



Updating Taiwanese pteridophyte checklist: a new phylogenetic classification

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ABSTRACT: Ferns and lycophytes of Taiwan display an extraordinarily high diversity. Despite the detailed species documentation, the pteridophyte flora of Taiwan as a whole has never been organized into a phylogenetic framework. Here we provide an updated, phylogeny-based checklist that includes a total of 824 (infra)species taxa, of which eleven are first recorded. In addition, lectotypification of *Phlegmariurus salvinioides* and new combinations of 25 taxa were made in this study. Our classification scheme is based on the most recent phylogenetic evidence, and for all taxon names accepted here, we provide their best corresponding names in Taiwanese Mandarin. Our appendix and the online file also supply other details, such as synonyms, for the Taiwanese pteridophytes in order to track their nomenclatural changes from the previous floristic documentations. Finally, a discussion group for our community-Taiwan Pteridophyte Group (TPG)- is established online. This platform will allow more users to follow further updates of TPG or to provide any comments on new versions of Taiwan pteridophyte checklist.

KEY WORDS: Checklist, Conservation assessment, Fern, Lycophyte, PPG, Pteridophyte, Taiwan, TPG.

INTRODUCTION

Ferns and lycophytes (= pteridophytes) of Taiwan display an extraordinarily high diversity (Fig. 1) that, in terms of the pteridophyte species number, represents one of the top five most speciose insular floras in the world (Kreft *et al.*, 2010). Knapp, in a recent work, "Fern and Fern Allies of Taiwan" (Knapp, 2011, 2013, Knapp and Hsu, 2017) summarizes a total of 801 species and lower taxa (including unidentified taxa), representing a near 20%-increase in the taxon number that had been officially documented in "Flora of Taiwan" (DeVol, 1975, 1979; Huang, 1994, 2003; a total of 597 taxa) and "Manual of Taiwan Vascular Plants" (Kuo, 1997; Yang and Liu, 2002; a total of 677 taxa). 824 (infra)species for Taiwanese pteridophytes are recognized in the updated checklist here. However, this figure is very likely an underestimation, and newly recorded species are continuously being reported (e.g., Chang *et al.*, 2019;

Chao, 2019; Chen *et al.*, 2019).

Despite the detailed species documentation, the pteridophyte flora of Taiwan as a whole has never been organized into a phylogenetic framework that aims to reflect natural relationships of pteridophyte species by ordering them with the generic and higher-levels. Advanced by insights from molecular phylogenetics, systems for pteridophyte classification have evolved rapidly during the past decades, and experienced drastic changes at different taxonomic levels (Smith *et al.*, 2006; Christenhusz *et al.*, 2011; Rothfels *et al.*, 2012; PPG I, 2016). Pteridophyte Phylogenetic Group I (PPG I, 2016), for example, classifies genera and families differently from the system of Kramer and Green (1990), which had been widely accepted before the era of molecular phylogenetics, and was commonly adopted in many previous floristic works, such as "Manual of Taiwan Vascular Plants, vol. 1" (Kuo, 1997). For the Taiwanese pteridophyte flora, some systems established earlier have

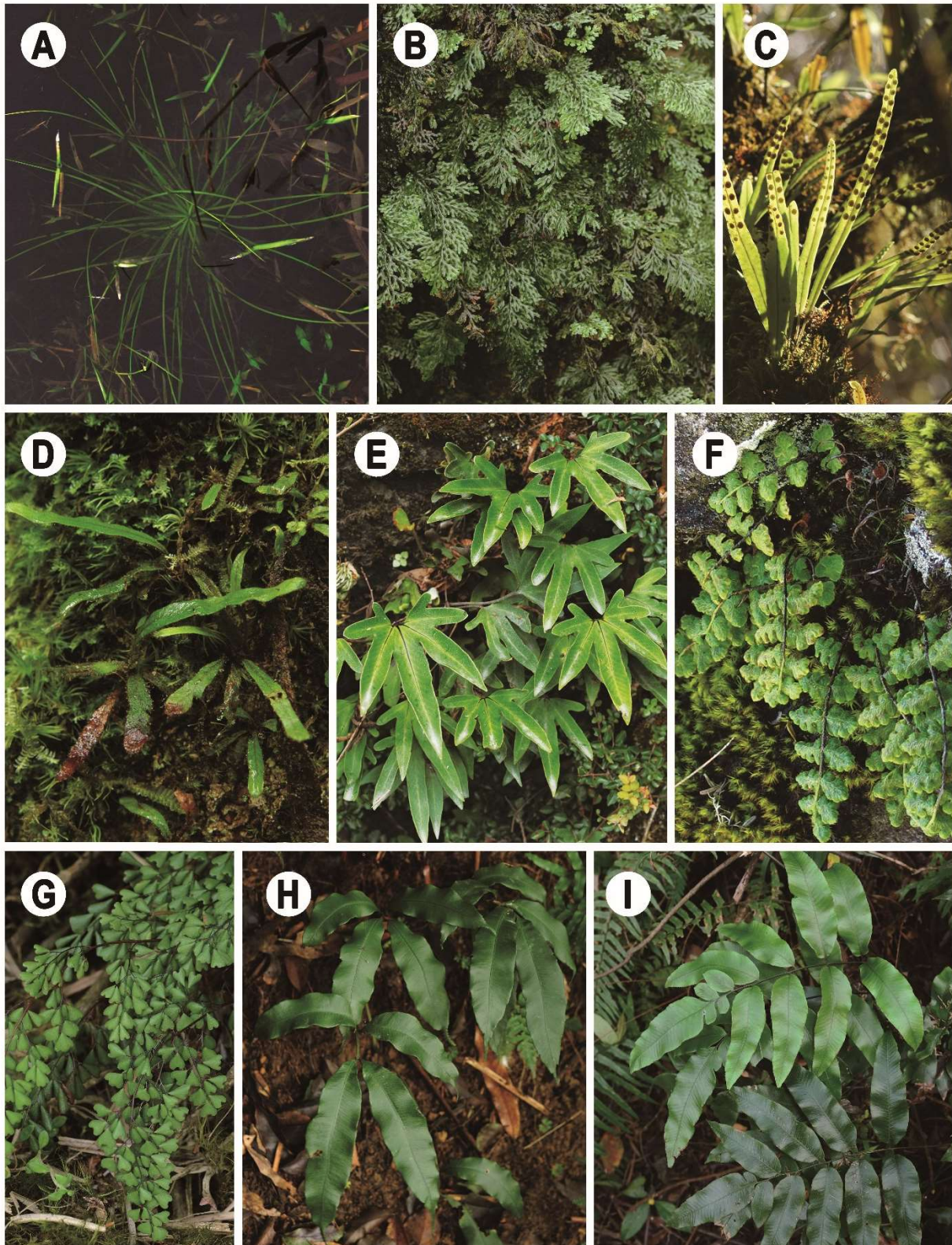


Fig. 1. Endemic diversity of Taiwanese pteridophytes (selected representatives). A. *Isoetes taiwanensis* DeVol var. *taiwanensis*. B. *Hymenophyllum devolii* M.J.Lai. C. *Lepisorus monilisorus* (Hayata) Tagawa. D. *Oreogrammitis taiwanensis* (Parris & Ralf Knapp) T.C.Hsu. E. *Pyrrosia polydactylos* (Hance) Ching. F. *Woodsia okamotoi* Tagawa. G. *Adiantum taiwanianum* Tagawa. H. *Angiopteris somae* (Hayata) Makino & Nemoto. I. *Diplazium chioui* T.C.Hsu. [Photo credit by Yao-Moan Huang (A), Pi-Fong Lu (B–H), and Tian-Chuan Hsu (I)]



been applied, such as Engler's system (Diels, 1899/1900) in DeVol (1975) and Huang (1994), Copeland's system (Copeland, 1947) in Shieh (1972–1978), the system of Tryon and Tryon (1982) in Kuo (1985), and Ching's system (Ching, 1978a,b; Wu and Ching, 1991) in Lu and Yang (2005). Although these classifications perform well in characterizing pteridophyte genera and families morphologically, they fail to represent natural relationships informed by modern molecular phylogenetics (Smith *et al.*, 2006; Liu, 2016; PPG I, 2016).

To organize Taiwanese pteridophytes in a phylogenetic context, here we provide a classification scheme that is based on the most updated phylogenetic evidence, and for all taxon with accepted names here, we provide their best corresponding names in Taiwanese Mandarin. Our appendix and online file also supply other details for the Taiwanese pteridophytes in order to track their names used in the previous floristic works. Particularly, the online file provides the synonyms that will help researchers worldwide to better recognize the Taiwanese pteridophytes taxonomically. Finally, a discussion group (Google discussion group: <https://groups.google.com/forum/#!forum/taiwan-pteridophyte-group>) is established online for our community. This public platform will allow more users to follow our further updates or to provide any comments on this new Taiwan pteridophyte checklist.

