T. pellucens* Kunze; *T. pilosum* Raddi; *T. pinnatum* Hedw.; *T. plumosum* Kunze; *T. polypodioides* L.;

T. robustum E. Fourn.; *T. roraimense* Jenman; *T. scandens* L.; *T. spruceanum* Hook.; *T. steyermarkii* P.G. Windisch & A.R. Sm.; *T. trigonum* Desv.; *T. vandenboschii* P.G. Windisch; *T. vaupesense* Lellinger; *T. vittaria* DC. ex Poir.

2. Subgenus **Feea** (Bory) Hook.

Trichomanes L. subg. *Feea* (Bory) Hook. (1844) 114. — *Feea* Bory (1824) 446. — *Ptilophyllum* Bosch sect. *Feea* (Bory) Prantl (1875) 48. — *Trichomanes* L. sect. *Feea* (Bory) H. Christ (1897) 29. — Lectotype: *Feea polypodina* Bory (= *Trichomanes osmundoides* Poir.) (selected by Smith (1875) 349, as *Trichomanes spicatum* Hedw. ex Hook.).

Hymenostachis Bory (1824) 588. — *Trichomanes* L. subg. *Hymenostachis* (Bory) Hook. (1844) 114. — *Trichomanes* L. subsect. *Hymenostachis* (Bory) C.V. Morton (1968) 197. — Type: *Trichomanes elegans* Rudge (= *Trichomanes diversifrons* (Bory) Mett.).

Maschalosorus Bosch (1861a) 320. — *Trichomanes* L. sect. *Maschalosorus* (Bosch) C. Chr. (1906) XIV. — Type: *Maschalosorus mougeotii* (Bosch) Bosch (= *Trichomanes mougeotii* Bosch).

Rhizomes suberect or ascending (leading to a dwarf tree-fern habit), quite thick, 1.5–8 mm diam., apex covered with brown to blackish hairs, basal parts covered by roots, protostele massive, cortex homogeneous, root numerous and robust. *Stipes* to 8 cm long, usually close to each other. *Fronds* dimorphic (except in *T. mougeotii*), simple or without lamina in the fertile fronds, once-pinnate in the sterile fronds, 30 by 8 cm, venation catadromous (in sterile frond), false veinlets absent, laminae usually more than one cell thick in fertile fronds, internal cell walls thick and coarsely pitted. *Sori* paratactic or pantotactic, immersed in the lamina, tubular, lips truncate or slightly dilate, receptacles long-exserted.

Distribution — The Neotropics; more than 5 species.

Habitat — Terrestrial or epilithic.

Note — Corresponding to the Fe subclade in Ebihara et al. (submitted), and also to Copeland's (1938b) genus, *Feea*.

Representative species:

Trichomanes botryoides Kaulf.; *T. diversifrons* (Bory) Mett.; *T. mougeotii* Bosch; *T. osmundoides* Poir.; *T. trollii* Bergdolt.

3. Subgenus **Davalliopsis** (Bosch) Ebihara & K. Iwats., *comb. nov.*

Based on *Davalliopsis* Bosch (1861a) 323. — *Trichomanes* L. sect. *Davalliopsis* (Bosch) Prantl (1875) 53. — *Cephalomanes* C. Presl subg. *Davalliopsis* (Bosch) K. Iwats. (1984) 177. — Lectotype: *Trichomanes prieurii* Kunze (= *Trichomanes elegans* Rich.) (selected by Prantl (1875) 53).

Rhizomes erect or ascending, quite thick, 4–15 mm diam., densely covered with dark hairs, protostele massive, cortex homogeneous, roots numerous and robust. *Stipes* to 50 cm long, close to each other. *Blades* tri- to quadripinnatifid, deltate, 60 by 36 cm, venation anadromous, false veinlets absent, laminae usually more than one cell thick, internal cell walls thick and coarsely pitted. *Sori* paratactic, tubular, lips truncate or slightly dilate, receptacles long-exserted.

Distribution — The Neotropics; at least 1 species.

Habitat — Terrestrial.

Note — Corresponding to a part of the Da subclade in Ebihara et al. (submitted).

Representative species:

Trichomanes elegans Rich.

4. Subgenus **Lacostea** (Bosch) C. Chr.

Trichomanes L. subg. *Lacostea* (Bosch) C. Chr. (1906) 634. — *Lacostea* Bosch (1861a) 320. — *Trichomanes* L. sect. *Lacostea* (Bosch) H. Christ (1897) 29. — Lectotype: *Lacostea brachypus* (Kunze) Prantl (= *Trichomanes pedicellatum* Desv.) (selected by Christensen (1906) XIV, as *'T. pedicellatum* Desv.').

Rhizomes long-creeping, frequently branching, rather thick, 0.5–1.2 mm diam., sparsely to densely covered with brown hairs, protostele massive, cortex heterogeneous, roots numerous and robust terrestrially, rootless at the climbing part. *Stipes* very short and unclear, subdistant to remote. *Blades* once-pinnate with symmetric pinnae, occasionally finer (up to tripinnatifid), elliptic, 30 by 9 cm, venation anadromous, false veinlets absent, internal cell walls slightly thick and wavy. *Sori* paratactic, tubular, lips truncate or sometimes dilate, receptacles long-exserted.

Distribution — The Neotropics; more than 4 species.

Habitat — Lianas on tree trunks.

Note — Corresponding to a part of the Da subclade in Ebihara et al. (submitted).

REPRESENTATIVE SPECIES:

Trichomanes ankersii C. Parker ex Hook. & Grev.; *T. pedicellatum* Desv.; *T. tanaicum* Hook.; *T. tuerckheimii* H. Christ.

8. CEPHALOMANES

Cephalomanes C. Presl (1843) 17, t. V. — *Lacostea* Bosch sect. *Cephalomanes* (C. Presl) Prantl (1875) 50. — *Trichomanes* L. subg. *Cephalomanes* (C. Presl) C. Chr. (1906) XIV. — *Trichomanes* L. sect. *Cephalomanes* (C. Presl) C.V. Morton (1968) 189. — Type: *Cephalomanes atrovirens* C. Presl.

Rhizomes erect to short-creeping, thick, usually densely covered with old stipes, protostele massive, cortex homogeneous, roots numerous and robust. *Stipes* 2–15 cm long, close to each other. *Blades* once-pinnate with asymmetric pinnae, narrowly elliptic, 10–20 by 3–4(–5) cm, venation anadromous, false veinlets absent, internal cell walls thick and coarsely pitted. *Sori* paratactic, campanulate, lips sometimes dilate, receptacles long-exserted.

Distribution — The Paleotropics (Asia to the Pacific); c. 4 species.

Habitat — Terrestrial or epilithic along streams.

Chromosome base number — x = 32.

Note — Corresponding to the Ce clade in Ebihara et al. (submitted).

REPRESENTATIVE SPECIES:

Cephalomanes atrovirens C. Presl; *C. crassum* (Copel.) M.G. Price; *C. javanicum* (Blume) C. Presl. The Malagasian *Trichomanes madagascariense* (Bosch) Moore has traditionally been placed in this group, but unpublished molecular data suggest its exclusion. Further investigations are needed.

9. CALLISTOPTERIS

Callistopteris Copel. (1938b) 64. — *Trichomanes* L. sect. *Callistopteris* (Copel.) C.V. Morton (1968) 190. — *Cephalomanes* C. Presl subg. *Callistopteris* (Copel.) K. Iwats. (1984) 176. — Type: *Callistopteris apiifolia* (C. Presl) Copel.

Rhizomes erect to short-creeping, quite thick, hairy at apices, protostele massive, cortex homogeneous, roots numerous and robust. *Stipes* 5–25 cm long, close to each other,

densely hairy with long bristle-like light reddish hairs. *Blades* tripinnate to quadripinnate, elliptic to narrowly ovate, 40 by 16 cm, venation anadromous, false veinlets absent, internal cell walls thin and straight. *Sori* paratactic, campanulate, lips truncate, or sometimes bilabiate, receptacles long-exserted.

Distribution — The Paleotropics (Asia to the Pacific); c. 5 species.

Habitat — Usually epilithic on moist rocks, occasionally epiphytic on tree trunks.

Chromosome base number — x = 36.

Note — Corresponding to the Ca clade in Ebihara et al. (submitted).

REPRESENTATIVE SPECIES:

New combination:

Callistopteris superba (Backh. ex T. Moore) Ebihara & K. Iwats., *comb. nov.* [based on *Trichomanes superbum* Backh. ex T. Moore (1862) 44].

Other species:

Callistopteris apiifolia (C. Presl) Copel.; *C. baldwinii* (D.C. Eaton) Copel.; *C. baueriana* (Endl.) Copel.; *C. polyantha* (Hook.) Copel.

ACKNOWLEDGEMENTS

We are grateful to Ms. E. Wood (Harvard University Herbaria) for checking and correcting the English manuscript; to Dr. P.D. Bostock (Queensland Herbarium) for checking the Latin diagnosis; to the directors and curators of herbaria (BM, K, L and P) for supporting our investigation of their specimens; to Dr. N. Murakami and Dr. H. Nishida for providing some literature; to Dr. Leon Perrie (Museum of New Zealand Te Papa Tongarewa) for giving advices about the replacement for *Cardiomanes reniforme* and to the anonymous reviewer for valuable comments on the manuscript. This study was partly supported by the JSPS Grant for Oversea Research No. 12575012 (for K.I.) and by JSPS Fellows (for A.E.).

REFERENCES

Alderw. — See Van Alderwerelt van Rosenburgh, C.R.W.K.

Allan, H.H.B. 1961. Flora of New Zealand, vol. 1. Government Printer, Wellington.

Baker, J.G. 1866. Some new species of Hymenophyllaceae. J. Linn. Soc., Bot. 9: 335–341.

Baksh-Comeau, Y.S. 2000. Checklist of the pteridophytes of Trinidad & Tobago. Fern Gaz. 16: 11–122.

Bentham, G. 1862. Leguminosae. Dalbergiae. In: C.F.P. Martius & A.G. Eichler (eds.), Flora Brasiliensis. Vol. 15, 1: 1–349. Fleischer, Leipzig.

Blume, C.L. 1828. Enumeratio Plantarum Javae. Van Leeuwen, Lugduni Batavorum.

Bonaparte, R. 1920. Les ptéridophytes de Madagascar, première partie. Notes Pteridol. 9: 1–44.

Bory, J.B.G.G.M. 1824. Dictionnaire classique d'histoire naturelle, vol. 6. Publisher unknown, Paris.

Bosch — See Van den Bosch, R.B.

Bostock, P.D. & T.M. Spokes. 1998. Hymenophyllaceae. In: P.M. McCarthy (ed.), Flora of Australia. Vol. 48: 116–148. Australian Biological Resources Study, Canberra.

Brackenridge, W.D. 1854. Botany – Cryptogamia – Filices. U.S. Expl. Exped. 16: 250–268.

Brause, G. 1912. Neue Farne Papuasiens. Bot. Jahrb. Syst. 49: 6–59.

Carmichael, D. 1818. Some account of the island of Tristan da Cunha and of its natural production. Trans. Linn. Soc. London 12: 483–513.

Ching, R.C. 1959. Pteridophyta. Flora Reipublicae Popularis Sinicae. Science Press, Beijing.

Christ, K.H.H. 1897. Farnkräuter der Erde. Fischer, Jena.

Christ, K.H.H. 1901. Pteridophyta. In: J. Schmidt (ed.), Flora of Koh Chang. Bot. Tidsskr. 24: 102–114.

Christ, K.H.H. 1908a. Spicilegium filicum Philippinensium novarum aut imperfecte congnitarum, II. Philipp. J. Sci., Bot. 3: 269–276.
Christ, K.H.H. 1908b. Filices – Novitates florae Africanae. Bull. Soc. Bot. France 55: Mém. 8b, 105–109.
Christ, K.H.H. 1909a. Diagnoses plantarum Africae. Plantes nouvelles de l'Afrique tropicale française décrites d'après les collections de M. Auguste Chevalier, Filices. J. Bot. (Morot) 22: 19–24.
Christ, K.H.H. 1909b. Pteridophyta. In: E. de Wildeman (ed.), Etudes de systématique et de géographie botaniques sur la flore du Bas- et du Moyen-Congo. Ann. Mus. Congo Belge, Bot. 5, 3: 23–41.
Christensen, C. 1905–1906. Index Filicum. Hagerup, Copenhagen.
Christensen, C. 1920. New species of Hymenophyllaceae from Madagascar. Notes Pteridol. 12: 1–20.
Christensen, C. 1934. Index Filicum, Supplementum Tertium pro Annis 1917–1933. Hagerup, Copenhagen.
Christensen, C. & C. Skottsberg. 1920. The pteridophyta of the Juan Fernandez Islands. Nat. Hist. Juan Fernandez (Botany) 2: 1–46.
Copeland, E.B. 1911. Papuan ferns collected by the reverend Copland King. Philipp. J. Sci., Bot. 6: 65–92.
Copeland, E.B. 1933. Trichomanes. Philipp. J. Sci. 51: 119–280.
Copeland, E.B. 1937. Hymenophyllum. Philipp. J. Sci. 64: 1–188.
Copeland, E.B. 1938a. Ferns of southeastern Polynesia. Occas. Pap. Bernice P. Bishop Mus. 14: 45–101.
Copeland, E.B. 1938b. Genera Hymenophyllacearum. Philipp. J. Sci. 67: 1–110.
Copeland, E.B. 1941. Notes on Hymenophyllaceae. Philipp. J. Sci. 73: 457–469.
Copeland, E.B. 1947. Genera Filicum. Waltham, Massachusetts.
Copeland, E.B. 1958. Fern Flora of the Philippines I. Institute of Science and Technology, Manila.
Croxall, J.P. 1975. The Hymenophyllaceae of Queensland. Austral. J. Bot. 23: 509–547.
Cunningham, A. 1836. Florae insularum Novae Zelandiae precursor: or a specimen of the botany of the islands of New Zealand. Companion Bot. Mag. 2: 358–378.
DC. — see De Candolle, A.
De Candolle, A. 1828. Prodromus Systematis Naturalis Regni Vegetabilis. Vol. 3. Sumptibus Sociorum Treuttel & Wurtz, Paris.
De la Sota, E.R. 1977. Flora de la Provincia de Jujuy, Republica Argentina. Instituto Nacional de Tecnologia Agropecuaria (INTA), Buenos Aires.
De Vol, C.E. 1975. Flora of Taiwan, Vol. 1. Epoch Publishing, Taipei.
Desvaux, N.A. 1827. Prodrome. De la famille des fougères. Mém. Soc. Linn. Paris 6: 171–337.
Diem, J. & J.S. de Lichtenstein. 1959. Las Himenofilaceas del area Argentino-Chilena del Sud. Darwiniana 11: 611–760.
Domin, K. 1913. Pteridophyta – Prodromus einer Farnflora Queenslands. Biblioth. Bot. 20, 85: 1–238.
Du Puy, D.J. & A.E. Orchard. 1993. Hymenophyllaceae. In: A.S. George et al. (eds.), Flora of Australia. Vol. 50 – Oceanic Islands 2: 538–540. Australian Biological Resources Study, Canberra.
Dubuisson, J.-Y. 1997. rbcL sequences: A promising tool for the molecular systematics of the fern genus Trichomanes (Hymenophyllaceae). Molec. Phylogenet. Evol. 8: 128–137.
Dubuisson, J.-Y., S. Hennequin, E.J.P. Douzery, R.B. Cranfill, A.R. Smith & K.M. Pryer. 2003a. rbcL phylogeny of the fern genus Trichomanes (Hymenophyllaceae) with special reference to Neotropical taxa. Int. J. Pl. Sci. 164: 753–761.
Dubuisson, J.-Y., S. Hennequin, S. Rakotondrainibe & H. Schneider. 2003b. Ecological diversity and adaptive tendencies in the tropical fern Trichomanes L. (Hymenophyllaceae) with special reference to climbing and epiphytic habits. Bot. J. Linn. Soc. 142: 41–63.
Dumortier, B.C.J. 1835. Recueil d'observations sur les Jungermanniacées. Publisher unknown, Tournay.
Ebihara, A., S. Hennequin, K. Iwatsuki, P.D. Bostock, S. Matsumoto, R. Jaman, J.-Y. Dubuisson & M. Ito. 2004. Polyphyletic origin of Microtrichomanes (Prantl) Copel. (Hymenophyllaceae), with a revision of the species assigned to the genus. Taxon 53: 935–948.