METHODS

We established a research community - Taiwan Pteridophyte Group (TPG) - to prepare an updated checklist of Taiwanese pteridophytes. Species lists of different taxonomic groups were first generated by different community members. These species lists were prepared by reviewing the name records in four reference works - "Flora of Taiwan, 2nd edition, vol. 1" (Huang, 1994), "Manual of Taiwan Vascular Plants, vol. 6" (Yang and Liu, 2002), "Index to Ferns and Fern Allies of Taiwan" (Knapp, 2014), and "Flora of China, Lycopodiaceae through Polypodiaceae (vol. 2–3)" (Wu *et al.*, 2013). We also considered newly recorded taxa that had been documented more recently or are provided in this current work. After these separate taxon lists were compiled and combined into a preliminary checklist, all community members then provided feedback and discussed further revisions. Our phylogenetic-based classification is primarily based on the PPG I (2016) system, which is considered the most widely accepted and up-to-date system; and on the ordinal level, ours is also identical with that of Christenhusz and Chase (2014). However, certain generic concepts were recently argued or suggested to be slightly modified from PPG I (e.g., Christenhusz and Chase, 2018; Dong and Zuo, 2018; He

et al., 2018; Wei *et al.*, 2018; also see Schuettpelz *et al.*, 2018). To address such issues, when a generic treatment different from PPG I was proposed by a TPG member, all members voted in order to find a majority consensus.

All scientific names of ferns and lycophytes that were ever cited in any effective publications as occurring in Taiwan, either indigenous or naturalized, are dealt with in this paper. The names were first categorized into either accepted or nonaccepted ones. To prepare the accepted name checklist, we reviewed the legitimate names and selected the best representing one for every (infra)species taxon. For each accepted (infra)species taxon/name here, its basionym, type information, corresponding names in the four previous works (i.e., Huang, 1994; Yang and Liu, 2002; Wu *et al.*, 2013; Knapp, 2014), and an appropriate Taiwanese Mandarin name are given (the first three of these provided only in the online file and appendix). The nonaccepted names are categorized as: (i) homotypic (i.e., nomenclatural) synonyms of accepted taxa; (ii) heterotypic (i.e., taxonomical) synonyms of accepted taxa; (iii) excluded names, those recorded in Taiwan exclusively by traceable misidentifications; (iv) doubtfully recorded names, those without sufficient data to either affirm or reject its occurrence in Taiwan; and (v) undetermined names, those taxonomic units that were neither validly published nor attributed to valid names. Whenever referable [for (i) and (ii)] or traceable [for (iii) and (v)], the corresponding accepted names for each nonaccepted name is also given.

Extensive field and herbaria surveys are also conducted to clarify whether additional taxa occur in Taiwan. Among the unrecorded taxa, a taxon presumably not introduced due to human activity would be recognized as an indigenous taxon and added into the accepted name checklist; otherwise it would be regarded as an adventive taxon. An adventive taxon would be further recognized as a naturalized taxon and added into the accepted name list only when sustainable and reproduceable wild populations were observed.

In the main text here, we present only the list of accepted names. A complete version of this name checklist with both accepted and nonaccepted ones is available in the online file (<https://groups.google.com/forum/#!topic/taiwan-pteridophyte-group/DZuchDPSAwE>; also in https://figshare.com/articles/Taiwan_Pteridophyte_Checklist_v_5_9_official_xlsx/9547154; doi: 10.6084/m9.figshare.9547154). The online and public discussion group of TPG will provide further updates for Taiwanese pteridophyte checklist or an extension of any relevant project.



Results and Discussion

Classification and statistic summary

The phylogenetic classification here follows the scheme of PPG I (2016) from the class to generic level, except for the recognition of seven genera. *Lycopodium* (including *Diphasiastrum* and *Spinulum*; Lycopodiaceae), *Lycopodiella* (Lycopodiaceae), and *Oreogrammitis* (Polypodiaceae) which are here treated in a broader sense, while each of them still meets the criterion of being monophyletic (Sundue *et al.*, 2014; Field *et al.*, 2016). *Drynaria* was applied here to replace *Aglaomorpha* in Polypodiaceae because the former was conserved against the latter (Christenhusz and Schneider, 2012; Wilson, 2016). The genus *Spicantopsis* in Blechnaceae was applied to the single Taiwanese *Struthiopteris* species (*S. hancockii*) based on recent phylogenetic evidence (Molino *et al.*, 2019). In Figure 2, we outline the phylogenetic relationships of these Taiwanese pteridophytes with a hierarchy from the (sub)family to higher taxonomic levels.

In sum, we classified Taiwanese pteridophytes into two classes, 14 orders, 38 families, 148 genera, and 824 (infra)species taxa, including hybrids. 803 (45 from lycophytes and 758 from ferns) of these (infra)species taxa and hybrids have accepted names (Table 1). To track their name changes, the appendix here provides their corresponding names in the four previous floristic works. Among them, 86 and 11 are recognized respectively as endemic and naturalized ones, and these statuses are provided in the online file and are also noted below. Seven of them have only interspecies hybrid formulae. For the remaining 21 taxa, we have not been able to find a corresponding accepted name based on our current understanding; they are listed in our nonaccepted name checklist (online file: “undetermined names”). To follow the classification adopted here, we made 25 new combinations. For the newly recorded and newly naturalized taxa (Figs. 3–7), background data about their geographic distribution, voucher specimens in Taiwan, conservation status at national level following IUCN Red List Categories and Criteria (IUCN, 2012a,b; Editorial Committee of the Red List of Taiwan Plants, 2017), with remarks on taxonomy is provided.

TAXONOMIC TREATMENT

Newly recorded and newly naturalized taxa

1. *Adiantum tenerum* Sw., Prodr. 135. 1788. **Fig. 4A–B.**

Distribution: Native in Northern, Central and Southern America. Introduced elsewhere as an ornamental and occasionally escaped and naturalized.

Conservation status: NA. *Adiantum tenerum* is presumed as a naturalized species in Taiwan.

Taxonomic remarks: *Adiantum tenerum* differs from other congeneric species in Taiwan by the combination of

Table 1. Taxon numbers of Taiwanese pteridophytes with accepted names.

	All	Indigenous	Naturalized
Lycophytes (= class Lycopodiopsida)			
Order	3	3	1
Family	3	3	1
Subfamily	2	2	0
Genus	7	7	1
Species	43	42	1
Infraspecific taxon ¹	3	3	0
Species + infraspecific taxon	45	44	1
Ferns (= class Polypodiopsida)			
Subclass	4	4	2
Order	11	11	3
Suborder	5	5	2
Family	35	35	4
Subfamily	20	20	3
Genus	141	139	7
Species	731	721	10
Infraspecific taxon ¹	28	27	1
Species + infraspecific taxon	751	741	10
Taxa with only hybrid formulae	7	7	0

¹with a variety, subspecies, or forma status but no corresponding status at the species level

3-pinnate fronds and segment stalks terminating in small disc-like swelling at the base of ultimate segments.

Voucher specimens: Taiwan: New Taipei: Pitan, *Lu 23670* (TAIF).

2. *Dryopteris acutodentata* Ching, Bull. Fan. Mem. Inst. Biol., Bot. 8(6): 432. 1938. **Fig. 5A–C.**

Distribution: Bhutan, China, Northern India, Kashmir and Nepal.

Conservation status: LC. This species is rather widespread around the alpine region of Taiwan, and currently no immediate threat could be detected.

Taxonomic remarks: *Dryopteris acutodentata* is closely related to *D. serratodentata* and differs by the combination of obtusely serrate pinnule margin and arose indusia.

Voucher specimens: Taiwan: Chiayi: Mt. Yu Front Peak Entrance, *Lu 22571* (TAIF). Hualien: Little Qilai Trail, *Lu 20768* (TAIF). Kaohsiung: 3026 Shelter to Mt. Kuan, *Lu 6851* (TAIF); *Lu 8699* (TAIF). Taichung: Mt. Hsueh Entrance to Sanliuchiu Shelter, *Lu 12066* (TAIF). Taitung: Chiaming Lake, *Lu 25743* (TAIF).

3. *Dryopteris nyngchiensis* Ching, Fl. Xizang 1: 262. 1983. **Fig. 5D–F.**

Distribution: China.

Conservation status: EN D1. In Taiwan, this species is currently only known from a single subpopulation with an estimation of <250 mature individuals. Although its known population, located in the Yushan National Park, is generally well protected, it is still under the threat of human activities because most individuals occurs along a popular hiking trail.

Taxonomic remarks: *Dryopteris nyngchiensis* is closely related to *D. sublacera*, from which it differs by having brown (vs. black) scales on rachis.

Voucher specimens: Taiwan: Nantou and Chiayi: Tatachia to Mt. Yu Front Peak Entrance, *Lu 22597* (TAIF); Tatachia through Mt. Yu Front Peak Entrance to Tiehshanlin, *Lu 27015* (TAIF).