Ebihara, A., K. Iwatsuki, S. Kurita & M. Ito. 2002. Systematic position of Hymenophyllum rolandi-principis Rosenst. or a monotypic genus Rosenstockia Copel. (Hymenophyllaceae) endemic to New Caledonia. Acta Phytotax. Geobot. 53: 35–49.

Forster, J.G.A. 1786. Florulae Insularum Australium Prodromus. Dieterich, Göttingen.

Grant, C.W. 1840. Memoir to illustrate a geological map of Cutsch. Trans. Geol. Soc. (London), II, 2, 5: 289–330.

Green, P.S. 1994. Hymenophyllaceae. In: A.J.G. Willson (ed.), Flora of Australia. Vol. 49 – Oceanic Islands 1: 557–561. Australian Biological Resources Study, Canberra.

Greuter, W., J. McNeill, F.R. Barrie, H.M. Burdet, V. Demoulin, T.S. Filgueiras, D.H. Nicolson, P.C. Silva, J.E. Skog, P. Trehane, N.J. Turland & D.L. Hawksworth. 2000. International Code of Botanical Nomenclature (St Louis Code) adopted by the Sixteenth International Botanical Congress, St Louis, Missouri, July–August 1999. Koeltz Scientific, Königstein.

Hennequin, S., A. Ebihara, M. Ito, K. Iwatsuki & J.-Y. Dubuisson. 2003. Molecular systematics of the fern genus Hymenophyllum s.l. (Hymenophyllaceae) based on chloroplastic coding and non-coding regions. Molec. Phylogenet. Evol. 27: 283–301.

Hennequin, S., A. Ebihara, M. Ito, K. Iwatsuki & J.-Y. Dubuisson. In press. New insights into the phylogeny of the genus Hymenophyllum s.l. (Hymenophyllaceae): revealing the polyphyly of Mecodium. Syst. Bot.

Herzog, T.C.J. 1926. Bryophyten der weiteren Indomalaya. Hedwigia 66: 337–358.

Holttum, R.E. 1976. Proposal for the conservation of the generic name Trichomanes Linn. against Vandenboschia Copel. Taxon 25: 203–204.

Hooker, W.J. 1844–1846. Species Filicum, vol. 1. Pamplin, London.

Hooker, W.J. 1854. Icones Plantarum; or Figures, with brief descriptive characters and remarks of new or rare plants, vol. X. Longman, London.

Hooker, W.J. & J.G. Baker. 1867. Synopsis Filicum; or A synopsis of all known ferns. Hardwicke, London.

Hooker, W.J. & R.K. Greville. 1831. Icones Filicum, vol. 2. Treuttel, London.

Iwatsuki, K. 1975. Studies in the systematics of filmy ferns I. A note on the identity of Microtrichomanes. Fern Gaz. 11: 115–124.

Iwatsuki, K. 1977a. Studies in the systematics of filmy ferns II. A note on Meringium and the taxa allied this. Gard. Bull. Singapore 30: 63–74.

Iwatsuki, K. 1977b. Studies in the systematics of filmy ferns III. An observation on the involucres. Bot. Mag. (Tokyo) 90: 259–267.

Iwatsuki, K. 1978. Studies in the systematics of filmy ferns IV. Notes on the species with false veinlets. Mem. Fac. Sci. Kyoto Univ., Ser. Biol. 7: 31–43.

Iwatsuki, K. 1981. Studies in the systematics of filmy ferns V. A note on the identity of Macroglena. Hikobia, Suppl. 1: 59–66.

Iwatsuki, K. 1982. Studies in the systematics of filmy ferns VI. The genus Sphaerocionium in Asia and Oceania. J. Fac. Sci. Univ. Tokyo, Sect. 3, Bot. 13: 203–215.

Iwatsuki, K. 1984. Studies in the systematics of filmy ferns VII. A scheme of classification based on the Asiatic species. Acta Phytotax. Geobot. 35: 165–179.

Iwatsuki, K. 1985. The Hymenophyllaceae of Asia, excluding Malesia. J. Fac. Sci. Univ. Tokyo, Sect. 3, Bot. 13: 501–551.

Iwatsuki, K. 1990. Hymenophyllaceae. In: K. Kubitzki (ed.), The families and genera of vascular plants. Vol. I, Pteridophytes and Gymnosperms: 157–163. Springer Verlag, Berlin.

Iwatsuki, K. 1995. Hymenophyllaceae. In: K. Iwatsuki, T. Yamazaki, D.E. Boufford & H. Ohba (eds.), Flora of Japan. Vol. 1: 41–53. Kodansha, Tokyo.

Iwatsuki, K. & M. Kato. 1980. Enumeration of Kalimantan pteridophytes collected during 1978–1979 (1). Acta Phytotax. Geobot. 31: 24–43.

Jacquin, N. 1789. Collectanea, vol. 3. Publisher unknown, Vienna.

Klotzsch, J.F. 1844. Beiträge zu einer Flora der Aequinoctial-Gegenden der neuen Welt. Linnaea 18: 525–539.

Kramer, K.U. 1978. The pteridophytes of Suriname: An enumeration with keys of the ferns and fern-allies. Natuurwetenschappelijke Studiekring voor Suriname en de Nederlandse Antillen, Utrecht.

Kuhn, F.A.M. 1879. Cryptogame vasculares. In: C.C. von der Decken (ed.), Reisen in Ost-Afrika, Bd. 3, Abth. 3: 7–71. Winter, Leipzig.
Kunth, K.S. 1815. Nova Genera et Species Plantarum. Publisher unknown, Paris.
Kunze, G. 1837. Analecta Pteridographica. Publisher unknown, Leipzig.
Lellinger, D.B. 1989. The ferns and fern-allies of Costa Rica, Panama, and the Chocó (Part 1: Psilotaceae through Dicksoniaceae). Pteridologia 2A: 1–364.
Linnaeus, C. 1753. Species Plantarum, vol. 2. Impensis Laurentii Salvii, Stockholm.
Makino, T. 1899. Plantae Japonenses novae vel minus cognitae. Bot. Mag. (Tokyo) 13: 44–48.
Marticorena, C. & R. Rodriguez. 1995. Flora de Chile, Vol. I. Pteridophyta – Gymnospermae. Universidad de Concepción, Concepción.
Martius, C.F.P. 1859. Flora Brasiliensis, vol. 12. Fleischer, Leipzig.
Mettenius, G.H. 1864. Ueber die Hymenophyllaceae. Publisher unknown, Leipzig.
Mickel, J.T. & J.B. Beitel. 1988. Pteridophyte flora of Oaxaca, Mexico. Mem. New York Bot. Gard. 46: 1–568.
Moore, T. 1857. Index Filicum. Pamplin, London.
Moore, T. 1862. Diagnoses speciarum novarum in hortis cultivarum interdum sub titulo: new garden ferns. Gard. Chron. ser. 2: 44–45.
Morton, C.V. 1932. Buesia, a new subgenus of Hymenophyllum from Peru. Bot. Gaz. 93: 336–339.
Morton, C.V. 1947. The American species of Hymenophyllum section Sphaerocionium. Contr. U.S. Natl. Herb. 29: 139–202.
Morton, C.V. 1968. The genera, subgenera, and sections of the Hymenophyllaceae. Contr. U.S. Natl. Herb. 38: 153–214.
Morton, C.V. 1973. Studies of fern types, II. Contr. U.S. Natl. Herb. 38: 215–281.
Müller, K. 1854. Ueber einige bisher verwechselte Arten der Farrngruppe der Hymenophyllaceae IV–VI. Bot. Zeitung (Berlin) 12: 729–738.
Nadeaud, J. 1873. Énumération des plantes indigènes de l'Ile de Tahiti. Librairie de la Société Botanique de France, Paris.
Nakai, T. 1926. Tentamen systematis Hymenophyllacearum Japonicarum. Bot. Mag. (Tokyo) 40: 239–275.
Nakaike, T. 1975. Enumeratio Pteridophytarum Japonicarum – Filicales. University of Tokyo Press, Tokyo.
Pacheco, L. 1995. Hymenophyllaceae. In: G. Davidse, S. Sousa, C. Mario & S. Knapp (eds.), Flora Mesoamericana Vol. 1: Psilotaceae a Salviniaceae: 62–83. Universidad Nacional Autónoma de México, Instituto de Biologia, México, D.F.
Parris, B.S. 1992. The plants of Mount Kinabalu 1: Ferns and fern allies. Royal Botanic Gardens Kew, London.
Philippi, R.A. 1860. Plantarum novarum Chilensium. Centuriae sextae continuatio. Linnaea 30: 185–212.
Pichi Sermolli, E.G. 1970. Fragmenta pteridologiae II. Webbia 24: 699–722.
Pichi Sermolli, E.G. 1973. Fragmenta pteridologiae IV. Webbia 28: 445–477.
Pichi Sermolli, E.G. 1977a. Fragmenta pteridologiae VI. Webbia 31: 237–259.
Pichi Sermolli, E.G. 1977b. Tentamen pteridophytorum genera in taxonomicum ordinem redigendi. Webbia 31: 315–512.
Pichi Sermolli, E.G. 1981. The controversial typification of the Linnaean genus Trichomanes (Hymenophyllaceae). Taxon 30: 809–815.
Pichi Sermolli, E.G. 1983. A contribution to the knowledge of the Pteridophyta of Rwanda, Burundi, and Kivu (Zaire) I. Bull. Jard. Bot. Belg. 53: 177–284.
Prantl, K.A.E. 1875. Die Hymenophyllaceen, die niedrigste Entwicklungsreihe der Farne. Unters. Morph. Gefasskrypt. 1: 1–73, pl. 1–6.
Presl, C.B. 1843. Hymenophyllaceae. Haase, Prague.
Presl, C.B. 1848. Die Gefässbündel im Stipes der Farrn. Abh. Königl. Böhm. Ges. Wiss. 5, 5: 307–356, pl. 1–7.
Presl, C.B. 1849. Epimeliae Botanicae. Haase, Prague.

Proctor, G.R. 1985. Ferns of Jamaica: A guide to the pteridophytes. British Museum (Natural History), London.
Proctor, G.R. 1989. Ferns of Puerto Rico and the Virgin Islands. Mem. New York Bot. Gard. 53: 1–389.
Pryer, K.M., A.R. Smith, J.S. Hunt & J.-Y. Dubuisson. 2001. rbcL data reveal two monophyletic groups of filmy ferns (Filicopsida: Hymenophyllaceae). Amer. J. Bot. 88: 1118–1130.
Raddi, G. 1825. Plantarum Brasiliensium Nova Genera. Pezzati, Firenze.
Reed, C.F. 1948. Two new generic names of ferns. Amer. Fern J. 28: 87–89.
Reichenbach, H.G.L. 1841. Deutsche Botaniker. Erster Band. Das Herbarienbuch. Dresden, Leipzig.
Reinwardt, C.G.C. 1825. Verbesserungen und Druckfehler. Flora 8, 2 Beibl. 3: 47–48.
Rosenstock, E. 1908a. Filices Novo-Guineenses novae. Repert. Spec. Nov. Regni Veg. 5: 33–44.
Rosenstock, E. 1908b. Filices Novo-Guineenses novae. Repert. Spec. Nov. Regni Veg. 5: 370–376.
Sánchez, C. 2000. Flora de la República de Cuba, Serie A. Plantas vasculares, Fasciculo 4, Hymenophyllaceae. Koeltz Scientific, Königstein.
Satou, Z. 1997. Miscellaneous notes on ferns and fern allies (1–4). Hikobia 12: 267–270.
Schneider, H. 2000. Morphology and anatomy of roots in the filmy fern tribe Trichomaneae H. Schneider (Hymenophyllaceae, Filicatae) and the evolution of rootless taxa. Bot. J. Linn. Soc. 132: 29–46.
Schuettpelz, E. & K.M. Pryer. In press. Reconciling extreme branch length differences: decoupling time and rate through the evolutionary history of filmy ferns. Syst. Bot.
Smith, A.R. 1981. Flora of Chiapas Part 2, Pteridophytes. California Academy of Sciences, San Francisco.
Smith, J. 1875. Historia Filicum. Macmillan, London.
Smith, J.E. 1793. Tentamen botanicum de filicum generibus dorsiferarum. Mem. Acad. Sci. Turin 5: 401–422.
Spach, É. 1839. Histoire naturelle des végétaux phanérogames. Vol. 7.
Stolze, R.G. 1976. Ferns and fern allies of Guatemala I, Ophioglossaceae through Cyatheaceae. Fieldiana, Bot. 39: 1–130.
Sturm, J.W. 1858. Enumeratio plantarum vascularium cryptogamicarum Chilensium. Abh. Naturhist. Ges. Nürnberg 1: 151–202.
Swartz, O.P. 1788. Nova Genera & Species Plantarum seu Prodromus Descriptionum Vegetabilium, Maximam Partem Incognitorum quae sub Itinere in Indiam Occidentalem Annis 1783–1787. Bibliopoliis Acad. Swederi, Stockholm.
Tagawa, M. 1939. Specilegium pteridographiae Asiae Orientalis. Acta Phytotax. Geobot. 8: 164–176.
Tagawa, M. & K. Iwatsuki. 1979. Flora of Thailand, Vol. 3, part 1. Forest Herbarium, Royal Forest Department, Bangkok.
Tardieu-Blot, M.L. 1977. Sur quelques Hymenophyllaceae des îles Mascareignes. Adansonia, n.s. 17: 147–150.
Torrey, J. & A. Gray. 1840. A Flora of North America. Vol. 1. Wiley & Putnam, New York.
Tryon, R.M. & R.G. Stolze. 1989. Pteridophyta of Peru, Part I. Fieldiana, Bot., n.s. 20: 1–145.
Tryon, R.M. & A.F. Tryon. 1981. Taxonomic and nomenclatural notes on ferns. Rhodora 83: 133–137.
Tryon, R.M. & A.F. Tryon. 1982. Ferns and allied plants with special reference to Tropical America. Springer Verlag, New York.
Van Alderwerelt van Rosenburgh, C.R.W.K. 1924. Pteridophyta. Nova Guinea 14: 1–68.
Van den Bosch, R.B. 1859. Synopsis Hymenophyllacearum. Ned. Kruidk. Arch. 4: 341–419.
Van den Bosch, R.B. 1861a. Eerste Bijdrage tot de Kennis der Hymenophyllaceae. Verslagen Meded. Afd. Natuurk. Kon. Akad. Wetensch. 11: 300–330.
Van den Bosch, R.B. 1861b. Hymenophyllaceae novas, synopseos supplementum. Ned. Kruidk. Arch. 5, 2: 135–185.

Van den Bosch, R.B. 1861c. Hymenophyllaceae Novae Caledoniae. Ann. Sci. Nat., Bot. sér. 4, 15: 88–91.
Van den Bosch, R.B. 1863. Hymenophyllaceae novas. Ned. Kruidk. Arch. 5, 3: 135–217.
Wallich, N. 1832. Plantae Asiaticae Rariores, vol. 3. Treuttel, Wurtz & Richter, London.
Wessels Boer, J.G. 1962. The New World species of Trichomanes sect. Didymoglossum and Microgonium. Acta Bot. Neerl. 11: 227–330.
Willdenow, C.L. 1810. Species Plantarum. Editio Quarta. Impensis G.C. Nauk, Berlin.
Yoroi, R. & K. Iwatsuki. 1977. An observation on the variation of Trichomanes minutum and allied species. Acta Phytotax. Geobot. 28: 152–159.

Appendix. Taxonomic placement (genus, subgenus and section) of each basionym of Hymenophyllaceae (excl. later homonyms) in the present classification.

Basionym	Genus	Subgenus / Section
Abrodictyum		
boninense Tagawa & K. Iwats.	*Abrodictyum*	*Abrodictyum*
cumingii C. Presl	*Abrodictyum*	*Abrodictyum*
Adiantum		
decurrens Jacq.	*Hymenophyllum*	*Mecodium*
tenellum Jacq.	*Hymenophyllum*	*Hymenophyllum*
trifoliatum L.	*Hymenophyllum*	?
Amphipterum		
humatoides Copel.	*Hymenophyllum*	*Hymenophyllum*
Apteropteris		
applanata A.M. Gray & R.G. Williams	*Hymenophyllum*	*Sphaerocionium*
Buesia		
megistocarpa Copel.	*Hymenophyllum*	*Hymenophyllum*
Callistopteris		
calyculata Copel.	*Callistopteris*	–
mulensis K. Iwats.	*Abrodictyum*	*Abrodictyum*
Cephalomanes		
atrovirens C. Presl	*Cephalomanes*	–
australicum Bosch	*Cephalomanes*	–
curvatum Bosch	*Cephalomanes*	–
madagascariense Bosch	*Trichomanes*	?
oblongifolium C. Presl	*Cephalomanes*	–
rhomboideum Bosch	*Cephalomanes*	–
singaporianum Bosch	*Cephalomanes*	–
wilkesii Bosch	*Cephalomanes*	–
Crepidomanes		
agasthianum Madhus. & C.A. Hameed	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
chuii Ching & P.C. Chiu	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
dilatatum Ching & Chu H. Wang	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
hainanense Ching	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
indicum C.A. Hameed & Madhus.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
liboense P.S. Wang	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
lunulatum Madhus. & C.A. Hameed	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
malabaricum C.A. Hameed & Madhus.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
nanophyllum Tagawa	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
omeiense Ching & P.C. Chiu	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
paucinervium Ching	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
pinnatifidum Ching & P.C. Chiu	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
pseudonymanii Hosok.	*Crepidomanes*	*Crepidomanes*/*Crepidium* ?
sarawakense K. Iwats.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
smithiae Ching	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
tagawanum K. Iwats.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
tiendongense Ching & C.F. Zhang	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
yunnanense Ching & P.C. Chiu	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
zayüense Ching & S.K. Wu	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
Davallia		
tegularis Desv.	*Hymenophyllum*	?
Didymoglossum		
acanthoides Bosch	*Hymenophyllum*	*Hymenophyllum*
aculeatum Bosch	*Hymenophyllum*	*Hymenophyllum*
affine Bosch	*Hymenophyllum*	*Hymenophyllum*
angustifrons Fée	*Didymoglossum*	*Didymoglossum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Didymoglossum (cont.)		
anomalum Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
braunii Bosch	*Hymenophyllum*	*Hymenophyllum*
brevipes C. Presl	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
cordifolium Fée	*Didymoglossum*	*Didymoglossum*
decipiens Desv.	*Polyphlebium*	–
dilatatum Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
euphlebium Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
ferox Hassk.	*Hymenophyllum*	*Hymenophyllum*
fructuosum Fée	*Didymoglossum*	*Didymoglossum*
griffithii Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
hedwigii C. Presl	*Didymoglossum*	*Didymoglossum*
holochilum Bosch	*Hymenophyllum*	*Hymenophyllum*
hookeri C. Presl	*Didymoglossum*	*Didymoglossum*
insigne Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
laceratum Fée	*Didymoglossum*	*Didymoglossum*
latealatum Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
lineolatum Bosch	*Didymoglossum*	*Didymoglossum*
longisetum C. Presl	*Abrodictyum*	*Pachychaetum*
magellanicum Desv.	*Hymenophyllum*	*Myrmecostylum*
nummularium Bosch	*Didymoglossum*	*Didymoglossum*
ovale E. Fourn.	*Didymoglossum*	*Didymoglossum*
palmarum Vareschi	*Didymoglossum*	*Didymoglossum*
plicatum Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
preslii Bosch	*Hymenophyllum*	*Hymenophyllum*
racemulosum Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
serrulatum C. Presl	*Hymenophyllum*	*Hymenophyllum*
sociale Fée	*Didymoglossum*	*Didymoglossum*
undulatum C. Presl	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
wesselsboeri Ebihara & Dubuisson	*Didymoglossum*	*Microgonium*
Feea		
boryi Bosch	*Trichomanes*	*Feea*
humboldti Bosch	*Trichomanes*	*Trichomanes*
nana Bory	*Trichomanes*	*Feea*
polypodina Bory	*Trichomanes*	*Feea*
Gonocormus		
australis Ching	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
samoensis Copel.	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
siamensis Tagawa & K. Iwats.	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
Hymenophyllum		
abietinum Hook. & Grev.	*Hymenophyllum*	*Mecodium*
abruptum Hook.	*Hymenophyllum*	*Mecodium*
acrosorum Bosch	*Hymenophyllum*	*Mecodium*
aculeolatum Bosch	*Hymenophyllum*	*Hymenophyllum* ?
adiantoides Bosch	*Hymenophyllum*	*Sphaerocionium*
aequabile Kunze	*Hymenophyllum*	*Sphaerocionium*
affine Brack.	*Hymenophyllum*	*Hymenophyllum*
alatum Sm.	*Vandenboschia* ?	*Vandenboschia*
alfredii Rosenst.	*Hymenophyllum*	*Mecodium*
alishanense De Vol	*Hymenophyllum*	*Hymenophyllum*
alpinum Colenso	*Hymenophyllum*	*Hymenophyllum*
alternatum Fosberg	*Hymenophyllum*	*Sphaerocionium*
alveolatum C. Chr.	*Hymenophyllum*	*Hymenophyllum* ?

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
amabile C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
amoenum Sturm	*Hymenophyllum*	*Sphaerocionium*
andinum Bosch	*Hymenophyllum*	*Mecodium*
angulosum H. Christ	*Hymenophyllum*	*Globosa*
angustatum Kunze	*Hymenophyllum*	*Sphaerocionium*
angustifrons H. Christ	*Hymenophyllum*	*Sphaerocionium*
angustum Bosch	*Hymenophyllum*	*Sphaerocionium*
anisopterum Peter	*Hymenophyllum*	*Sphaerocionium*
antarcticum C. Presl	*Hymenophyllum*	*Hymenophyllum*
apicale Bosch	*Hymenophyllum*	*Mecodium*
apiculatum Kuhn	*Hymenophyllum*	*Mecodium*
apterum Bosch	*Hymenophyllum*	*Sphaerocionium*
arbuscula Desv.	*Hymenophyllum*	*Sphaerocionium*
asperulum Kunze	*Hymenophyllum*	*Hymenophyllum*
assamense Gand.	*Hymenophyllum*	*Globosa*
asterothrix Kunze	*Hymenophyllum*	*Sphaerocionium*
atrosanguineum Bosch	*Hymenophyllum*	*Mecodium*
atrovirens Colenso	*Hymenophyllum*	*Globosa*
attenuatum Hook.	*Hymenophyllum*	*Myrmecostylum*
aucklandicum Bosch	*Hymenophyllum*	*Globosa*
australe Willd.	*Hymenophyllum*	*Globosa*
austrosinicum Ching	*Hymenophyllum*	*Hymenophyllum*
axillare Sw.	*Hymenophyllum*	*Mecodium*
babindae Watts	*Hymenophyllum*	*Hymenophyllum*
badium Hook. & Grev.	*Hymenophyllum*	*Globosa*
baileyanum Domin	*Hymenophyllum*	*Hymenophyllum*
bakeri Copel.	*Hymenophyllum*	*Hymenophyllum*
balansae E. Fourn.	*Hymenophyllum*	*Globosa*
baldwinii D.C. Eaton	*Callistopteris*	–
balfourii Baker	*Hymenophyllum*	*Mecodium*
bamlerianum Rosenst.	*Hymenophyllum*	*Globosa*
batuense Rosenst.	*Hymenophyllum*	*Hymenophyllum*
berteroi Hook.	*Hymenophyllum*	*Sphaerocionium*
beyrichianum Kunze	*Hymenophyllum*	*Sphaerocionium*
bibraianum Sturm	*Hymenophyllum*	*Myrmecostylum*
bicolanum Copel.	*Hymenophyllum*	*Hymenophyllum*
bismarckianum H. Christ	*Hymenophyllum*	*Globosa*
blandum Racib.	*Hymenophyllum*	*Hymenophyllum*
blepharodes C. Presl	*Hymenophyllum*	*Hymenophyllum*
blumeanum A. Spreng.	*Hymenophyllum*	*Mecodium*
bontocense Copel.	*Hymenophyllum*	*Hymenophyllum*
borneense Hook.	*Hymenophyllum*	*Sphaerocionium*
boryanum Bory ex Willd.	*Hymenophyllum*	*Sphaerocionium*
boschii Rosenst.	*Hymenophyllum*	*Hymenophyllum*
botryoides Bosch	*Hymenophyllum*	*Mecodium*
bougainvillense Jeff W. Grimes	*Hymenophyllum*	*Hymenophyllum*
boutoni Baker	*Hymenophyllum*	*Sphaerocionium*
brachyglossum A. Braun ex Kunze	*Hymenophyllum*	*Hymenophyllum*
brachypus Sodiro	*Hymenophyllum*	*Sphaerocionium* ?
braithwaitei Ebihara & K. Iwats.	*Hymenophyllum*	*Sphaerocionium*
brassii C. Chr.	*Hymenophyllum*	*Hymenophyllum*
breve Rosenst.	*Hymenophyllum*	*Mecodium* ?