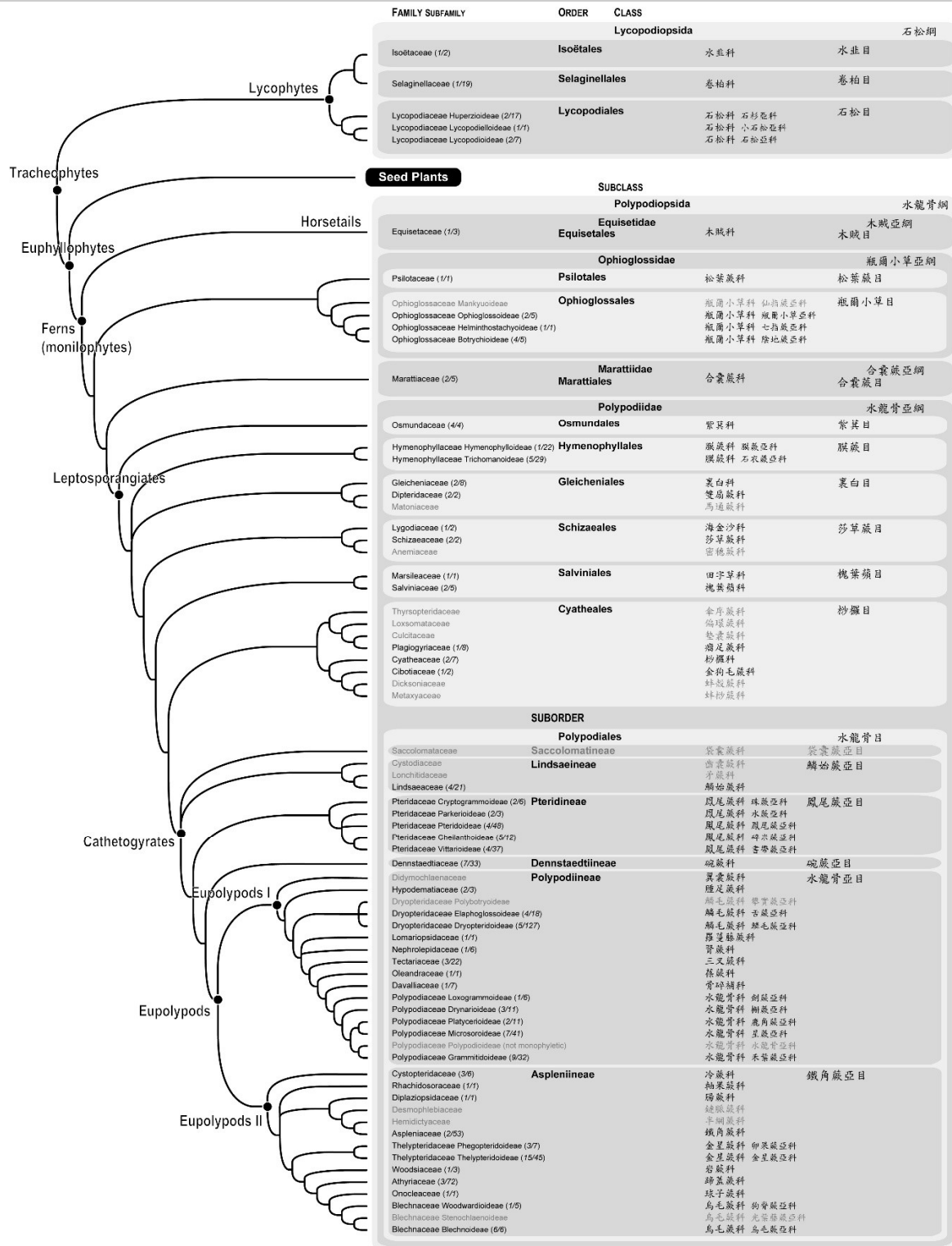


Fig. 2. Phylogenetic scheme of pteridophytes at the (sub)family and higher taxonomic levels. The family or deeper relationships follow PPG I (2016). The inter-subfamily relationships follow Field *et al.* (2016), Kim and Kim (2018), Ebihara *et al.* (2006), Schuettpelz *et al.* (2007), Liu *et al.* (2016), Schneider *et al.* (2004), Almeida *et al.* (2016), and de Gasper *et al.* (2017). The taxa indicated with gray names are absent in Taiwan. The numbers behind the (sub)families are generic/(infra)species taxa in the accepted name list. This figure is modified from the online resource of TPG discussion group (https://groups.google.com/forum/?utm_medium=email&utm_source=footer#!topic/taiwan-pteridophyte-group/KRZwqUke-CE; prepared by Li-Yaung Kuo).



4. *Equisetum praealtum* Raf., *Fl. Ludovic.*: 13. 1817, as 'prealta'. **Fig. 3A.**

Distribution: Widely distributed around East, Northeast, Central and Southwest Asia, and Central and North America. Introduced elsewhere as an ornamental and occasionally escaped and naturalized (Christenhusz *et al.*, 2019).

Conservation status: NA. This species is currently only found around an agricultural area and thus presumed as a naturalized species.

Taxonomic remarks: *Equisetum praealtum* is easily separable from the native *E. ramosissimum* by its much thicker (5–9 mm in diam.) and rarely branched main stems.

Voucher specimens: Taiwan: Taipei, Yangmingshan National Park, *Lu 17898* (TAIF).

5. *Haplopteris yakushimensis* C.W.Chen & Ebihara, *Phytotaxa* 156: 232. 2014. **Fig. 3C–F.**

Distribution: Japan (Yakushima Island).

Conservation status: DD. This species occurs in Taiwan mostly as independent gametophytes which are very difficult to discover and identify. Therefore, there are still insufficient data to estimate its exact distribution and population size. In addition, no obvious threat could be detected among currently known wild populations.

Taxonomic remarks: The sporophyte of *Haplopteris yakushimensis* is easily distinguished from other congeneric species in Taiwan by its 5–10 mm wide soft-chartaceous fronds with submarginal superficial sorus lines, while its gametophyte could only be identified by DNA sequences (Kuo *et al.*, 2017).

Voucher specimens: Taiwan: Ilan: Tsaopi, *Hsu 6391* (TAIF).

6. *Lepisorus contortus* (Christ) Ching, *Bull. Fan Mem. Inst. Biol.* 4(3): 90–91. 1933. **Fig. 7D–F.**

Distribution: Bhutan, China, India, and Nepal.

Conservation status: LC. This species is rather widespread around the northern and central alpine region of Taiwan, and currently no immediate threat could be detected.

Taxonomic remarks: Frond texture and shape of *Lepisorus contortus* are somewhat similar to that of *L. monilisorus* and *L. pseudoussuriensis* in Taiwan but the rhizome scales of *L. contortus* are bicolored with a broad dark central portion. *L. contortus* populations in Taiwan have been only found in rocky habitats at >2,800m mountain regions.

Voucher specimens: Taiwan: Nantou: Nengkao Cross-Ridge Historic Trail, *Kuo 3888* (TAIF), *Lu 12355* (TAIF); Mt. Shihmen, *Lu 6454* (TAIF). Taichung: Sumita shelter to Hsuehpei shelter, *Liu 8837* (TAIF); Mt. Hsueh Entrance to Sanliuchiu Shelter, *Lu 12058* (TAIF).

7. *Neolepisorus platyphyllus* (Tagawa) L.Y.Kuo, new combination in this study. **Fig. 7G–H.**

Distribution: Japan.

Conservation status: DD. There is no sufficient data about its current status in Taiwan.

Taxonomic remarks: Frond size of *Neolepisorus*

platyphyllus is similar to that of *N. ensatus* in Taiwan but the frond shape of *N. platyphyllus* tends to be ovate-oblong in contrast to the oblong frond in *N. ensatus*.

Voucher specimens: Taiwan: Miaoli: Mt. Chiali, *Hsu 505* (TAIF), *Hsu 506* (TAIF), *Lu 11877* (TAIF), *Lu 26757* (TAIF).

8. *Plagiogyria pycnophylla* (Kunze) Mett., *Abh. Senckenberg. Naturf. Ges.* 2: 272. 1858. **Fig. 3C–D.**

Distribution: Bhutan, China, India, Indonesia, Malaysia, Myanmar, Nepal, New Guinea, and Philippines

Conservation status: DD. The only record in Taiwan was made in 2007, and there is no sufficient data about its current situation.

Taxonomic remarks: The plant and frond size of *Plagiogyria pycnophylla* are similar to that of *P. glauca* in Taiwan, but the abaxial sides of frond laminae are green producing no white powders. Compared to *P. adnata*, *P. pycnophylla* has free pinnae with/without short stalks at its frond bases, and its rachises are obviously tetragonal distally.

Voucher specimens: Taiwan: Kaohsiung: Tengchih Forest Recreation Area, *Lu 15157* (TAIF).

9. *Polystichum mayebarae* Tagawa, *Acta Phytotax. Geobot.* 3(2): 91. 1934.

Distribution: China and Japan.

Conservation status: DD. This species is currently known from a single collection. More data are necessary toward an appropriate evaluation.

Taxonomic remarks: *Polystichum mayebarae* is closely related to *P. tsus-simense*, from which it could be diagnosed by the combination of brown to dark brown (vs. blackish brown) stipe and rachis scales and relatively short stipes (about half of lamina length or shorter).

Voucher specimens: Taiwan: Nantou: *Lu 31465* (TAIF).

10. *Pyrrosia assimilis* (Baker) Ching, *Bull. Chin. Bot. Soc.* 1(1): 49. 1935. **Fig. 7A–C.**

Distribution: China.

Conservation status: DD. This species is currently known from a single location. More data are necessary toward an appropriate evaluation.

Taxonomic remarks: *Pyrrosia assimilis* could be diagnosed from other congeneric species in Taiwan by the combination of linear-lanceolate sessile fronds with several rows of sori between midrib and margin and sterile parts covered with only one type of stellate hair the rays of which are straight and unequal in length.

Voucher specimens: Taiwan: Nantou: *Chang 7266* (TEIE), *Lu 29550* (TAIF).

11. *Salvinia cucullata* Bory ex Roxb., *Calcutta J. Nat. Hist.* 4: 470. 1844. **Fig. 3B.**

Distribution: Bangladesh Cambodia, Laos, India, Indochina, Malaysia, and Thailand. Possibly introduced elsewhere as an ornamental and occasionally escaped and naturalized.

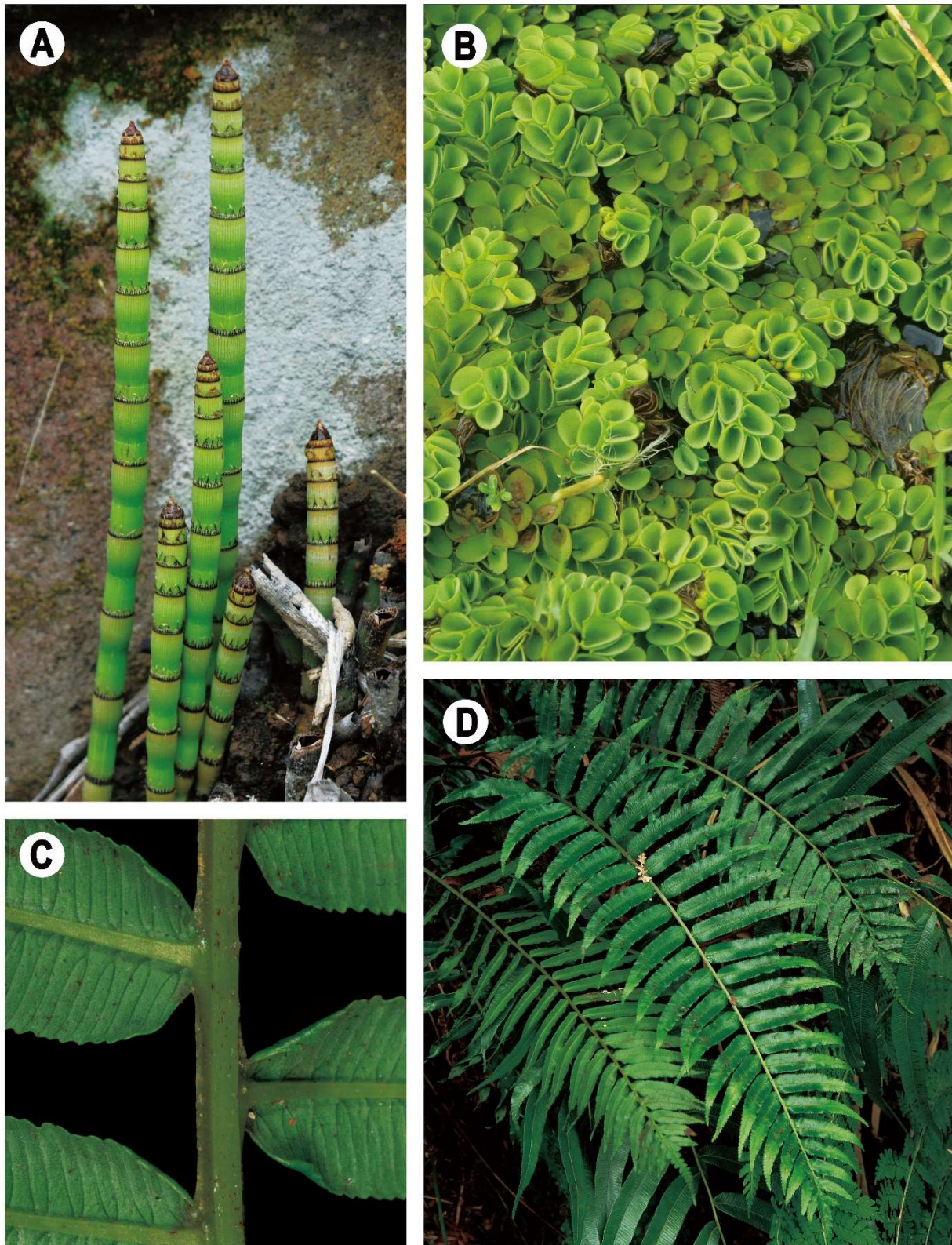


Fig. 3. Newly recorded pteridophyte taxa in Taiwan - Equisetaceae, Salviniaceae, and Plagiogyriaceae. **A.** *Equisetum praealtum* Raf., habit. **B.** *Salvinia cucullata* Bory ex Roxb., habit. **C–D.** *Plagiogyria pycnophylla* (Kunze) Mett., rachis abaxial view (C) and habit (D). (Photo credit by Pi-Fong Lu)

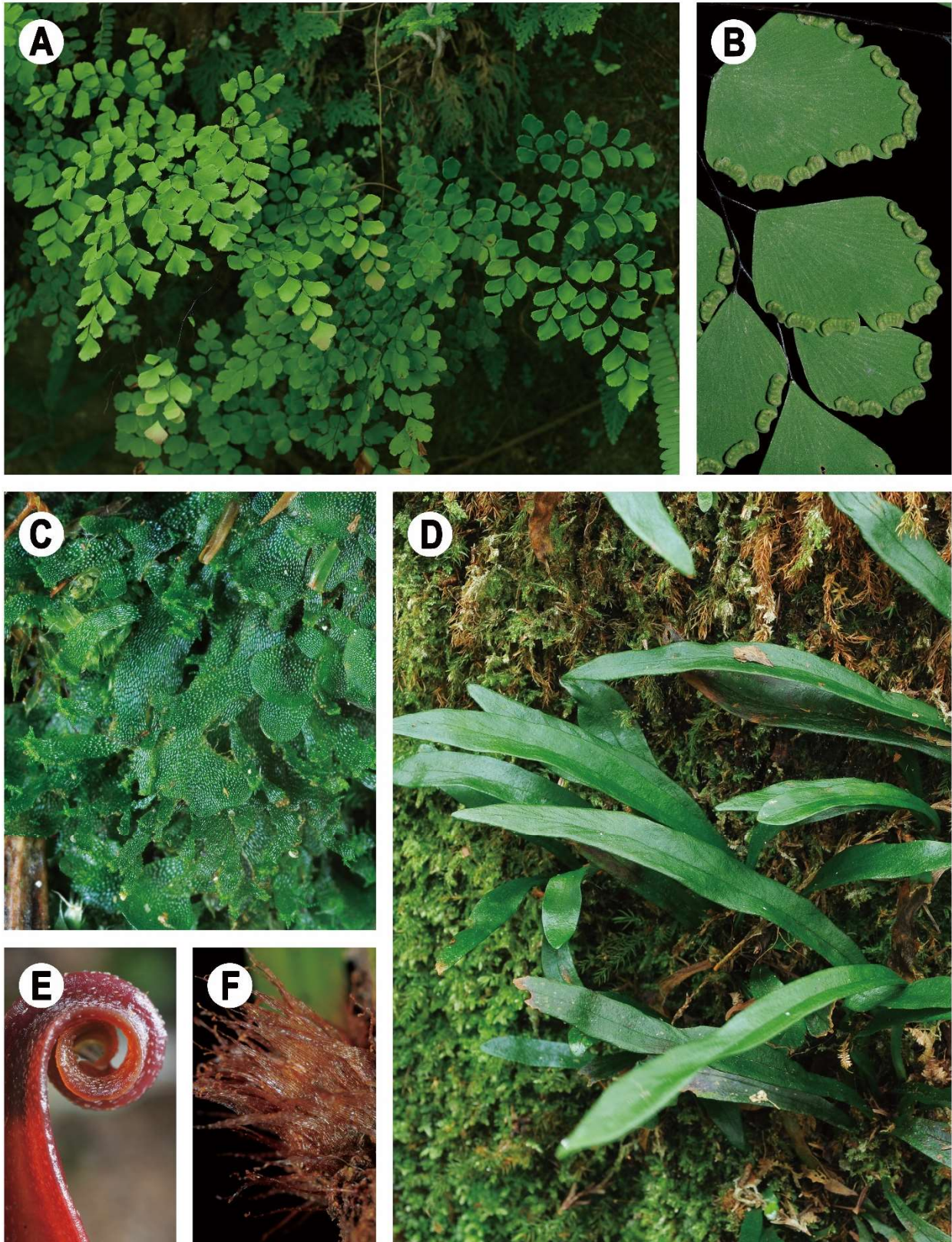


Fig. 4. Newly recorded pteridophyte taxa in Taiwan - Vittarioideae, Pteridaceae. **A–B.** *Adiantum tenerum* Sw., habit (A) and indusia (B). **C–F.** *Haplopteris yakushimensis* C.W.Chen & Ebihara, gametophytes with gemmae (C), habit (D), a red young leaf (E), and rhizome scales (F). (Photo credit by Pi-Fong Lu)