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
brevidens Alderw.	*Hymenophyllum*	*Hymenophyllum*
brevifrons Kunze	*Hymenophyllum*	*Mecodium*
brevistipes Liebm.	*Hymenophyllum*	*Mecodium*
bridgesii Hook.	*Hymenophyllum*	*Hymenophyllum*
bryophilum C. Chr.	*Hymenophyllum*	*Hymenophyllum*
buchtienii Rosenst.	*Hymenophyllum*	*Sphaerocionium*
caespitosum Gaudich.	*Hymenophyllum*	*Hymenophyllum*
calodictyon Bosch	*Hymenophyllum*	*Hymenophyllum*
campanulatum H. Christ	*Hymenophyllum*	*Hymenophyllum*
caparaoense Brade	*Hymenophyllum*	*Sphaerocionium*
capense Schrad.	*Hymenophyllum*	*Mecodium*
capillaceum Roxb.	*Hymenophyllum*	*Mecodium* ?
capillare Desv.	*Hymenophyllum*	*Sphaerocionium*
capurroi de la Sota	*Hymenophyllum*	*Sphaerocionium*
cardunculus C. Chr.	*Hymenophyllum*	*Hymenophyllum*
carnosum H. Christ	*Hymenophyllum*	*Mecodium*
catherinae Hook.	*Hymenophyllum*	*Sphaerocionium*
caudatellum H. Christ	*Hymenophyllum*	*Sphaerocionium*
caudatum Bosch	*Hymenophyllum*	*Globosa*
caudiculatum Mart.	*Hymenophyllum*	*Globosa*
caulopteron Fée	*Hymenophyllum*	*Sphaerocionium*
ceratophylloides H. Christ	*Hymenophyllum*	*Sphaerocionium*
cernuum A. Gepp	*Hymenophyllum*	*Hymenophyllum*
cheesemannii Baker	*Hymenophyllum*	*Hymenophyllum*
chiloense Hook.	*Hymenophyllum*	*Hymenophyllum*
chrysothrix Sturm	*Hymenophyllum*	*Sphaerocionium*
cincinnatum A. Gepp	*Hymenophyllum*	*Hymenophyllum*
clemensiae Copel.	*Hymenophyllum*	*Hymenophyllum*
cocosense A. Rojas	*Hymenophyllum*	*Sphaerocionium*
coloratum A. Braun ex Bosch	*Hymenophyllum*	*Mecodium*
compactum Bonap.	*Hymenophyllum*	*Mecodium*
consanguineum C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
constrictum H. Christ	*Hymenophyllum*	*Sphaerocionium*
contextum Rosenst.	*Hymenophyllum*	*Mecodium*
contortum Bosch	*Hymenophyllum*	*Mecodium*
contractile Sodiro	*Hymenophyllum*	*Sphaerocionium*
convolutum Bosch	*Hymenophyllum*	*Mecodium*
copelandianum Alderw.	*Hymenophyllum*	*Globosa*
copelandii C.V. Morton	*Hymenophyllum*	*Mecodium*
coreanum Nakai	*Hymenophyllum*	*Mecodium*
corrugatum H. Christ	*Hymenophyllum*	*Mecodium*
costaricanum Bosch	*Hymenophyllum*	*Mecodium*
crassipetiolatum Stolze	*Hymenophyllum*	*Sphaerocionium*
crispato-alatum Hayata	*Hymenophyllum*	*Globosa*
crispatulum Bosch	*Hymenophyllum*	*Sphaerocionium*
crispatum Wall. ex Hook. & Grev.	*Hymenophyllum*	*Globosa*
crispum Kunth	*Hymenophyllum*	*Sphaerocionium*
cristatum Hook. & Grev.	*Hymenophyllum*	*Hymenophyllum*
cristulatum Rosenst.	*Hymenophyllum*	*Myrmecostylum*
cruegeri Müll.Berol.	*Hymenophyllum*	*Sphaerocionium*
cruentum Cav.	*Hymenophyllum*	*Hymenoglossum*
cubense Sturm	*Hymenophyllum*	*Sphaerocionium*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
cumingii C. Presl	*Hymenophyllum*	*Mecodium*
cuneatum Kunze	*Hymenophyllum*	*Mecodium*
cupressiforme Labill.	*Hymenophyllum*	*Hymenophyllum*
daedaleum Blume	*Hymenophyllum*	*Globosa*
darwinii Hook.	*Hymenophyllum*	*Mecodium*
dejectum Baker	*Hymenophyllopsis*	–
delavayi H. Christ	*Hymenophyllum*	*Hymenophyllum*
delicatissimum Fée	*Hymenophyllum*	*Sphaerocionium*
delicatulum Sehnem	*Hymenophyllum*	*Sphaerocionium*
deltoideum C. Chr.	*Hymenophyllum*	*Hymenophyllum*
dendritis Rosenst.	*Hymenophyllum*	*Mecodium*
densifolium Phil.	*Hymenophyllum*	*Hymenophyllum*
dentatum Cav.	*Hymenophyllum*	*Hymenophyllum*
denticulatum Sw.	*Hymenophyllum*	*Hymenophyllum*
dependens C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
deplanchei Mett. ex Kuhn	*Hymenophyllum*	*Hymenophyllum*
dichotomum Cav.	*Hymenophyllum*	*Hymenophyllum*
dimidiatum Mett. ex Kuhn	*Hymenophyllum*	*Hymenophyllum*
dimorphum H. Christ	*Hymenophyllum*	*Sphaerocionium*
dipteroneuron A. Braun ex Kunze	*Hymenophyllum*	*Hymenophyllum*
discosum H. Christ	*Hymenophyllum*	*Mecodium*
divaricatum Bosch	*Hymenophyllum*	*Sphaerocionium*
dregeanum C. Presl	*Hymenophyllum*	*Hymenophyllum*
durandi H. Christ	*Hymenophyllum*	*Sphaerocionium*
dusenii H. Christ	*Hymenophyllum*	*Hymenophyllum*
eboracense Croxall	*Hymenophyllum*	*Globosa*
ectocarpon Fée	*Hymenophyllum*	*Hymenophyllum*
elasticum Bory ex Willd.	*Hymenophyllum*	*Sphaerocionium*
elatius H. Christ	*Hymenophyllum*	*Sphaerocionium*
elberti Rosenst.	*Hymenophyllum*	*Hymenophyllum*
elegans A. Spreng.	*Hymenophyllum*	*Sphaerocionium*
elegantissimum Fée	*Hymenophyllum*	*Sphaerocionium*
elegantulum Bosch	*Hymenophyllum*	*Sphaerocionium*
ellipticosorum Alderw.	*Hymenophyllum*	*Hymenophyllum*
elongatum Jeff W. Grimes	*Hymenophyllum*	*Hymenophyllum*
emarginatum Sw.	*Hymenophyllum*	*Globosa*
emersum Baker	*Hymenophyllum*	*Hymenophyllum*
endiviaefolium Desv.	*Hymenophyllum*	*Mecodium*
epiphyticum J.W. Moore	*Hymenophyllum*	*Mecodium*
erecto-alatum Colenso	*Hymenophyllum*	*Globosa*
eriophorum Bosch	*Hymenophyllum*	*Sphaerocionium*
erosum Blume	*Hymenophyllum*	*Globosa*
exiguum Bedd.	*Didymoglossum*	*Didymoglossum*
eximium Kunze	*Hymenophyllum*	*Globosa*
exsertum Wall. ex Hook.	*Hymenophyllum*	*Hymenophyllum*
falklandicum Baker	*Hymenophyllum*	*Hymenophyllum*
farallonense Hieron.	*Hymenophyllum*	*Mecodium*
fastigiosum H. Christ	*Hymenophyllum*	*Hymenophyllum*
fecundum Bosch	*Hymenophyllum*	*Mecodium*
feejeense Brack.	*Hymenophyllum*	*Hymenophyllum*
fendlerianum Sturm	*Hymenophyllum*	*Mecodium*
ferax Bosch	*Hymenophyllum*	*Mecodium*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
ferrugineum Colla	*Hymenophyllum*	*Sphaerocionium*
filicula Bory ex Willd.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
fimbriatum J. Sm. ex Hook.	*Hymenophyllum*	*Globosa*
firmum Alderw.	*Hymenophyllum*	*Hymenophyllum*
flabellatum Labill.	*Hymenophyllum*	*Pleuromanes*
flaccidum Bosch	*Hymenophyllum*	*Mecodium*
flavo-aureum Bory	*Hymenophyllum*	*Sphaerocionium*
flexile Makino	*Hymenophyllum*	*Globosa*
flexuosum A. Cunn.	*Hymenophyllum*	*Globosa*
floribundum Kunth	*Hymenophyllum*	*Mecodium* ?
foersteri Rosenst.	*Hymenophyllum*	*Hymenophyllum*
formosum Brack.	*Hymenophyllum*	*Globosa*
foxworthyi Copel.	*Hymenophyllum*	*Pleuromanes*
francavillei Bosch	*Hymenophyllum*	*Sphaerocionium*
frankliniae Colenso	*Hymenophyllum*	*Sphaerocionium*
franklinianum Colenso	*Hymenophyllum*	*Sphaerocionium*
fraseri Mett.	*Hymenophyllum*	*Sphaerocionium*
fraternum C. Presl	*Hymenophyllum*	*Mecodium*
fuciforme Sw.	*Hymenophyllum*	*Fuciformia*
fucoides Cav.	*Hymenophyllum*	*Fuciformia*
fuertesii Brause	*Hymenophyllum*	*Sphaerocionium*
fujisanense Nakai	*Hymenophyllum*	*Mecodium*
fulvum Bosch	*Hymenophyllum*	*Sphaerocionium*
fumarioides Bory ex Willd.	*Hymenophyllum*	*Mecodium*
funckii Bosch	*Hymenophyllum*	*Mecodium*
fusugasugense H. Karst. ex Sturm	*Hymenophyllum*	*Sphaerocionium*
gardneri Bosch	*Hymenophyllum*	*Hymenophyllum*
gardnerianum Sturm	*Hymenophyllum*	*Sphaerocionium*
geluense Rosenst.	*Hymenophyllum*	*Hymenophyllum*
glaziovii Baker	*Hymenophyllum*	*Sphaerocionium*
glebarium H. Christ	*Hymenophyllum*	*Hymenophyllum*
gollmeri Bosch	*Hymenophyllum*	*Mecodium*
gorgoneum Copel.	*Hymenophyllum*	*Hymenophyllum*
gracile Bory ex Willd.	*Hymenophyllum*	*Mecodium*
gracilescens Domin	*Hymenophyllum*	*Hymenophyllum*
gracilius Copel.	*Hymenophyllum*	*Mecodium*
gratum Fée	*Hymenophyllum*	*Sphaerocionium*
grevilleanum C. Presl	*Hymenophyllum*	*Mecodium*
gunnii Bosch ex Baker	*Hymenophyllum*	*Mecodium*
haematochroum Sodiro	*Hymenophyllum*	*Hymenophyllum*
halconense Copel.	*Hymenophyllum*	*Hymenophyllum*
hallieri Rosenst.	*Hymenophyllum*	*Hymenophyllum*
hamuliferum Alderw.	*Hymenophyllum*	*Hymenophyllum*
hayatai Masam.	*Hymenophyllum*	*Mecodium*
heimii Tardieu	*Hymenophyllum*	*Hymenoglossum*
helicoideum Sodiro	*Hymenophyllum*	*Mecodium*
hemidimorphum R.C. Moran & B. Øllg.	*Hymenophyllum*	*Sphaerocionium*
hemipteron Rosenst.	*Hymenophyllum*	*Sphaerocionium*
henkelii Sim	*Hymenophyllum*	*Mecodium*
henryi Baker	*Hymenophyllum*	*Hymenophyllum*
l'herminieri Mett. ex Kuhn	*Hymenophyllum*	*Mecodium* ?
herterianum Brause	*Hymenophyllum*	*Hymenophyllum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
herzogii Rosenst.	*Hymenophyllum*	*Mecodium*
himalaianum Bosch	*Hymenophyllum*	*Mecodium*
hirtellum Sw.	*Hymenophyllum*	*Sphaerocionium*
holotrichum Peter	*Hymenophyllum*	*Sphaerocionium*
hookeri Bory	*Hymenophyllum*	*Pleuromanes*
horizontale C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
hosei Copel.	*Hymenophyllum*	*Hymenophyllum*
houstonii Jenman	*Hymenophyllum*	*Hymenophyllum*
howense Brownlie	*Hymenophyllum*	*Hymenophyllum*
humbertii C. Chr.	*Hymenophyllum*	*Hymenophyllum*
humboldtianum E. Fourn.	*Hymenophyllum*	*Globosa*
humile Nees & Blume	*Hymenophyllum*	*Hymenophyllum*
imbricatum Blume	*Hymenophyllum*	*Globosa*
inclinatum Bosch	*Hymenophyllum*	*Globosa*
infortunatum Bory	*Hymenophyllum*	*Mecodium*
integrivalvatum C. Sánchez	*Hymenophyllum*	*Hymenophyllum*
integrum Bosch	*Hymenophyllum*	*Mecodium*
intercalatum H. Christ	*Hymenophyllum*	*Sphaerocionium*
interruptum Kunze	*Hymenophyllum*	*Sphaerocionium*
intricatum Bosch	*Hymenophyllum*	*Globosa*
involucratum Copel.	*Hymenophyllum*	*Mecodium*
ivohibense Tardieu	*Hymenophyllum*	*Sphaerocionium*
jalapense Schltdl. & Cham.	*Hymenophyllum*	*Mecodium*
jamesoni Hook.	*Hymenophyllum*	*Hymenophyllum*
japonicum Miq.	*Hymenophyllum*	*Hymenophyllum*
javanicum A. Spreng.	*Hymenophyllum*	*Globosa*
johorense Holttum	*Hymenophyllum*	*Hymenophyllum*
junghuhnii Bosch	*Hymenophyllum*	*Globosa*
kaieteurum Jenman	*Hymenophyllum*	*Sphaerocionium*
karstenianum Sturm	*Hymenophyllum*	*Sphaerocionium*
kerianum Watts	*Hymenophyllum*	*Hymenophyllum*
khasianum Baker	*Hymenophyllum*	*Hymenophyllum*
klabatense H. Christ	*Hymenophyllum*	*Hymenophyllum*
kohautianum C. Presl	*Hymenophyllum*	*Mecodium*
krauseanum Phil.	*Hymenophyllum*	*Myrmecostylum*
kuhnii C. Chr.	*Hymenophyllum*	*Mecodium*
kurzii Prantl	*Hymenophyllum*	*Hymenophyllum*
laciniosum H. Christ	*Hymenophyllum*	*Mecodium*
lamellatum Stolze	*Hymenophyllum*	*Hymenophyllum*
laminatum Copel.	*Hymenophyllum*	*Hymenophyllum*
lanatum Fée	*Hymenophyllum*	*Sphaerocionium*
lanceolatum Hook. & Arn.	*Hymenophyllum*	*Sphaerocionium*
latifrons Bosch	*Hymenophyllum*	*Sphaerocionium*
latilobum Bonap.	*Hymenophyllum*	*Globosa*
ledermanni Brause	*Hymenophyllum*	*Hymenophyllum*
lehmannii Hieron.	*Hymenophyllum*	*Mecodium*
leptocarpum Copel.	*Hymenophyllum*	*Hymenophyllum*
leptodictyon Müll.Berol.	*Hymenophyllum*	*Globosa*
leratii Rosenst.	*Hymenophyllum*	*Pleuromanes*
levingei C.B. Clarke	*Hymenophyllum*	*Hymenophyllum*
limminghei Bosch	*Hymenophyllum*	*Mecodium*
lindenii Hook.	*Hymenophyllum*	*Sphaerocionium*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
lindigii Mett.	*Hymenophyllum*	*Sphaerocionium*
lindsaeoides Baker	*Sphenomeris*	–
lingganum Alderw.	*Hymenophyllum*	*Hymenophyllum*
lobatoalatum Klotzsch	*Hymenophyllum*	*Sphaerocionium*
lobatopapillosum Klotzsch ex Sadeb.	*Hymenophyllum*	*Sphaerocionium*
lobbii T. Moore ex Bosch	*Hymenophyllum*	*Hymenophyllum*
longifolium Alderw.	*Hymenophyllum*	*Globosa*
lophocarpum Colenso	*Hymenophyllum*	*Myrmecostylum*
lyallii Hook.f.	*Hymenophyllum*	*Sphaerocionium*
macroglossum Bosch	*Hymenophyllum*	*Hymenophyllum*
macrosorum Alderw.	*Hymenophyllum*	*Hymenophyllum*
macrothecum Fée	*Hymenophyllum*	*Mecodium*
maderense Gibby & Lovis	*Hymenophyllum*	*Hymenophyllum*
malaccense Gand.	*Hymenophyllum*	*Globosa*
mannianum Mett. ex Kuhn	*Hymenophyllum*	*Hymenophyllum*
marginatum Hook. & Grev.	*Hymenophyllum*	*Hymenophyllum*
marlothii Brause	*Hymenophyllum*	*Sphaerocionium*
martii Sturm	*Hymenophyllum*	*Globosa*
martinicense Bosch	*Hymenophyllum*	*Mecodium*
matthewsii Bosch	*Hymenophyllum*	*Mecodium*
maxonii H. Christ ex C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
mazei E. Fourn. ex H. Christ	*Hymenophyllum*	*Mecodium*
megachilum C. Presl	*Hymenophyllum*	*Hymenophyllum*
megalocarpum Colenso	*Hymenophyllum*	*Globosa*
melanocheilos Colenso	*Hymenophyllum*	*Hymenophyllum*
mentitum Gand.	*Hymenophyllum*	*Globosa*
menziesii C. Presl	*Hymenophyllum*	*Hymenophyllum*
merrillii H. Christ	*Hymenophyllum*	*Hymenophyllum*
mettenii Bosch	*Hymenophyllum*	*Hymenophyllum*
meyeri C. Presl	*Hymenophyllum*	*Hymenophyllum*
micans H. Christ	*Hymenophyllum*	*Sphaerocionium*
micranthum Bosch	*Hymenophyllum*	*Globosa*
microcarpon Fée	*Hymenophyllum*	*Sphaerocionium*
microcarpum Desv.	*Hymenophyllum*	*Sphaerocionium*
microphyllum Mett.	*Hymenophyllum*	*Mecodium*
microsorum Bosch	*Hymenophyllum*	*Mecodium*
millefolium Schltdl. & Cham.	*Hymenophyllum*	*Mecodium*
minimum A. Rich.	*Hymenophyllum*	*Hymenophyllum*
minutidenticulatum Ching & P.C. Chiu	*Hymenophyllum*	*Hymenophyllum*
mirificum C.V. Morton	*Hymenophyllum*	*Hymenophyllum*
mnioides Baker	*Hymenophyllum*	*Mecodium*
modestum Bosch	*Hymenophyllum*	*Globosa*
molle C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
montanum Kirk	*Hymenophyllum*	*Globosa*
moorei Baker	*Hymenophyllum*	*Hymenophyllum*
moritziaum Sturm	*Hymenophyllum*	*Sphaerocionium*
mortonianum Lellinger	*Hymenophyllum*	*Sphaerocionium*
multialatum C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
multiflorum Rosenst.	*Hymenophyllum*	*Mecodium*
myriocarpum Hook.	*Hymenophyllum*	*Mecodium*
nahuelhuapiense Diem & J.S. Licht.	*Hymenophyllum*	*Hymenophyllum*
nanostellatum Lellinger	*Hymenophyllum*	*Sphaerocionium*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
nanum Sodiro	*Hymenophyllum*	*Hymenophyllum*
natalense Bosch	*Hymenophyllum*	*Mecodium*
neozelandicum Gand.	*Hymenophyllum*	*Globosa*
nephrophyllum Ebihara & K. Iwats.	*Hymenophyllum*	*Cardiomanes*
nigrescens Liebm.	*Hymenophyllum*	*Mecodium*
nigricans Colla	*Hymenophyllum*	*Myrmecostylum*
nitens R.Br.	*Hymenophyllum*	*Pleuromanes*
nitiduloides Copel.	*Hymenophyllum*	*Mecodium*
notabile Fée	*Hymenophyllum*	*Sphaerocionium*
nutantifolium Alderw.	*Hymenophyllum*	*Hymenophyllum*
obtusum Hook. & Arn.	*Hymenophyllum*	*Sphaerocionium*
odontophyllum Copel.	*Hymenophyllum*	*Hymenophyllum*
okadai Masam.	*Hymenophyllum*	*Hymenophyllum*
oligocarpum Colenso	*Hymenophyllum*	*Hymenophyllum*
oligosorum Makino	*Hymenophyllum*	*Hymenophyllum*
omeiense H. Christ	*Hymenophyllum*	*Hymenophyllum*
ooides F. Muell. & Baker	*Hymenophyllum*	*Mecodium*
opacum Copel.	*Hymenophyllum*	*Globosa*
orbignianum Bosch	*Hymenophyllum*	*Sphaerocionium*
organense Hook.	*Hymenophyllum*	*Sphaerocionium*
osmundoides Bosch	*Hymenophyllum*	*Mecodium*
ovatum Copel.	*Hymenophyllum*	*Hymenophyllum*
oxyodon Baker	*Hymenophyllum*	*Hymenophyllum*
pachydermicum Ces.	*Hymenophyllum*	*Hymenophyllum*
palmatum Bosch	*Hymenophyllum*	*Hymenophyllum*
palmense Rosenst.	*Hymenophyllum*	*Sphaerocionium*
paniculiflorum C. Presl	*Hymenophyllum*	*Mecodium*
paniense Ebihara & K. Iwats.	*Hymenophyllum*	*Myrmecostylum*
pannosum H. Christ	*Hymenophyllum*	*Sphaerocionium*
pantotactum Alderw.	*Hymenophyllum*	*Globosa*
parallelocarpum Hayata	*Hymenophyllum*	*Mecodium*
parvifolium Baker	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
parvulum C. Chr.	*Hymenophyllum*	*Mecodium*
pastoensis Hook.	*Hymenophyllum*	*Sphaerocionium*
patagonicum Gand.	*Hymenophyllum*	*Globosa*
paucicarpum Jenman	*Hymenophyllum*	*Mecodium*
pectinatum Cav.	*Hymenophyllum*	*Hymenophyllum*
pedicellatum Kunze ex Klotzsch	*Hymenophyllum*	*Hymenophyllum*
pedicularifolium Ces.	*Hymenophyllum*	*Hymenophyllum*
penangianum C.G. Matthew & H. Christ	*Hymenophyllum*	*Hymenophyllum*
pendulum Bory	*Hymenophyllum*	*Sphaerocionium*
perfissum Copel.	*Hymenophyllum*	*Hymenophyllum*
perparvulum Alderw.	*Hymenophyllum*	*Hymenophyllum*
perrieri Tardieu	*Hymenophyllum*	*Hymenophyllum*
peruvianum Hook. & Grev.	*Hymenophyllum*	*Hymenophyllum*
physocarpum H. Christ	*Hymenophyllum*	*Globosa*
piliferum C. Chr.	*Hymenophyllum*	*Hymenophyllum*
pilosissimum C. Chr.	*Hymenophyllum*	*Sphaerocionium*