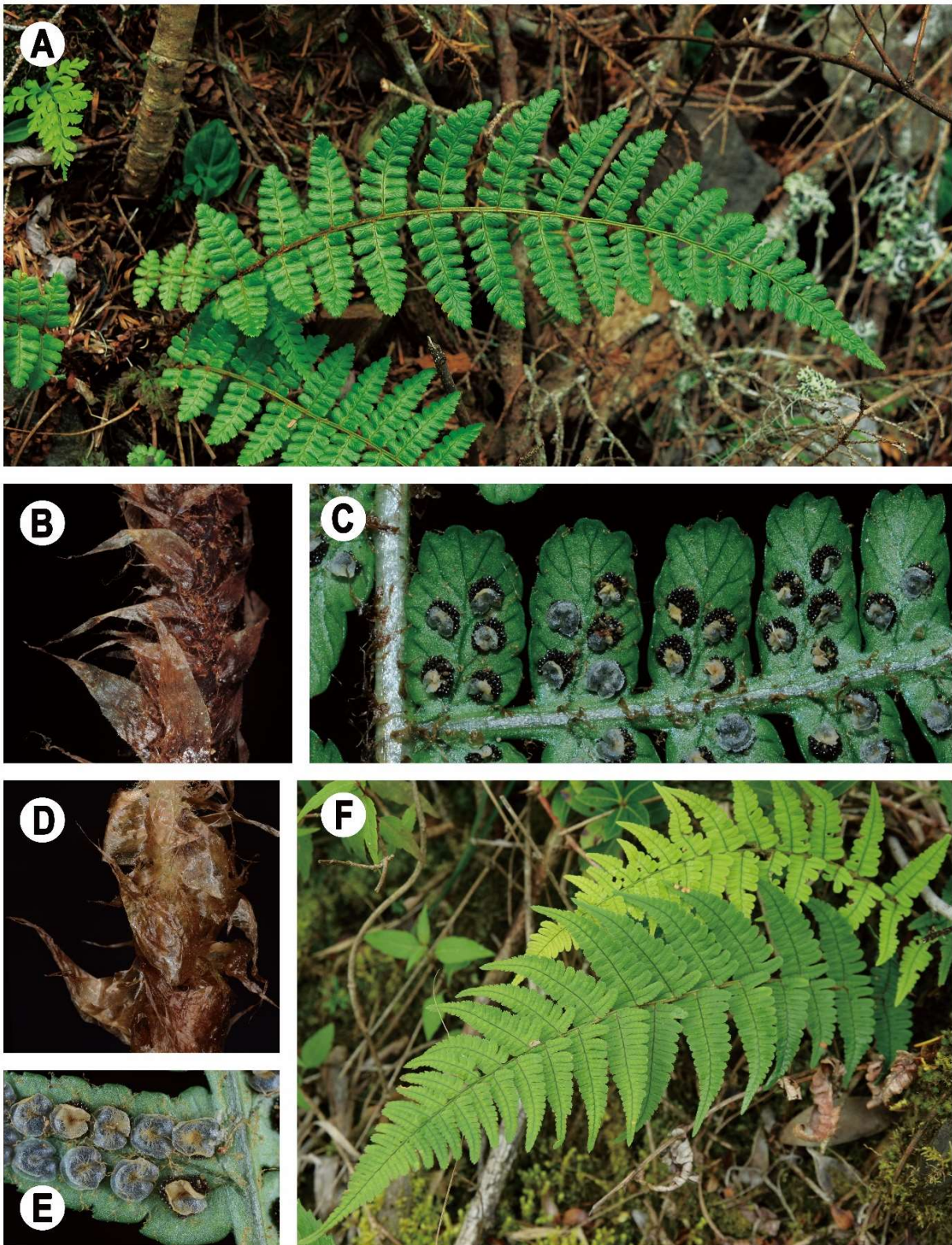


Fig. 5. Newly recorded pteridophyte taxa in Taiwan - Dryopteridaceae I. **A–C.** *Dryopteris acutodentata* Ching, habit (A), scales on stipe base (B), and indusia (C). **D–F.** *Dryopteris nyingchiensis* Ching, scales on stipe base (D), indusia (E), and habit (F). (Photo credit by Pi-Fong Lu)

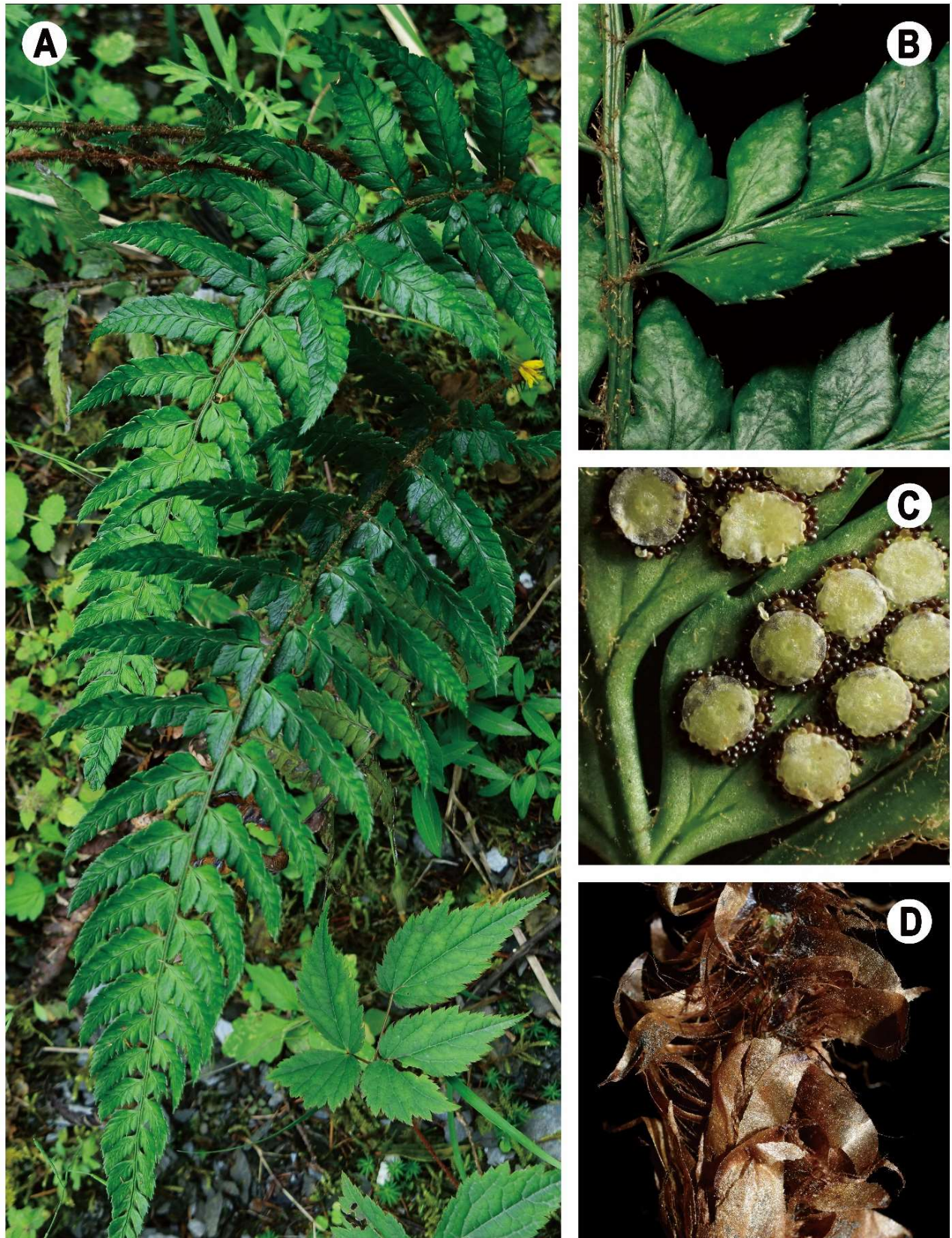


Fig. 6. Newly recorded pteridophyte taxa in Taiwan - Dryopteridaceae II. **A–D.** *Polystichum mayebarae* Tagawa, habit (A), rachis adaxial side (B), indusia (C), scales on stipe (D). (Photo credit by Pi-Fong Lu)