pilosum Alderw.	*Hymenophyllum*	*Hymenophyllum*
platylobum Bosch	*Hymenophyllum*	*Sphaerocionium*
pleiocarpum Alderw.	*Hymenophyllum*	*Globosa*
plicatum Kaulf.	*Hymenophyllum*	*Myrmecostylum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
plumieri Hook. & Grev.	*Hymenophyllum*	*Sphaerocionium*
plumosum Kaulf.	*Hymenophyllum*	*Sphaerocionium*
podocarpon Fée	*Hymenophyllum*	*Hymenophyllum*
poeppigianum C. Presl	*Hymenophyllum*	*Mecodium*
poilanei Tardieu & C. Chr.	*Hymenophyllum*	*Hymenophyllum*
pollenianum Rosenst.	*Hymenophyllum*	*Mecodium*
polyanthum Hook.	*Callistopteris*	–
polycarpum Mett. ex Kuhn	*Hymenophyllum*	*Mecodium*
polychilum Colenso	*Hymenophyllum*	*Globosa*
polyodon Baker	*Hymenophyllum*	*Hymenophyllum*
poolii Baker	*Hymenophyllum*	*Sphaerocionium*
portoricense Kuhn	*Hymenophyllum*	*Sphaerocionium*
praetervisum H. Christ	*Hymenophyllum*	*Hymenophyllum*
prionema Kunze ex Sturm	*Hymenophyllum*	*Sphaerocionium*
procerum Bosch	*Hymenophyllum*	*Sphaerocionium*
proctoris C. Sánchez	*Hymenophyllum*	*Sphaerocionium*
producens Fée	*Hymenophyllum*	*Sphaerocionium*
productoides J.W. Moore	*Hymenophyllum*	*Globosa*
productum Kunze	*Hymenophyllum*	*Globosa*
protrusum Hook.	*Hymenophyllum*	*Mecodium*
pseudotunbridgense Watts	*Hymenophyllum*	*Hymenophyllum*
pteropodum Bosch	*Hymenophyllum*	*Sphaerocionium*
puellum Ces.	*Abrodictyum* ?	*Abrodictyum* ?
pulchellum Schltdl. & Cham.	*Hymenophyllum*	*Sphaerocionium*
pulcherrimum Colenso	*Hymenophyllum*	*Fuciformia*
pulchrum Copel.	*Hymenophyllum*	*Hymenophyllum*
pumilio Rosenst.	*Hymenophyllum*	*Hymenophyllum*
pumilum C. Moore	*Hymenophyllum*	*Hymenophyllum*
punctisorum Rosenst.	*Hymenophyllum*	*Mecodium*
pusillum Schott ex Sturm	*Hymenophyllum*	*Mecodium*
pycnocarpum Bosch	*Hymenophyllum*	*Mecodium*
pygmaeum Colenso	*Hymenophyllum*	*Hymenophyllum*
pyramidatum Desv.	*Hymenophyllum*	*Sphaerocionium*
pyriforme Bosch	*Hymenophyllum*	*Hymenophyllum*
quadrifidum Phil.	*Hymenophyllum*	*Myrmecostylum*
quetrihuense Diem & J.S. Licht.	*Hymenophyllum*	*Hymenophyllum*
raapii Gand.	*Hymenophyllum*	*Globosa*
raddianum Müll.Berol.	*Hymenophyllum*	*Sphaerocionium*
ramosii Copel.	*Hymenophyllum*	*Hymenophyllum*
ramosissimum Ham. ex D. Don	*Sphenomeris*	–
rarum R.Br.	*Hymenophyllum*	*Mecodium*
recurvum Gaudich.	*Hymenophyllum*	*Mecodium*
reductum Copel.	*Hymenophyllum*	*Hymenophyllum*
refrondescens Sodiro	*Hymenophyllum*	*Sphaerocionium*
reinwardtii Bosch	*Hymenophyllum*	*Globosa*
remotipinna Bonap.	*Hymenophyllum*	*Mecodium*
remotum Bosch	*Hymenophyllum*	*Sphaerocionium*
reniforme Hook.	*Hymenophyllum*	*Mecodium*
repens Dulac	*Hymenophyllum*	*Hymenophyllum*
retusilobum Hayata	*Hymenophyllum*	*Globosa*
revolutum Colenso	*Hymenophyllum*	*Hymenophyllum*
ricciaefolium Bory ex Willd.	*Hymenophyllum*	*Hymenophyllum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
rimbachii Sodiro	*Hymenophyllum*	*Mecodium*
ringens H. Christ	*Hymenophyllum*	*Hymenophyllum*
riukiuense H. Christ	*Hymenophyllum*	*Globosa*
rolandi-principis Rosenst.	*Hymenophyllum*	*Hymenophyllum*
roraimense C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
rosenstockii Brause	*Hymenophyllum*	*Hymenophyllum*
rubellum Rosenst.	*Hymenophyllum*	*Hymenophyllum*
rufescens Kirk	*Hymenophyllum*	*Pleuromanes*
rufifolium Alderw.	*Hymenophyllum*	*Hymenophyllum*
rufifrons Alderw.	*Hymenophyllum*	*Hymenophyllum*
rufofibrillosum Ching & Z.Y. Liu	*Hymenophyllum*	*Hymenophyllum*
rufum Fée	*Hymenophyllum*	*Sphaerocionium*
rugosum C. Chr. & Skottsb.	*Hymenophyllum*	*Hymenophyllum*
rupestre Raddi	*Vandenboschia*	*Lacosteopsis*
sabinifolium Baker	*Hymenophyllum*	*Hymenophyllum*
saenzianum L.D. Gómez	*Hymenophyllum*	*Sphaerocionium*
salakense Racib.	*Hymenophyllum*	*Globosa*
samoense Baker	*Hymenophyllum*	*Globosa*
sampaioanum Brade & Rosenst.	*Hymenophyllum*	*Sphaerocionium*
scabrum A. Rich.	*Hymenophyllum*	*Myrmecostylum*
schomburghii C. Presl	*Hymenophyllum*	*Mecodium*
secundum Hook. & Grev.	*Hymenophyllum*	*Hymenophyllum*
semibivalve Hook. & Grev.	*Hymenophyllum*	*Mecodium*
semifissum Copel.	*Hymenophyllum*	*Hymenophyllum*
semiglabrum Rosenst.	*Hymenophyllum*	*Sphaerocionium*
semiteres Colla	*Hymenophyllum*	*Fuciformia*
serra C. Presl	*Hymenophyllum*	*Hymenophyllum*
seselifolium C. Presl	*Hymenophyllum*	*Myrmecostylum*
shirleyanum Domin	*Hymenophyllum*	*Globosa*
siliquosum H. Christ	*Hymenophyllum*	*Mecodium*
silvaticum C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
silveirae H. Christ	*Hymenophyllum*	*Sphaerocionium*
simonsianum Hook.	*Hymenophyllum*	*Hymenophyllum*
simplex C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
skottsbergii C. Chr.	*Hymenophyllum*	*Mecodium*
smithii Hook.	*Hymenophyllum*	*Hymenophyllum*
sodiroi C. Chr.	*Hymenophyllum*	*Hymenophyllum*
spathulatum Colenso	*Hymenophyllum*	*Hymenophyllum*
speciosum Bosch	*Hymenophyllum*	*Sphaerocionium*
spectabile Mett. ex Kuhn	*Hymenophyllum*	*Sphaerocionium*
sphaerocarpum Bosch	*Hymenophyllum*	*Mecodium*
spicatum H. Christ	*Hymenophyllum*	*Hymenophyllum*
spinosum Ching	*Hymenophyllum*	*Hymenophyllum*
spinulosum Kunth	*Hymenophyllum*	*Hymenophyllum*
splendidum Bosch	*Hymenophyllum*	*Sphaerocionium*
sprucei Baker	*Hymenophyllum*	*Sphaerocionium* ?
steerei C. Chr.	*Hymenophyllum*	*Globosa*
streptophyllum E. Fourn.	*Hymenophyllum*	*Globosa*
sturmii Bosch	*Hymenophyllum*	*Mecodium*
subdeltoideum H. Christ	*Hymenophyllum*	*Mecodium*
subdemissum H. Christ	*Hymenophyllum*	*Mecodium*
subdimidiatum Rosenst.	*Hymenophyllum*	*Hymenophyllum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
subfirmum Alderw.	*Hymenophyllum*	*Hymenophyllum*
subflabellatum Ces.	*Hymenophyllum*	*Hymenophyllum*
subobtusum Rosenst.	*Hymenophyllum*	*Sphaerocionium*
subrigidum H. Christ	*Hymenophyllum*	*Sphaerocionium*
subrotundum Alderw.	*Hymenophyllum*	*Hymenophyllum*
subtilissimum Kunze	*Hymenophyllum*	*Sphaerocionium*
superbum C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
suprapaleaceum Ching	*Hymenophyllum*	*Hymenophyllum*
surinamense Bosch	*Hymenophyllum*	*Sphaerocionium*
tablaziense H. Christ	*Hymenophyllum*	*Mecodium*
tabulare Bosch	*Hymenophyllum*	*Mecodium*
taliabense Alderw.	*Hymenophyllum*	*Hymenophyllum*
tarapotense Stolze	*Hymenophyllum*	*Sphaerocionium*
tasmannicum Bosch	*Hymenophyllum*	*Globosa*
tayloriae Farrar & Raine	*Hymenophyllum*	*Sphaerocionium*
tenellum D. Don	*Hymenophyllum*	*Mecodium*
tenerrimum Bosch	*Hymenophyllum*	*Sphaerocionium*
tenerum Bosch	*Hymenophyllum*	*Mecodium*
terminale Bosch	*Hymenophyllum*	*Sphaerocionium*
thomassetii C.H. Wright	*Hymenophyllum*	*Hymenophyllum*
thuidium Harr.	*Hymenophyllum*	*Globosa*
thunbergii Eckl. ex C. Presl	*Hymenophyllum*	*Mecodium*
todjambuense Kjellb.	*Hymenophyllum*	*Globosa*
tomentosum Kunze	*Hymenophyllum*	*Sphaerocionium*
torquescens Bosch	*Hymenophyllum*	*Hymenophyllum*
torricellianum Alderw.	*Hymenophyllum*	*Hymenophyllum*
tortuosum Hook. & Grev.	*Hymenophyllum*	*Myrmecostylum*
trapezoidale Liebm.	*Hymenophyllum*	*Sphaerocionium*
treubii Racib.	*Hymenophyllum*	*Globosa*
trianae Hieron.	*Hymenophyllum*	*Mecodium*
triangulare Baker	*Hymenophyllum*	*Hymenophyllum*
trichocaulon Phil.	*Hymenophyllum*	*Hymenophyllum*
trichomanoides Bosch	*Hymenophyllum*	*Mecodium*
trichophyllum Kunth	*Hymenophyllum*	*Sphaerocionium*
trifidum Hook. & Grev.	*Hymenophyllum*	*Sphaerocionium*
truncatum Colenso	*Hymenophyllum*	*Hymenophyllum*
turquinense C. Sánchez	*Hymenophyllum*	*Sphaerocionium*
ulei H. Christ & Giesenh.	*Hymenophyllum*	*Sphaerocionium*
umbratile Diem & J.S. Licht.	*Hymenophyllum*	*Hymenophyllum*
uncinatum Sim	*Hymenophyllum*	*Hymenophyllum*
unilaterale Bory ex Willd.	*Hymenophyllum*	*Hymenophyllum*
urbanii Brause	*Hymenophyllum*	*Sphaerocionium*
urofrons Ching & C.F. Zhang	*Hymenophyllum*	*Hymenophyllum*
vacillans H. Christ	*Hymenophyllum*	*Hymenophyllum* ?
valvatum Hook. & Grev.	*Hymenophyllum*	*Sphaerocionium*
venustum Desv.	*Hymenophyllum*	*Sphaerocionium*
verecundum C.V. Morton	*Hymenophyllum*	*Sphaerocionium*
veronicoides C. Chr.	*Hymenophyllum*	*Mecodium*
viguieri Tardieu	*Hymenophyllum*	*Sphaerocionium*
villosum Colenso	*Hymenophyllum*	*Myrmecostylum*
vincentinum Baker	*Hymenophyllum*	*Mecodium*
viride Rosenst. ex Copel.	*Hymenophyllum*	*Hymenophyllum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Hymenophyllum (cont.)		
viridissimum Fée	*Hymenophyllum*	*Mecodium*
vittatum Copel.	*Hymenophyllum*	*Hymenophyllum*
walleri Maiden & Betche	*Hymenophyllum*	*Hymenophyllum*
wercklei H. Christ	*Hymenophyllum*	*Sphaerocionium*
whangshanense Ching & P.C. Chiu	*Hymenophyllum*	*Hymenophyllum*
whitei Goy	*Hymenophyllum*	*Mecodium*
wilsonii Hook.	*Hymenophyllum*	*Hymenophyllum*
wrightii Bosch	*Hymenophyllum*	*Mecodium*
zeelandicum Bosch	*Hymenophyllum*	*Hymenophyllum*
zeyheri Bosch	*Hymenophyllum*	*Mecodium*
zollingerianum Kunze	*Hymenophyllum*	*Hymenophyllum*
Hymenostachys		
diversifrons Bory	*Trichomanes*	*Feea*
elegans C. Presl	*Trichomanes*	*Feea*
Leptocionium		
barbatum Bosch	*Hymenophyllum*	*Hymenophyllum*
dicranotrichum C. Presl	*Hymenophyllum*	*Hymenophyllum*
edentulum Bosch	*Hymenophyllum*	*Hymenophyllum*
flaccidum Bosch	*Hymenophyllum*	*Hymenophyllum*
sororium C. Presl	*Hymenophyllum*	*Diploophyllum*
violaceum Meyen ex Bosch	*Hymenophyllum*	*Hymenophyllum*
Macroglena		
brassii Croxall	*Abrodictyum*	*Abrodictyum*
kalimantanensis K. Iwats. & M. Kato	*Abrodictyum*	*Pachychaetum*
obtusa Copel.	*Vandenboschia*	*Vandenboschia*
toppingii O. Deg. & I. Deg.	*Callistopteris*	–
truncata Copel.	*Abrodictyum*	*Abrodictyum*
Mecodium		
acrocarpum H. Christ ex Ching	*Hymenophyllum*	*Mecodium*
archboldii Copel.	*Hymenophyllum*	*Mecodium*
contiguum D.A. Sm.	*Hymenophyllum*	*Mecodium*
diversilabium Copel.	*Hymenophyllum*	*Mecodium*
edanoi Copel.	*Hymenophyllum*	*Globosa*
gongboense Ching	*Hymenophyllum*	*Mecodium* ?
hainanense Ching	*Hymenophyllum*	*Mecodium*
jinfoshanense Ching & Z.Y. Liu	*Hymenophyllum*	*Mecodium*
kansuense Ching & Y.P. Hsu	*Hymenophyllum*	*Mecodium*
likiangense Ching & P.C. Chiu	*Hymenophyllum*	*Mecodium*
lineatum Ching & P.C. Chiu	*Hymenophyllum*	*Globosa*
lofoushanense Ching & P.C. Chiu	*Hymenophyllum*	*Mecodium* ?
longissimum Ching & P.C. Chiu	*Hymenophyllum*	*Mecodium* ?
lushanense Ching & P.C. Chiu	*Hymenophyllum*	*Mecodium*
mexiae Copel.	*Hymenophyllum*	*Mecodium*
mikawanum Seriz.	*Hymenophyllum*	*Mecodium*
ovalifolium Ching & P.C. Chiu	*Hymenophyllum*	*Mecodium*
paramnioides H.G. Zhou & W.M. Chu	*Hymenophyllum*	*Mecodium*
propinquum Ching & P.C. Chiu	*Hymenophyllum*	*Globosa*
stenochladum Ching & P.C. Chiu	*Hymenophyllum*	*Globosa*
szechuanense Ching & P.C. Chiu	*Hymenophyllum*	*Mecodium*
taiwanense Tagawa	*Hymenophyllum*	*Globosa*
tenellum Parris	*Hymenophyllum*	*Mecodium*
tenuifrons Ching	*Hymenophyllum*	*Globosa*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Mecodium (cont.)		
wangii Ching & P.C. Chiu	*Hymenophyllum*	*Mecodium*
wenhsienense Ching & Y.P. Hsu	*Hymenophyllum*	*Mecodium*
Meringium		
archboldii Copel.	*Hymenophyllum*	*Hymenophyllum*
bartlettii Copel.	*Hymenophyllum*	*Hymenophyllum*
blumeanum C. Presl	*Hymenophyllum*	*Mecodium*
latifolium Copel.	*Hymenophyllum*	*Hymenophyllum*
laxum Copel.	*Hymenophyllum*	*Hymenophyllum*
melanosorum Copel.	*Hymenophyllum*	*Hymenophyllum*
meyenianum C. Presl	*Hymenophyllum*	*Hymenophyllum*
Microgonium		
benlii Pic.Serm.	*Didymoglossum*	*Microgonium*
berteroanum C. Presl	*Didymoglossum*	*Microgonium*
bimarginatum Bosch	*Didymoglossum*	*Microgonium*
falsinervulosum M. Nishida	*Didymoglossum*	*Microgonium*
minutifolium Tagawa & K. Iwats.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
omphalodes Vieill. ex E. Fourn.	*Didymoglossum*	*Didymoglossum*
Microtrichomanes		
zamboanganum Copel.	*Hymenophyllum*	*Sphaerocionium*
Neuromanes		
abruptum Bosch	*Trichomanes*	*Trichomanes*
immersum Bosch	*Trichomanes*	*Trichomanes*
kaulfussii Bosch	*Trichomanes*	*Trichomanes*
Neurophyllum		
hedwigianum Fée	*Trichomanes*	*Trichomanes*
hostmannianum Klotzsch	*Trichomanes*	*Trichomanes*
thecaphyllum Fée	*Trichomanes*	*Trichomanes*
Pleuromanes		
retusum Copel.	*Hymenophyllum*	*Pleuromanes*
Ragatelus		
eriophorus C. Presl	*Trichomanes*	*Trichomanes*
Selenodesmium		
recurvum Ching & P.C. Chiu	*Abrodictyum*	*Pachychaetum*
Sphaerocionium		
aureum C. Presl	*Hymenophyllum*	*Sphaerocionium*
breutelli C. Presl	*Hymenophyllum*	*Mecodium*
commutatum C. Presl	*Hymenophyllum*	*Sphaerocionium*
diversilobum C. Presl	*Hymenophyllum*	*Sphaerocionium*
glanduliferum C. Presl	*Hymenophyllum*	*Myrmecostylum*
grevilleanum C. Presl	*Hymenophyllum*	*Sphaerocionium*
macrocarpum C. Presl	*Hymenophyllum*	*Globosa*
nigricans C. Presl	*Hymenophyllum*	*Mecodium*
productum C. Presl	*Hymenophyllum*	*Globosa*
ruizianum Klotzsch	*Hymenophyllum*	*Sphaerocionium*
schiedeanum C. Presl	*Hymenophyllum*	*Sphaerocionium*
sieberi C. Presl	*Hymenophyllum*	*Sphaerocionium*
× *tucuchense* Jermy & T.G. Walker	*Hymenophyllum*	*Sphaerocionium*
vestitum C. Presl	*Hymenophyllum*	*Sphaerocionium*
Trichomanes		
abrotanifolium Bosch	*Vandenboschia* ?	?
abruptum Fée ex H. Christ	*Trichomanes*	*Trichomanes*
accedens C. Presl	*Trichomanes*	*Trichomanes*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
achilleaefolium Bory ex Willd.	*Abrodictyum*	*Pachychaetum*
acranthum H. Itô	*Cephalomanes*	–
acrocarpon Fée	*Didymoglossum*	*Didymoglossum*
acrosorum Copel.	*Cephalomanes*	–
acutilobum Ching	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
acuto-obtusum Hayata	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
acutum C. Presl	*Hymenophyllum*	*Pleuromanes*
adianthinum Bory	*Didymoglossum*	*Microgonium*
adiantoides L.	*Asplenium*	–
adscendens Kunze	*Trichomanes* ?	?
aerugineum Bosch	*Didymoglossum*	*Microgonium*
aeruginosum Poir.	*Hymenophyllum*	*Sphaerocionium*
aethiopicum Burm.f.	*Asplenium*	–
africanum H. Christ	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
alagense H. Christ	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
alatum Sw.	*Trichomanes*	*Trichomanes*
album Blume	*Hymenophyllum*	*Pleuromanes*
alternans Carruth. ex Seem.	*Polyphlebium*	–
amabile Nakai	*Vandenboschia*	*Vandenboschia*
amazonicum H. Christ	*Trichomanes*	*Trichomanes*
ambiguum Mart.	*Polyphlebium*	–
ambongoense Bonap.	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
anadromum Rosenst.	*Trichomanes*	*Trichomanes*
anceps Hook.	*Trichomanes*	*Davalliopsis*
andrewsii Newman	*Vandenboschia*	*Vandenboschia*
angustatum Carmich.	*Polyphlebium*	–
angustilaciniatum Bonap.	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
angustimarginatum Bonap.	*Abrodictyum*	*Pachychaetum*
angustissimum C. Presl	*Polyphlebium*	–
ankersii C. Parker ex Hook. & Grev.	*Trichomanes*	*Lacostea*
anomalum Maxon & C.V. Morton	*Trichomanes*	*Trichomanes*
antillarum Bosch	*Vandenboschia*	*Vandenboschia*
aphlebioides H. Christ	*Crepidomanes*	*Nesopteris*
apicilare E. Fourn.	*Crepidomanes*	*Crepidomanes*/*Crepidium*
apiifolium C. Presl	*Callistopteris*	–
apodum Hook. & Grev.	*Didymoglossum*	*Didymoglossum*
arbuscula Desv.	*Trichomanes*	*Trichomanes*
armstrongii Baker	*Hymenophyllum*	*Hymenophyllum*
asae-grayi Bosch	*Abrodictyum*	*Abrodictyum*
asnykii Racib.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
asplenioides Sw.	*Hymenophyllum*	*Hymenoglossum*
assimile Mett. ex Kuhn	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
astylum Kaulf.	*Trichomanes*	*Trichomanes*
attenuatum Hook.	*Trichomanes*	*Trichomanes*
auratum Fée	*Trichomanes*	*Trichomanes*
aureovestitum Proctor	*Trichomanes*	*Trichomanes*
aureum Bosch	*Polyphlebium*	–
auriculatum Blume	*Vandenboschia*	*Lacosteopsis*
axillare Sodiro	*Polyphlebium* ?	–
badium E. Fourn.	*Trichomanes*	*Trichomanes*