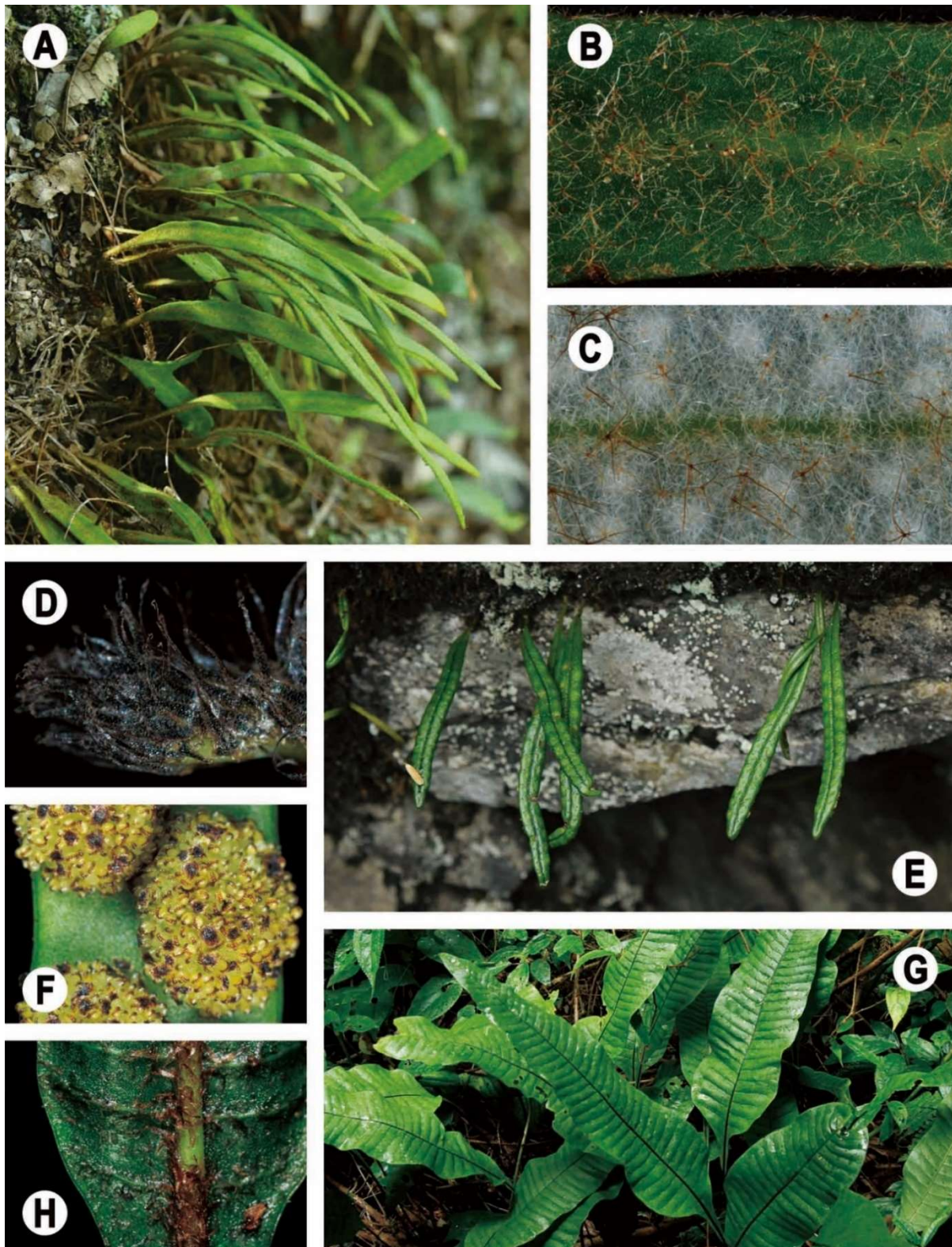


Fig. 7. Newly recorded pteridophyte taxa in Taiwan - Polypodiaceae. **A–C.** *Pyrrhosia assimilis* (Baker) Ching, habit (A), leaf adaxial side (B), leaf abaxial side (C). **D–F.** *Lepisorus contortus* (Christ) Ching, rhizome scales (D), habit (E), and sori (F). **G–H.** *Neolepisorus platyphyllus* (Tagawa) L.Y.Kuo, habit (G) and scales on a rachis base (H). [Photo credit by Pi-Fong Lu (A, C–G) and Ho-Ming Chang (B)]



Conservation status: NA. *Salvinia cucullata* is found only in an artificial pond and thus presumed as a naturalized species.

Taxonomic remarks: Float leaves of *Salvinia cucullata* are curved into a cup-like shape, and can be easily distinguish from that of other *Salvinia* species in Taiwan (i.e., *S. natans* and *S. molesta*).

Voucher specimens: Taiwan: Kaohsiung City: Weiwuying Metropolitan Park, Lu 29132 (TAIF).

Nomenclatural novelties

1. *Phlegmariurus salvinioides* (Herter) Ching; **Basionym:** *Urostachys salvinioides* Herter, Philipp. J. Sci. 22(1): 67. 1923. **Lectotype (here designated):** PHILIPPINES. Cagayan Prov., Musure, *H.M.Curran s.n.* (B, barcode: 20 011394).

Lycopodium salvinioides (Herter) Tagawa, Acta Phytotax. Geobot.

8(1): 20. 1939; Tsai & Shieh, Fl. Taiwan 2nd ed. 1: 39–40, 1994.

Huperzia salvinioides (Herter) Holub, Folia Geobot. Phytotax.

20(1): 76. 1985; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 83, 2002.

2. *Crepidomanes minutum* (Blume) K.Iwats. subsp. **proliferum** (Blume) T.C.Hsu, **comb. et stat. nov.**; **Basionym:** *Trichomanes proliferum* Blume, Enum. Pl. Javae 2: 224. 1828.

Crepidomanes minutum auct. non (Blume) K.Iwats., J. Fac. Sci.

Univ. Tokyo, Bot. 13(5): 524. 1985; Yang & Liu, Manu. Taiwan

Vasc. Pl. 6: 74–75, 2002, pro parte: Liu *et al.*, Fl. China 2–3: 98–

99, 2013, pro parte: Knapp, Index Ferns Fern All. Taiwan 49,

2014, pro parte.

Note: Based on the research of Nitta *et al.* (2011) we accept the whole *Crepidomanes minutum* complex as a polymorphic species. Although the global evolutionary history within the species is extremely complicated, we still prefer to recognize the two main lineages occurring in Taiwan as two infraspecific taxa for the usage of local researchers and amateurs considering their different morphological characteristics, habitat preferences and conservation status.

3. *Aleuritopteris henryi* (Christ) F.W.Li, **comb. nov.**; **Basionym:** *Cheilanthes henryi* Christ, Bull. Acad. Int. Géogr. Bot. 16(199–200–201): 133. 1906.

Mildella henryi (Christ) Hall, Amer. Fern J. 57: 129. 1967; Shieh,

Fl. Taiwan 2nd ed. 1: 216, 1994.

Cheilanthes nitidula Hook., Sp. Fil. 2. 112. 1852; Yang & Liu,

Manu. Taiwan Vasc. Pl. 6: 99, 2002; Zhang & Yatskiyevych, Fl.

China 2–3: 223–224, 2013; Knapp, Index Ferns Fern All. Taiwan

41, 2014.

Note: This treatment is based on unpublished phylogenetic data of M.D. Windham.

4. *Cyrtomium simadae* (Tagawa) Y.H.Chang, **comb. et stat. nov.**; **Basionym:** *Cyrtomium macrophyllum* (Makino) Tagawa var. *simadae* Tagawa, Acta Phytotax. Geobot. 3(2): 63. 1934, “Simadae”.

Cyrtomium yamamotoi auct. non Tagawa, Acta Phytotax. Geobot.

7(3): 187. 1938; Zhang & Barrington, Fl. China 2–3: 569, 2013.

Cyrtomium macrophyllum (Makino) Tagawa var. *acuminatum* auct.

non (Diels) Tagawa, Acta Phytotax. Geobot. 7(2): 78, 1938;

Wang & Shieh, Fl. Taiwan 2nd ed. 1: 314, 1994.

Polystichum acuminatum auct. non (Diels) C.M.Kuo, Taiwania 47(2):

172. 2002; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 129, 2002.

Note: This endemic taxon is recognized at specific rank as it shows clear morphological distinction from *C. macrophyllum*. Also see Knapp (2013) for the detailed discussion about its taxonomic history.

5. *Goniophlebium raishaense* (Rosenst.) L.Y.Kuo, **comb. nov.**; **Basionym:** *Polypodium raishaense* Rosenst., Hedwigia 56: 346. 1915.

Polypodiodes raishaensis (Rosenst.) S.G.Lu, Taiwania 50: 140.

2005; Lu & Hovenkamp, Fl. China 2–3: 801, 2013.

Goniophlebium niponicum auct. non (Mett.) Bedd., Handb. Suppl.

90. 1892; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 90–91, 2002.

Note: The present and next new combinations are necessary under the framework of PPG I (2016).