baileyanum Watts	*Didymoglossum*	*Microgonium*
ballardianum Alston	*Didymoglossum*	*Microgonium*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
bancroftii Hook. & Grev.	*Trichomanes*	*Trichomanes*
barklianum Baker	*Didymoglossum*	*Didymoglossum*
barnardianum F.M. Bailey	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
batrachoglossum Copel.	*Abrodictyum* ?	?
bauerianum Endl.	*Callistopteris*	–
beccarianum Ces.	*Didymoglossum*	*Didymoglossum*
beckeri Krause ex Phil.	*Hymenophyllum*	*Myrmecostylum*
belangeri Bory	*Vandenboschia*	*Lacosteopsis*
bicorne Hook.	*Trichomanes*	*Trichomanes*
bifidum Vent. ex Willd.	*Abrodictyum*	*Pachychaetum*
bifolium Blume	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
bilabiatum Nees & Blume	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
bilobatum Alderw.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
bipunctatum Poir.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
birmanicum Bedd.	*Vandenboschia*	*Vandenboschia*
bissei C. Sánchez	*Trichomanes*	*Trichomanes*
bivalve G. Forst.	*Hymenophyllum*	*Hymenophyllum*
blepharistomum Copel.	*Crepidomanes*	*Nesopteris*
blumei Hassk.	*Hymenophyllum*	*Sphaerocionium*
bojeri Hook. & Grev.	*Didymoglossum*	*Microgonium*
bonapartei C. Chr.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes* ?
bonincolum Nakai	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
boninense Koidz.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
borbonicum Bosch	*Polyphlebium*	–
borneense Alderw.	*Cephalomanes*	–
boryanum Kunze	*Cephalomanes*	–
boschianum Sturm ex Bosch	*Vandenboschia*	*Vandenboschia*
botryoides Kaulf.	*Trichomanes*	*Feea*
bovini Bosch	*Trichomanes*	?
brachyblastos Mett. ex Kuhn	*Vandenboschia*	*Vandenboschia*
brachypus Kunze	*Trichomanes*	*Lacostea*
bradei H. Christ	*Polyphlebium*	–
brasiliense Desv.	*Polyphlebium*	–
braunii Bosch	*Hymenophyllum*	*Pleuromanes*
brevisetum R.Br.	*Vandenboschia*	*Vandenboschia*
brooksii Copel.	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
bryoides Goldm.	?	?
bucinatum Mickel & Beitel	*Didymoglossum*	*Didymoglossum*
caespifrons C. Chr.	*Abrodictyum*	*Pachychaetum*
caliginum Lellinger	*Trichomanes*	*Trichomanes*
caluffii C. Sánchez	*Didymoglossum*	?
calvescens Bosch	*Hymenophyllum*	*Sphaerocionium*
campanulatum Roxb.	*Crepidomanes* ?	?
canariensis L.	*Davallia*	–
capillaceum L.	*Polyphlebium*	–
capillatum Taschner	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
carolianum Vareschi	*Trichomanes*	*Lacostea*
cartilagineum Vieill. & Pancher	*Abrodictyum*	*Pachychaetum*
caruifolium Roxb.	*Vandenboschia* ?	?
caudatum Brack.	*Abrodictyum*	*Abrodictyum*
cavifolium Müll.Berol.	*Polyphlebium*	–
cellulosum Klotzsch	*Abrodictyum*	*Pachychaetum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
chamaedrys Taton	*Didymoglossum*	*Microgonium*
charophylloides Poir.	*Davallia*	–
chevalieri H. Christ	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
chinensis L.	*Sphenomeris*	–
christii Copel.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
ciliatum Sw.	*Hymenophyllum*	*Sphaerocionium*
clarenceanum F. Ballard	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
clathratum Tagawa	*Abrodictyum*	*Abrodictyum*
clavatum Sw.	*Hymenophyllum*	*Mecodium*
cochinchinense Poir.	*Lygodium*	–
cocos H. Christ	*Polyphlebium*	–
cognatum C. Presl	*Trichomanes*	*Trichomanes*
colensoi Hook.	*Polyphlebium*	–
collariatum Bosch	*Vandenboschia*	*Vandenboschia*
commutatum Sturm	*Trichomanes*	*Lacostea*
compactum Alderw.	*Abrodictyum*	*Abrodictyum*
compressum Desv.	*Abrodictyum*	*Pachychaetum*
concinnum Mett. ex Kuhn	*Crepidomanes*	*Crepidomanes*/*Crepidium*
contiguum G. Forst.	*Davallia*	–
corcovadense Bosch	*Vandenboschia* ?	?
coriaceum Kunze	*Trichomanes*	*Trichomanes*
cormophylum Kaulf.	*Cyathea*	–
cornutum C. Chr.	*Trichomanes* ?	?
corticola Hook. ex Bedd.	*Hymenophyllum*	*Sphaerocionium*
craspedoneurum Copel.	*Didymoglossum*	*Microgonium*
crassipilis Weath.	*Trichomanes*	*Trichomanes*
crassum Copel.	*Cephalomanes*	–
crenatum Bosch	*Trichomanes*	*Trichomanes*
crinitum Sw.	*Trichomanes*	*Trichomanes*
crispiforme Alston	*Trichomanes*	*Trichomanes*
crispulum Bosch	*Didymoglossum*	*Microgonium*
crispum L.	*Trichomanes*	*Trichomanes*
cristatum Kaulf.	*Trichomanes*	*Trichomanes*
cultratum Baker	*Didymoglossum*	*Didymoglossum*
cuneatum H. Christ	*Hymenophyllum*	*Hymenophyllum* ?
cuneiforme G. Forst.	*Odontosoria*	–
cupressifolium Hayata	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
cupressoides Desv.	*Abrodictyum*	*Pachychaetum*
curranii Weath.	*Trichomanes*	*Trichomanes*
curtii Rosenst.	*Didymoglossum*	*Didymoglossum*
cuspidatum Willd.	*Didymoglossum*	*Microgonium*
cyrtotheca Hillebr.	*Vandenboschia*	*Vandenboschia*
cystoseiroides H. Christ ex Tardieu & C. Chr.	*Vandenboschia*	*Vandenboschia*
dactylites Sodiro	*Trichomanes*	*Trichomanes*
daguense Weath.	*Trichomanes*	*Trichomanes*
daucoides C. Presl	*Abrodictyum*	*Pachychaetum*
davallioides Gaudich.	*Vandenboschia*	*Vandenboschia*
debile Bosch	*Polyphlebium*	–
delicatum Bosch	*Trichomanes*	*Trichomanes*
demissum G. Forst.	*Hymenophyllum*	*Globosa*
densinervium Copel.	*Cephalomanes*	–
dentatum Bosch	*Abrodictyum*	*Pachychaetum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
denticulatum Houtt.	*Davallia*	–
depauperatum Bory	*Crepidomanes*	*Crepidomanes*/*Crepidium*
diaphanum Kunth	*Polyphlebium*	–
dichotomum Kunze	*Hymenophyllum*	*Sphaerocionium*
diffusum Blume	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
digitatum Sw.	*Hymenophyllum*	*Sphaerocionium*
dilatatum G. Forst.	*Hymenophyllum*	*Diploophyllum*
dimidiatum C. Presl	*Vandenboschia*	*Lacosteopsis*
dimorphum Mett. ex Sadeb.	*Trichomanes*	*Feea*
dissectum J. Sm. ex Hook.	*Vandenboschia*	*Lacosteopsis*
divaricatum Poir.	*Hymenophyllum*	?
draytonianum Brack.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
dregei Bosch	*Abrodictyum*	*Pachychaetum*
egleri P.G. Windisch	*Trichomanes*	*Trichomanes*
ekmanii Wess.Boer	*Didymoglossum*	*Microgonium*
elatum G. Forst.	*Davallia*	–
elegans Rich.	*Trichomanes*	*Davalliopsis*
elongatum A. Cunn.	*Abrodictyum*	*Pachychaetum*
eminens C. Presl	*Callistopteris*	–
endlicherianum C. Presl	*Polyphlebium*	–
englerianum Brause	*Abrodictyum*	*Pachychaetum*
epiphyllum G. Forst.	*Davallia*	–
erectum Brack.	*Polyphlebium*	–
ericoides Hedw. ex Hook.	*Abrodictyum*	?
erosum Willd.	*Didymoglossum*	*Microgonium*
europaeum Sm.	*Vandenboschia*	*Vandenboschia*
exaltatum Brack.	*Callistopteris*	–
eximium Kunze ex Sturm	*Polyphlebium*	–
exsectum Kunze	*Polyphlebium*	–
extravagans Copel.	*Abrodictyum*	*Pachychaetum*
fallax H. Christ	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
fargesii H. Christ	*Vandenboschia*	*Lacosteopsis* ?
ferrugineum E. Fourn.	*Abrodictyum*	*Pachychaetum*
filiculoides H. Christ	*Crepidomanes*	*Crepidomanes*/*Crepidium*
filiforme Sturm	*Abrodictyum*	*Pachychaetum*
fimbriatum Backh. ex T. Moore	*Trichomanes*	*Trichomanes*
firmulum C. Presl	*Abrodictyum*	*Pachychaetum*
flabellatum Bory	*Hymenophyllum*	*Hymenophyllum*
flabelliforme Hassk.	*Hymenophyllum*	*Sphaerocionium*
flabellula d'Urv.	*Hymenophyllum*	*Hymenophyllum*
flaccidum G. Forst.	*Dennstaedtia*	–
flavofuscum Bosch	*Abrodictyum*	*Abrodictyum*
floribundum Hook. & Grev.	*Trichomanes*	*Trichomanes*
foeniculaceum Bory ex Willd.	*Abrodictyum*	*Pachychaetum*
foersteri Rosenst.	*Cephalomanes*	–
fontanum Lindm.	*Didymoglossum*	*Didymoglossum*
formosanum Y. Yabe	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
fragile Hedw.	*Hymenophyllum*	*Sphaerocionium*
francii H. Christ	*Hymenophyllum*	*Hymenophyllum* ?
frappieri Cordem.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
fraseri Jenman	*Didymoglossum*	*Didymoglossum*
frondosum Fée	*Vandenboschia*	*Lacosteopsis*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
fruticulosum Jenman	*Didymoglossum*	*Didymoglossum*
fucoides Sw.	*Hymenophyllum*	*Hymenophyllum*
fulgens C. Chr.	*Didymoglossum*	*Didymoglossum*
fulvum Klotzsch	*Polyphlebium*	–
furcatum Kaulf. ex Spreng.	*Abrodictyum*	*Pachychaetum* ?
fuscum Blume	*Hymenophyllum*	*Hymenophyllum*
galeottii E. Fourn.	*Trichomanes*	*Trichomanes*
gardneri Bosch	*Trichomanes*	*Trichomanes*
gemmatum J. Sm. ex Baker	*Abrodictyum*	*Pachychaetum*
gibberosum G. Forst.	*Asplenium*	–
giesenhagenii C. Chr.	*Didymoglossum*	*Didymoglossum*
giganteum Bory ex Willd.	*Vandenboschia*	*Vandenboschia*
glaucofuscum Hook.	*Hymenophyllum*	*Pleuromanes*
godmanii Hook.	*Didymoglossum*	*Microgonium*
goebelianum Giesenh.	*Didymoglossum*	*Didymoglossum*
goetzii Hieron.	*Polyphlebium*	–
gourlianum Grev. ex J. Sm.	*Didymoglossum*	*Didymoglossum*
gracile Bosch	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
gracillimum Copel.	*Crepidomanes*	*Crepidomanes*/*Crepidium*
grande Copel.	*Crepidomanes*	*Nesopteris*
graucescens Bosch	*Hymenophyllum*	*Pleuromanes*
guianense Sturm	*Trichomanes*	*Lacostea*
guidoi P.G. Windisch	*Trichomanes*	*Trichomanes*
guineense Afzel. ex Sw.	*Abrodictyum*	*Pachychaetum*
haenkei C. Presl	*Trichomanes*	*Trichomanes*
hartii Baker	*Abrodictyum* ?	?
harveyi Carruth. ex Seem.	*Crepidomanes*	*Nesopteris*
haughtii C.V. Morton	*Polyphlebium*	–
henzaianum Parish ex Hook.	*Didymoglossum*	*Didymoglossum*
l'herminieri Fée	*Trichomanes*	*Trichomanes*
herzogii Rosenst.	*Polyphlebium*	–
hibernicum A. Spreng.	*Vandenboschia*	*Vandenboschia*
hieronymi Brause	*Hymenophyllum*	*Hymenophyllum*
hildebrandtii Kuhn	*Didymoglossum*	*Didymoglossum*
hirsutum L.	*Hymenophyllum*	*Sphaerocionium*
hispidulum Mett. ex Kuhn	*Callistopteris*	–
hispidum Poir.	*Hymenophyllum*	*Sphaerocionium*
holopterum Kunze	*Trichomanes*	*Trichomanes*
hookeri C. Presl	*Didymoglossum*	*Microgonium*
hosei Baker	*Hymenophyllum*	*Hymenophyllum*
huberi H. Christ	*Trichomanes*	*Trichomanes*
humile G. Forst.	*Crepidomanes*	*Crepidomanes*/*Crepidium*
hygrometricum Poir.	*Hymenophyllum*	*Sphaerocionium*
hymenoides Hedw.	*Didymoglossum*	*Didymoglossum*
hymenophylloides Bosch	*Polyphlebium*	–
hypnoides H. Christ	*Polyphlebium*	–
idoneum C.V. Morton	*Abrodictyum*	*Abrodictyum*
ignobile Ces.	*Callistopteris* ?	?
imbricatum Sodiro	*Trichomanes*	*Trichomanes*
inaequale Poir.	*Hymenophyllum*	*Mecodium*
incisum Thunb.	*Cyathea*	–
inerme Bosch	*Hymenophyllum*	*Sphaerocionium*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
infundibulare Alderw.	*Cephalomanes*	–
ingae C. Chr.	*Polyphlebium*	–
intermedium Bosch	*Crepidomanes*	*Nesopteris*
intramarginale Hook. & Grev.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
intricatum Farrar	*Vandenboschia* ?	?
japonicum Thunb. ex Murray	*Onychium*	–
javanicum Blume	*Cephalomanes*	–
jenmanii Lellinger	*Trichomanes*	*Trichomanes*
johnstonense F.M. Bailey	*Vandenboschia*	*Vandenboschia*
junceum H. Christ	*Polyphlebium*	–
jungermannioides E. Fourn.	*Polyphlebium*	–
kalamocarpum Hayata	*Vandenboschia*	*Vandenboschia*
kalbreyeri Baker	*Trichomanes*	*Trichomanes*
kapplerianum Sturm	*Didymoglossum*	*Microgonium*
kaulfussii Hook. & Grev.	*Trichomanes*	*Trichomanes*
killipii Weath.	*Trichomanes*	*Trichomanes*
kingii Copel.	*Cephalomanes*	–
kirkii Hook.	*Didymoglossum*	*Microgonium*
krausii Hook. & Grev.	*Didymoglossum*	*Didymoglossum*
krugii H. Christ	*Abrodictyum*	*Pachychaetum*
kunzeanum Hook.	*Vandenboschia*	*Vandenboschia*
kurzii Bedd.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
labiatum Jenman	*Didymoglossum*	*Didymoglossum*
laceratum Desv.	*Trichomanes*	*Lacostea*
laciniatum Roxb.	*Cephalomanes*	–
laciniosum Alston	*Trichomanes*	*Trichomanes*
laetevirens Fée	*Vandenboschia*	*Vandenboschia*
laetum Bosch	*Abrodictyum*	*Pachychaetum*
lambertianum Hook.	*Trichomanes*	*Trichomanes*
lanceolatum Poir.	*Davallia*	–
lanceum Bory ex Willd.	*Hymenophyllum*	*Sphaerocionium*
langsdorffii Bosch	*Trichomanes*	*Trichomanes*
lasiophyllum Alderw.	*Hymenophyllum*	*Hymenophyllum*
lastreoides C. Presl	*Trichomanes*	*Davalliopsis*
latemarginale D.C. Eaton	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
latevirens Fée	*Vandenboschia*	*Vandenboschia*
latifrons Bosch	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
latilabiatum E.D. Br.	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
latilobium Bonap.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
latipinnulata Bonap.	*Trichomanes*	?
latipinnum Copel.	*Abrodictyum*	*Pachychaetum*
latisectum H. Christ	*Abrodictyum* ?	?
lauterbachii H. Christ	*Crepidomanes*	*Crepidomanes*/*Crepidium*
laxum Klotzsch	*Trichomanes*	*Trichomanes*
lechleri Bosch	*Polyphlebium*	–
ledermanni Brause	*Cephalomanes*	–
lehmannii Hieron.	*Didymoglossum*	*Didymoglossum*
lenormandi Bosch	*Didymoglossum*	*Microgonium*
lentum Poir.	*Davallia*	–
lepervanchii Cordem.	*Crepidomanes* ?	*Crepidomanes*/*Gonocormus* ?
leprieurii Hook.	*Trichomanes*	*Davalliopsis*
leptophyllum A. Cunn.	*Abrodictyum*	*Abrodictyum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
levissisum Fée	*Vandenboschia* ?	?
liberiense Copel.	*Didymoglossum*	*Didymoglossum*
lindenii C. Presl	*Trichomanes*	*Trichomanes*
lindigii E. Fourn.	*Trichomanes*	*Trichomanes*
lineare Sw.	*Hymenophyllum*	*Sphaerocionium*
liukiuense Y. Yabe	*Vandenboschia*	*Vandenboschia*
longicollum Bosch	*Abrodictyum*	*Pachychaetum*
longifolium Desv.	*Trichomanes*	*Trichomanes*
longifrons Nakai	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
longilabiatum Bonap.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes* ?
longisetum Bory ex Willd.	*Abrodictyum*	*Pachychaetum*
lorencei Tardieu	*Didymoglossum*	*Didymoglossum*
loreum Bory & Bél.	*Hymenophyllum*	*Sphaerocionium*
lozanii M.T. Murillo	*Trichomanes*	*Trichomanes*
lucens Sw.	*Trichomanes*	*Trichomanes*
lucidum Roxb.	*Davallia*	–
ludovicinum Rosenst.	*Trichomanes*	*Trichomanes*
luerssenii F. Muell.	*Abrodictyum*	*Pachychaetum*
luschnatianum C. Presl	*Vandenboschia*	*Lacosteopsis*
luzonicum C. Presl	*Crepidomanes*	*Crepidomanes*/*Crepidium*
macgillivrayi Baker	*Hymenophyllum*	*Hymenophyllum*
macilentum Bosch	*Trichomanes*	*Trichomanes*
macroclados Kunze	*Trichomanes*	*Trichomanes*
majorae Watts	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
makinoi C. Chr.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
malayanum Roxb.	*Sphenomeris* ?	–
malingii Hook.f.	*Hymenophyllum*	*Sphaerocionium*
maluense Brause	*Cephalomanes*	–
mandiocanum Raddi	*Abrodictyum*	*Pachychaetum*
mannianum Mett. ex Kuhn	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
mannii Hook.	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
marchantioides Zippel ex Moritz	*Didymoglossum*	*Didymoglossum*
marginatum Mett.	*Abrodictyum*	*Pachychaetum*
martinezii Rovirosa	*Vandenboschia*	*Vandenboschia*
martiusii C. Presl	*Trichomanes*	*Trichomanes*
matthewii H. Christ	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
maximum Blume	*Vandenboschia*	*Vandenboschia*
megistostomum Copel.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
meifolium Bory ex Willd.	*Abrodictyum*	*Pachychaetum*
melanopus Baker	*Didymoglossum*	*Didymoglossum*
melanorhizon Hook.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
melanotrichum Schltdl.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
membranaceum L.	*Didymoglossum*	*Didymoglossum*
merrillii Copel.	*Abrodictyum*	*Pachychaetum*
mettenii C. Chr.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
mexicanum Bosch	*Vandenboschia*	*Vandenboschia*
micayense Hieron.	*Trichomanes*	*Trichomanes*
microchilum Baker	*Hymenophyllum*	*Hymenophyllum*
microlirion Copel.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
microphyllum Mett. ex Kuhn	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
micropubescens Proctor	*Didymoglossum*	*Didymoglossum*
mildbraedii Brause	*Hymenophyllum*	*Hymenophyllum* ?

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
millefolium Desv.	*Trichomanes*	*Davalliopsis*
milnei Bosch	*Abrodictyum*	*Abrodictyum*
mindorense H. Christ	*Didymoglossum*	*Microgonium*
minimum Alderw.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
minutissimum Alderw.	*Didymoglossum*	*Didymoglossum*
minutulum Gaudich.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes* ?
minutum Blume	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
miyakei Y. Yabe	*Vandenboschia*	*Vandenboschia*
molle E. Fourn.	*Trichomanes*	*Trichomanes*
montanum Hook.	*Didymoglossum*	*Didymoglossum*
moritzii Bosch	*Vandenboschia*	*Lacosteopsis*
mosenii Lindm.	*Didymoglossum*	*Didymoglossum*
motleyi Bosch	*Didymoglossum*	*Didymoglossum*
mougeotii Bosch	*Trichomanes*	*Feea*
multifidum G. Forst.	*Hymenophyllum*	*Hymenophyllum*
muscoides Sw.	*Didymoglossum*	*Didymoglossum*
musolense Brause	*Crepidomanes*	*Crepidomanes*/*Gonocormus* ?
myrioneuron Lindm.	*Didymoglossum*	*Didymoglossum*
myriophyllum Desv.	?	?
myrioplasium Kunze	*Callistopteris*	–
naseanum H. Christ	*Vandenboschia*	*Vandenboschia*
naumannii Kuhn & Luerss. ex H. Christ	*Polyphlebium*	–
neesii Blume	*Hymenophyllum*	*Hymenophyllum*
neilgherrense Bedd.	*Didymoglossum*	*Microgonium*
nipponicum Nakai	*Vandenboschia*	*Vandenboschia*
nitidulum Bosch	*Hymenophyllum*	*Sphaerocionium*
niveum Burm.f.	?	?
novoguineense Brause	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
nudum Poir.	*Hymenophyllum*	*Sphaerocionium*
nymanii H. Christ	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
obscurum Blume	*Abrodictyum*	*Pachychaetum*
olivaceum Kunze ex Klotzsch	*Polyphlebium*	–
opacum Bosch	*Trichomanes*	*Davalliopsis*
orbiculare H. Christ	*Didymoglossum*	*Didymoglossum*
orientale C. Chr.	*Vandenboschia*	*Vandenboschia*
ornatulum Bosch	*Didymoglossum* ?	?
osmundoides Poir.	*Trichomanes*	*Feea*
pabstianum Müll.Berol.	*Didymoglossum*	*Didymoglossum*
pachyphlebium C. Chr.	*Trichomanes* ?	*Davalliopsis* ?
pacificum Hedw.	*Hymenophyllum*	*Hymenophyllum*
padronii Proctor	*Trichomanes*	*Trichomanes*
pallidum Blume	*Hymenophyllum*	*Pleuromanes*
palmatifidum Müll.Berol.	*Hymenophyllum*	*Sphaerocionium*
palmatum C. Presl	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
palmicola Bosch	*Didymoglossum*	*Microgonium*
palmifolium Hayata	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
paniculatum Alderw.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
pannosum Ces.	*Didymoglossum*	*Didymoglossum*
papillatum Müll.Berol.	*Abrodictyum*	*Pachychaetum*
pappei Kunze	*Abrodictyum*	*Pachychaetum*
papuanum Brause	*Didymoglossum*	*Didymoglossum*
paradoxum Domin	*Didymoglossum*	*Didymoglossum*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
parviflorum Poir.	*Abrodictyum*	*Pachychaetum*
parvulum Poir.	*Hymenophyllum*	*Hymenophyllum*
parvum Copel.	*Vandenboschia*	*Vandenboschia*
pedicellatum Desv.	*Trichomanes*	*Lacostea*
pellucens Kunze	*Trichomanes*	*Trichomanes*
pellucidum Goldm.	*Vandenboschia*	*Lacosteopsis*
peltatum Poir.	*Hymenophyllum*	*Hymenophyllum*
pennatum Kaulf.	*Trichomanes*	*Trichomanes*
perpusillum Alderw.	*Crepidomanes*	*Crepidomanes*/*Crepidium* ?
pervenulosum Alderw.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
petersii A. Gray	*Didymoglossum*	*Didymoglossum*
philippianum Sturm	*Polyphlebium*	–
piliferum Alderw.	*Hymenophyllum*	*Sphaerocionium*
pilosum Raddi	*Trichomanes*	*Trichomanes*
pinnatifidum Bosch	*Trichomanes*	*Trichomanes*
pinnatinervium Jenman	*Didymoglossum*	*Didymoglossum*
pinnatum Hedw.	*Trichomanes*	*Trichomanes*
platyderon E. Fourn.	*Abrodictyum*	*Pachychaetum*
platyrachis Domin	*Trichomanes*	*Feea*
pluma Hook.	*Abrodictyum*	*Abrodictyum*
plumosum Kunze	*Trichomanes*	*Trichomanes*
plumula C. Presl	*Trichomanes*	*Trichomanes*
poeppigii C. Presl	*Trichomanes*	*Trichomanes*
polyanthos Sw.	*Hymenophyllum*	*Mecodium*
polyodon Colenso	*Abrodictyum*	*Pachychaetum*
polyphlebius V. Marcano	*Trichomanes*	*Trichomanes*
polypodioides L.	*Trichomanes*	*Trichomanes*
polysperma Poir.	*Sphenomeris*	–
polystromaticum Bierh.	*Abrodictyum*	*Pachychaetum*
powellii Baker	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
preslianum Nakai	*Crepidomanes*	*Nesopteris*
preslii C.V. Morton	*Cephalomanes*	–
prieurii Kunze	*Trichomanes*	*Davalliopsis*
procerum Fée	*Hymenophyllum*	*Sphaerocionium*
proliferum Blume	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
pseudo-arbuscula Alderw.	*Abrodictyum*	*Pachychaetum*
pseudoblepharistomum Tagawa	*Crepidomanes*	*Nesopteris*
pseudocapillatum Alderw.	*Crepidomanes*	*Crepidomanes*/*Crepidium* ?
ptilodes Bosch	*Trichomanes*	*Trichomanes*
pulchellum Salisb.	*Hymenophyllum*	*Hymenophyllum*
pulcherrimum Copel.	*Crepidomanes*	*Nesopteris*
pumilum Bosch	*Abrodictyum*	*Pachychaetum*
punctatum Poir.	*Didymoglossum*	*Didymoglossum*
pusillum Sw.	*Didymoglossum*	*Didymoglossum*
pygmaeum C. Chr.	*Didymoglossum*	*Microgonium*
pyxidiferum L.	*Polyphlebium*	–
quelpaertense Nakai	*Vandenboschia*	*Vandenboschia*
quercifolium Desv.	*Trichomanes*	*Trichomanes*
racemulosum Bosch	*Abrodictyum*	*Pachychaetum*
radicans Sw.	*Vandenboschia*	*Vandenboschia*
ramitrichum Faden	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
recedens Rosenst.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
reniforme G. Forst.	*Hymenophyllum*	*Cardiomanes*
repens Schott ex Sturm	*Vandenboschia*	*Vandenboschia*
reptans Sw.	*Didymoglossum*	*Didymoglossum*
resinosum R.C. Moran	*Trichomanes* ?	*Davalliopsis* ?
rhipidophyllum Sloss.	*Didymoglossum*	*Didymoglossum*
rhizophyllum Cav.	*Trichomanes*	*Trichomanes*
ridleyi Copel.	*Hymenophyllum*	*Sphaerocionium*
rigidum Sw.	*Abrodictyum*	*Pachychaetum*
robinsonii Hook. ex Baker	*Didymoglossum*	*Didymoglossum*
robustum E. Fourn.	*Trichomanes*	*Trichomanes*
roemerianum Rosenst.	*Crepidomanes*	*Nesopteris*
roraimense Jenman	*Trichomanes*	*Trichomanes*
rosenstockii Alderw.	*Cephalomanes*	–
rothertii Alderw.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
rotundifolium Bonap.	*Didymoglossum*	*Microgonium*
rupicolum Racib.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
ruwenzoriense Taton	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
samoense C. Chr.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
sandvicense Bosch	*Vandenboschia*	*Vandenboschia*
sanguinolentum G. Forst.	*Hymenophyllum*	*Myrmecostylum*
savaiense Lauterb.	*Hymenophyllum*	*Pleuromanes*
saxatile Brack. ex T. Moore	*Abrodictyum*	*Pachychaetum*
saxifragoides C. Presl	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
sayeri F. Muell. & Baker	*Didymoglossum*	*Didymoglossum*
scandens L.	*Trichomanes*	*Trichomanes*
schaffneri Schltdl.	*Didymoglossum*	*Didymoglossum*
schiedeanum Müll.Berol.	*Polyphlebium*	–
schlechteri Brause	*Abrodictyum*	*Abrodictyum*
schmidianum Zenker ex Taschner	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
schomburgkianum Sturm	*Trichomanes*	*Trichomanes*
schomburgkii Bosch	*Trichomanes*	*Trichomanes*
schultzei Brause	*Abrodictyum*	*Abrodictyum*
seemannii Carruth. ex Seem.	*Abrodictyum*	*Pachychaetum*
sellowianum C. Presl	*Trichomanes*	*Trichomanes*
sericeum Sw.	*Hymenophyllum*	*Sphaerocionium*
serratifolium Rosenst.	*Polyphlebium*	–
serratulum Baker	*Hymenophyllum*	*Hymenophyllum*
serricula Fée	*Trichomanes*	*Trichomanes*
setaceum Bosch	*Abrodictyum*	*Pachychaetum*
setiferum Baker ex Jenman	*Didymoglossum*	*Didymoglossum*
setigerum Backh. ex T. Moore	*Abrodictyum*	*Pachychaetum*
siamense H. Christ	*Abrodictyum*	*Pachychaetum*
sibthorpioides Bory ex Willd.	*Hymenophyllum*	*Hymenophyllum*
sinuatum Bonap.	*Didymoglossum*	*Microgonium*
sinuosum Rich. ex Willd.	*Trichomanes*	*Trichomanes*
smithii Hook.	*Abrodictyum*	*Abrodictyum*
societense J.W. Moore	*Callistopteris*	–
solidum G. Forst.	*Davallia*	–
solitarium Jenman	*Didymoglossum*	*Didymoglossum*
somai Nakai	*Vandenboschia*	*Vandenboschia*
sonderi Bosch	*Trichomanes*	*Lacostea*
speciosum Willd.	*Vandenboschia*	*Vandenboschia*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
spectabile Klotzsch	*Trichomanes*	*Trichomanes*
sphenoides Kunze	*Didymoglossum*	*Didymoglossum*
spicatum Hedw. ex Hook.	*Trichomanes*	*Feea*
spicisorum Desv.	*Trichomanes*	*Feea*
spinulosum Phil.	*Hymenophyllum*	*Hymenophyllum*
splendidum Bosch	*Trichomanes*	*Trichomanes*
spruceanum Hook.	*Trichomanes*	*Trichomanes*
sprucei Baker	*Abrodictyum*	*Pachychaetum*
squarrosum G. Forst.	*Dicksonia*	–
stenosiphon H. Christ	*Vandenboschia*	*Vandenboschia*
steyermarkii P.G. Windisch & A.R. Sm.	*Trichomanes*	*Trichomanes*
striatum D. Don	*Vandenboschia* ?	?
strictum Menzies ex Hook. & Grev.	*Abrodictyum*	*Abrodictyum*
strigosum Thunb. ex Murray	*Microlepia*	–
stylosum Poir.	*Abrodictyum*	*Pachychaetum*
subdeltoideum C. Chr.	*Abrodictyum*	*Pachychaetum*
subexsertum Bosch	*Polyphlebium*	–
sublabiatum Bosch	*Trichomanes*	*Trichomanes*
sublimbatum Müll.Berol.	*Didymoglossum*	*Didymoglossum*
subpinnatifidum Bosch	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
subsessile Splitg.	*Trichomanes*	*Lacostea*
subtilissimum Brause	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
subtrifidum C.G. Matthew & H. Christ	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
suffrutex Alderw.	*Cephalomanes*	–
sumatranum Alderw.	*Cephalomanes*	–
superbum Backh. ex T. Moore	*Callistopteris*	–
taeniatum Copel.	*Hymenophyllum*	*Sphaerocionium*
tahitense Nadeaud	*Didymoglossum*	*Didymoglossum*
tamarisciforme Jacq.	*Abrodictyum*	*Pachychaetum*
tanaicum Hook.	*Trichomanes*	*Lacostea*
tenellum Hedw.	*Polyphlebium*	–
tenerum A. Spreng.	*Polyphlebium*	–
tenue Brack.	*Polyphlebium*	–
tenuifolium Burm.f.	*Cheilanthes*	–
tenuissimum Bosch	*Polyphlebium*	–
tereticaulum Ching	*Abrodictyum*	*Pachychaetum*
teysmanni Bosch	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
thouarsianum C. Presl	*Hymenophyllum*	*Hymenophyllum*
thuioides Desv.	*Abrodictyum*	*Pachychaetum*
thysanostomum Makino	*Crepidomanes*	*Nesopteris*
tomaniiviense Brownlie	*Hymenophyllum*	*Sphaerocionium*
torotumani Vareschi	*Trichomanes*	*Lacostea*
tosae H. Christ ex Matsum.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
tranninense Fée	*Polyphlebium*	–
translucens Kunze	*Polyphlebium*	–
trichodes Sw.	*Polyphlebium*	–
trichoideum Sw.	*Polyphlebium*	–
trichophorum Alderw.	*Hymenophyllum*	*Hymenophyllum*
trichophyllum T. Moore	*Abrodictyum*	*Pachychaetum*
trigonum Desv.	*Trichomanes*	*Trichomanes*
trinerve Baker	*Crepidomanes*	*Crepidomanes*/*Gonocormus*
trollii Bergdolt	*Trichomanes*	*Feea*