6. *Goniophlebium transpianense* (Yamam.) L.Y.Kuo, **comb. nov.**; **Basionym:** *Polypodium transpianense* Yamam., J. Soc. Trop. Agric. 3(3): 236. 1931.

Goniophlebium niponicum auct. non (Mett.) Bedd., Handb. Suppl.

90. 1892; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 90–91, 2002.

Polypodiodes niponica auct. non (Mett.) Ching, Acta Phytotax. Sin.

16(4): 27. 1978; Lu & Hovenkamp, Fl. China 2–3: 801, 2013.

7. *Lepidomicrosorium ningpoense* (Baker) L.Y.Kuo, **comb. nov.**; **Basionym:** *Polypodium ningpoense* Baker, Ann. Bot. (Oxford) 5(4): 474. 1891.

Microsorium buergerianum auct. non (Miq.) Ching, Bull. Fan Mem.

Inst. Biol. 4: 302. 1933; Shieh *et al.*, Fl. Taiwan 2nd ed. 1: 499, 1994.

Microsorium superficiale auct. non (Blume) Ching, Bull. Fan Mem.

Inst. Biol. 4: 299. 1933; Knapp, Index Ferns Fern All. Taiwan

112, 2014.

Lepidomicrosorium superficiale auct. non (Blume) Li Wang, Bot. J.

Linn. Soc. 162(1): 36. 2010; Zhang & Nootboom, Fl. China 2–

3: 830, 2013.

Microsorium brachylepis auct. non (Baker) Nakaike, Illus. Pterid.

Japan 2: 492. 1981; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 93, 2002.

Note: This name is reinstated to replace the species previously identified as *Lepidomicrosorium superficiale* (Blume) Li Wang or *L. buergerianum* (Miq.) Ching & K.H.Shing ex S.X.Xu in Taiwan. Neither of the type specimen of *L. superficiale* nor *L. buergerianum* could match the materials collected from Taiwan, and *Polypodium ningpoense* is the earliest available basionym with corresponding morphology.

8. *Leptochilus longissimus* (Blume) L.Y.Kuo, **comb. nov.**; **Basionym:** *Polypodium longissimum* Blume, Enum. Pl. Javae 2: 127. 1828.

Phymatosorus longissimus (Blume) Pic.Serm., Webbia 28: 459.

1973; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 95, 2002; Lu &

Nootboom, Fl. China 2–3: 828, 2013; Knapp, Index Ferns Fern

All. Taiwan 122, 2014.

Microsorium rubidum (Kunze) Copel., Gen. Fil. [Copeland] 197.

1947; Shieh *et al.*, Fl. Taiwan 2nd ed. 1: 502–504, 1994.

Note: New combinations of the present and following species are proposed on the basis of recent molecular phylogeny studies (Kreier *et al.*, 2008; Zhang *et al.*, 2019).



9. *Leptochilus nigrescens* (Blume) L.Y.Kuo, **comb. nov.**; **Basionym:** *Polypodium nigrescens* Blume, Enum. Pl. Javae 2: 126. 1828.
Phymatosorus membranifolius auct. non (R.Br.) S.G.Lu, Guihaia 19(1): 27. 1999; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 95, 2002; Lu & Nootboom, Fl. China 2-3: 828, 2013; Knapp, Index Ferns Fern All. Taiwan 122, 2014.
10. *Neolepisorus platyphyllus* (Tagawa) L.Y.Kuo, **comb. et stat. nov.**; **Basionym:** *Neolepisorus ensatus* (Thunb.) Ching var. *platyphyllus* Tagawa, J. Jap. Bot. 22(10-12): 162-163. 1948.
Note: This taxon is newly recorded in Taiwan by this study (other details see the above section).
11. *Oreogrammitis beddomeana* (Alderw.) T.C.Hsu, **comb. nov.**; **Basionym:** *Polypodium beddomeanum* Alderw., Bull. Jard. Bot. Buitenzorg Ser. 2, 28: 39. 1918.
Grammitis alepidota M.G.Price, Philippine Agriculturist 57: 34. 1973; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 70, 2002; Knapp, Index Ferns Fern All. Taiwan 85, 2014.
Radiogrammitis alepidota (M.G.Price) Parris, Gard. Bull. Singapore 58(2): 241. 2007; Moore & Parris, Fl. China 2-3: 840-841, 2013.
Note: Based on the phylogenetic relationship revealed by Sundue *et al.* (2014), we tentatively accept the broadly defined genus *Oreogrammitis* including former *Radiogrammitis* and *Themelium* species in order to maintain its monophyly. Necessary new combinations for the present and following seven species are hence proposed.
12. *Oreogrammitis blechnifrons* (Hayata) T.C.Hsu, **comb. et stat. nov.**; **Basionym:** *Polypodium decrescens* Christ var. *blechnifrons* Hayata, Icon. Pl. Formosan. 4: 245-247. 1914.
Themelium blechnifrons (Hayata) Parris, Kew Bull. 59(2): 224. 2004; Moore & Parris, Fl. China 2-3: 849, 2013.
Ctenopteris curtisii auct. non (Baker) Copel., Philipp. J. Sci. 81: 103. 1953; Shieh *et al.*, Fl. Taiwan 2nd ed. 1: 521-524, 1994; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 70, 2002.
Themelium curtisii auct. non (Baker) Parris, Kew Bull. 59(2): 225. 2004; Knapp, Index Ferns Fern All. Taiwan 86, 2014.
13. *Oreogrammitis ilanensis* (T.C.Hsu) T.C.Hsu, **comb. nov.**; **Basionym:** *Radiogrammitis ilanensis* T.C.Hsu in Knapp & Hsu, Ferns Fern All. Taiwan, Second Supplement: 40-41. 2017.
14. *Oreogrammitis moorei* (Parris & Ralf Knapp) T.C.Hsu, **comb. nov.**; **Basionym:** *Radiogrammitis moorei* Parris & Ralf Knapp, Fl. China 2-3: 842. 2013.
Grammitis fenicis auct. non Copel., Univ. Calif. Publ. Bot. 18: 224. 1942; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 70, 2002; Knapp, Index Ferns Fern All. Taiwan 86, 2014.
15. *Oreogrammitis setigera* (Blume) T.C.Hsu, **comb. nov.**; **Basionym:** *Polypodium setigerum* Blume, Enum. Pl. Javae 2: 123. 1828.
Grammitis intromissa (Christ) Parris, Fern Gaz. 12(3): 180. 1981; Shieh *et al.*, Fl. Taiwan 2nd ed. 1: 527, 1994; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 70-71, 2002; Knapp, Index Ferns Fern All. Taiwan 87, 2014.
Radiogrammitis setigera (Blume) Parris, Gard. Bull. Singapore 58(2): 244. 2007; Moore & Parris, Fl. China 2-3: 843, 2013.
16. *Oreogrammitis subnervosa* (T.C.Hsu) T.C.Hsu, **comb. nov.**; **Basionym:** *Radiogrammitis subnervosa* T.C.Hsu in Knapp & Hsu, Ferns Fern All. Taiwan, Second Supplement: 46-47. 2017.
17. *Oreogrammitis taiwanensis* (Parris & Ralf Knapp) T.C.Hsu, **comb. nov.**; **Basionym:** *Radiogrammitis taiwanensis* Parris & Ralf Knapp, Fl. China 2-3: 842. 2013.
Grammitis jagoriana auct. non (Mett. ex Kuhn) Tagawa, Acta Phytotax. Geobot. 10(4): 284. 1941; Shieh *et al.*, Fl. Taiwan 2nd ed. 1: 527-529, 1994; Knapp, Index Ferns Fern All. Taiwan 87, 2014.
Grammitis fenicis auct. non Copel., Univ. Calif. Publ. Bot. 18: 224. 1942; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 70, 2002.
18. *Oreogrammitis tenuisecta* (Blume) T.C.Hsu, **comb. nov.**; **Basionym:** *Polypodium tenuisectum* Blume, Enum. Pl. Javae 2: 134. 1828.
Ctenopteris tenuisecta (Blume) J.Sm., Hist. Fil. 185. 1875; Shieh *et al.*, Fl. Taiwan 2nd ed. 1: 525-526, 1994.
Grammitis tenuisecta (Blume) Ching, Bull. Fan Mem. Inst. Biol. Bot. 10: 241. 1941; Knapp, Index Ferns Fern All. Taiwan 89, 2014.
Themelium tenuisectum (Blume) Parris, Kew Bull. 52(3): 740. 1997; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 71, 2002. Moore & Parris, Fl. China 2-3: 849, 2013.
19. *Tomophyllum hayatae* (Masam.) T.C.Hsu, **comb. nov.**; **Basionym:** *Polypodium hayatae* Masam., J. Soc. Trop. Agric. 2(1): 31. 1930 [as “*hayatai*”].
Ctenopteris subfalcata auct. non (Blume) Kunze, Bot. Zeitung (Berlin) 6: 120. 1848; Shieh *et al.*, Fl. Taiwan 2nd ed. 1: 525, 1994; Yang & Liu, Taiwan Vasc. Pl. 6: 70, 2002.
Tomophyllum donianum auct. non (Spreng.) Fraser-Jenk. & Parris, Taxon. Revis. Indian Subcontinental Pteridophytes 75. 2008; Moore & Parris, Fl. China 2-3: 850, 2013; Knapp, Index Ferns Fern All. Taiwan 86, 2014.
Note: *Tomophyllum hayatae* is reinstated to replace the species previously identified as *T. donianum* in Taiwan. The former differs from the later by having deeper dissected pinnae, shorter and sparser lamina setae and much smaller rhizome scales that are glabrous or with only 1 or 2 apical hairs.
20. *Asplenium subtrialatum* (Seriz.) Y.H.Chang, **stat. nov.**; **Basionym:** *Asplenium trichomanes* L. var. *subtrialatum* Seriz., J. Jap. Bot. 45: 23. 1970.
Note: The present taxon is tentatively recognized at the specific rank because morphologically it shows clear distinction from *A. trichomanes*. However, further study might be necessary to clarify its relationship with *A. tripteropus*. This taxon was published from Taiwanese materials but ignored in both editions of Taiwan official floras.
21. *Amauropelta angustifrons* (Miq.) Y.H.Chang, **comb. nov.**; **Basionym:** *Aspidium angustifrons* Miq., Ann. Mus. Bot. Lugduno-Batavi 3: 178. 1867.
Thelypteris angustifrons (Miq.) Ching, Bull. Fan Mem. Inst. Biol.