Appendix. Continued.

Basionym	Genus	Subgenus / Section
Trichomanes (cont.)		
tuerckheimii H. Christ	*Trichomanes*	*Lacostea*
tunbrigense L.	*Hymenophyllum*	*Hymenophyllum*
ujhelyii Kümmerle	*Trichomanes*	*Trichomanes*
ulei H. Christ	*Polyphlebium* ?	–
undulatum Sw.	*Hymenophyllum*	*Mecodium*
uniflorum Cav.	*Crepidomanes* ?	*Nesopteris* ?
vandenboschii P.G. Windisch	*Trichomanes*	*Trichomanes*
varians Alderw.	*Didymoglossum*	*Microgonium*
vaupelii Brause	*Crepidomanes* ?	*Crepidomanes*/*Crepidomanes* ?
vaupesensis Lellinger	*Trichomanes*	*Trichomanes*
venosum R.Br.	*Polyphlebium*	–
venustulum Colenso	*Polyphlebium*	–
venustum Desv.	*Vandenboschia*	*Lacosteopsis*
vestitum Baker	*Hymenophyllum*	*Hymenophyllum*
vieillardii Bosch	*Polyphlebium*	–
virgatulum Bosch	*Vandenboschia*	*Vandenboschia* ?
viridans Mett. ex Kuhn	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
viride Bubani	*Asplenium*	–
vitiense Baker	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
vittaria DC. ex Poir.	*Trichomanes*	*Trichomanes*
volubile Vell.	*Trichomanes*	*Lacostea*
walleri Watts	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
wallii Thwaites ex Trimen	*Didymoglossum*	*Didymoglossum*
warburgii H. Christ	*Abrodictyum*	*Abrodictyum*
weddellii Bosch	*Trichomanes*	*Davalliopsis*
werneri Rosenst.	*Polyphlebium*	–
wildii F.M. Bailey	*Crepidomanes*	*Crepidomanes*/*Crepidium*
windischianum Lellinger	*Abrodictyum*	*Pachychaetum*
yandinense F.M. Bailey	*Didymoglossum*	*Microgonium*
zollingeri Bosch	*Cephalomanes*	–
Vandenboschia		
assimilis Ching & P.C. Chiu	*Vandenboschia*	*Vandenboschia*
inopinata Pic.Serm.	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
lofoushanensis Ching	*Vandenboschia*	*Vandenboschia* ?
subclathrata K. Iwats.	*Vandenboschia*	*Vandenboschia*
titibuensis H. Itô	*Crepidomanes*	*Crepidomanes*/*Crepidomanes*
tubiflora F.S. Wagner	*Vandenboschia*	*Vandenboschia*