Bot. 6: 318. 1936; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 111–112, 2002; Knapp, Index Ferns Fern All. Taiwan 155, 2014.
Parathelypteris angustifrons (Miq.) Ching, Acta Phytotax. Sin. 8(4): 302. 1963; Tsai & Shieh, Fl. Taiwan 2nd ed. 1: 386, 1994; Lin & Iwatsuki, Fl. China 2–3: 329, 2013.

Note: The treatments of the present and next taxa are based on unpublished DNA phylogenetic data of Y.H.Chang.

22. *Amauropelta beddomei* (Baker) Y.H.Chang, **comb. nov.**; **Basionym:** *Nephrodium beddomei* Baker in Hooker & Baker, Syn. Fil. 267. 1867.

Thelypteris beddomei (Baker) Ching, Bull. Fan Mem. Inst. Biol. Bot. 6: 308. 1936; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 112, 2002; Knapp, Index Ferns Fern All. Taiwan 155, 2014.

Parathelypteris beddomei (Baker) Ching, Acta Phytotax. Sin. 8(4): 302. 1963; Tsai & Shieh, Fl. Taiwan 2nd ed. 1: 388, 1994; Lin & Iwatsuki, Fl. China 2–3: 326–327, 2013.

23. *Amauropelta glanduligera* (Kunze) Y.H.Chang, **comb. nov.**; **Basionym:** *Aspidium glanduligerum* Kunze, Analecta Pteridogr. 44. 1837.

Thelypteris glanduligera (Kunze) Ching, Bull. Fan Mem. Inst. Biol. Bot. 6: 320. 1936; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 112, 2002; Knapp, Index Ferns Fern All. Taiwan 155–156, 2014.

Parathelypteris glanduligera (Kunze) Ching, Acta Phytotax. Sin. 8(4): 301. 1963. Tsai & Shieh, Fl. Taiwan 2nd ed. 1: 391, 1994; var. *glanduligera*, Lin & Iwatsuki, Fl. China 2–3: 329–330, 2013.

24. *Christella ×acuminatoides* (W.C.Shieh & J.L.Tsai) Y.H.Chang, **comb. et stat. nov.**; **Basionym:** *Cyclosorus acuminatus* nothovar. *×acuminatoides* W.C.Shieh & J.L.Tsai, J. Sci. Engin. 24: 8. 1987.

Note: This taxon was published from Taiwan and also recorded in Fl. Taiwan, 2nd edition (Huang, 1994) as *Cyclosorus acuminatus* var. *×acuminatoides*. New combinations of the present and following two taxa are necessary under the framework of PPG I (2016).

25. *Christella ×intermedius* (W.C.Shieh & J.L.Tsai) Y.H.Chang, **comb. nov.**; **Basionym:** *Cyclosorus ×intermedius* W.C.Shieh & J.L.Tsai, J. Sci. Engin. 24: 8. 1987.

Note: This taxon was published from Taiwan and also recorded in Fl. Taiwan 2nd edition (Huang, 1994) as *Cyclosorus ×intermedius*.

26. *Christella parasitica* (L.) H.Lév. ex Y.H.Chang, **comb. nov.**; **Basionym:** *Polypodium parasiticum* L., Sp. Pl. 2: 1090, 1753.

Cyclosorus parasiticus (L.) Farw., Amer. Midl. Naturalist 12: 259. 1931, nom. illeg.; Tsai & Shieh, Fl. Taiwan 2nd ed. 1: 374, 1994; Yang & Liu, Manu. Taiwan Vasc. Pl. 6: 108–109, 2002; Knapp, Index Ferns Fern All. Taiwan 56, 2014; Lin et al., Fl. China 2–3: 379–380, 2013.

Note: *Christella parasitica* (L.) H.Lév. is thought to be an invalid combination made by H.Lévillé in 1915 due to the omission of the original author (see Tropicos: <http://www.tropicos.org/Name/26600091>). For this reason, a new combination for this species into genus *Christella* is remade in this article.

Taiwanese pteridophyte accepted checklist
 (endemic^{EN}, naturalized^{NZ}, otherwise indigenous)

Lycopodiopsida 石松綱

Isoëtales 水韭目

Isoëtaceae 水韭科

Isoëtes 水韭屬

Isoëtes taiwanensis DeVol var. *taiwanensis* 臺灣水韭^{EN} (Fig. 1A)

Isoëtes taiwanensis DeVol var. *kinmenensis* F.Y.Lu, H.H.Chen & Y.L.Hsueh 金門水韭^{EN}

Lycopodiales 卷柏目

Selaginellaceae 卷柏科

Selaginella 卷柏屬

Selaginella aristata Spring 膜葉卷柏

Selaginella boninensis Baker 小笠原卷柏

Selaginella ciliaris (Retz.) Spring 緣毛卷柏

Selaginella delicatula (Desv. ex Poir.) Alston 全緣卷柏

Selaginella devolii H.M.Chang, P.F.Lu & W.L.Chiou 棟氏卷柏^{EN}

Selaginella doederleinii Hieron. subsp. *doederleinii* 生根卷柏

Selaginella doederleinii Hieron. subsp. *trachyphylla* (Warb.) X.C.Zhang 粗葉卷柏

Selaginella helvetica (L.) Spring subsp. *pseudonipponica* (Tagawa) H.M.Chang, W.L.Chiou & J.C.Wang 擬日本卷柏

Selaginella heterostachys Baker 姬卷柏

Selaginella involvens (Sw.) Spring 密葉卷柏

Selaginella labordei Hieron. ex Christ 玉山卷柏

Selaginella lutchuensis Koidz. 琉球卷柏

Selaginella moellendorffii Hieron. 異葉卷柏

Selaginella nipponica Franch. & Sav. 日本卷柏

Selaginella remotifolia Spring 疏葉卷柏

Selaginella repanda (Desv. ex Poir.) Spring 高雄卷柏

Selaginella stauntoniana Spring 擬密葉卷柏

Selaginella tamariscina (P.Beauv.) Spring 萬年松

Selaginella uncinata (Desv. ex Poir.) Spring 翠雲草^{NZ}

Lycopodiaceae 石松科

Huperzioidae 石杉亞科

Huperzia 石杉屬

Huperzia emeiensis (Ching & H.S.Kung) Ching & H.S.Kung 峨眉石杉

Huperzia herteriana (Kümmerle) T.Sen & U.Sen 錫金石杉

Huperzia liangshanica (H.S.Kung) Ching & H.S.Kung 涼山石杉

Huperzia quasipolytrichoides (Hayata) Ching 反捲葉石杉

Huperzia selago (L.) Bernh. ex Schrank & Mart. 小杉葉石杉



Huperzia serrata (Thunb.) Trevis. 千層塔
Huperzia somae (Hayata) Ching 相馬氏石杉
Phlegmariurus 馬尾杉屬
Phlegmariurus carinatus (Desv. ex Poir.) Ching 覆葉
 馬尾杉
Phlegmariurus changii T.Y.Hsieh 張氏馬尾杉^{EN}
Phlegmariurus cryptomerinus (Maxim.) Satou 柳杉葉
 馬尾杉
Phlegmariurus cunninghamioides (Hayata) Ching 寬葉
 馬尾杉^{EN}
Phlegmariurus fargesii (Herter) Ching 銳葉馬尾杉
Phlegmariurus fordii (Baker) Ching 福氏馬尾杉
Phlegmariurus phlegmaria (L.) Holub 垂枝馬尾杉
Phlegmariurus salvinioides (Herter) Ching 小垂枝馬
 尾杉
Phlegmariurus sieboldii (Miq.) Ching 鱗葉馬尾杉
Phlegmariurus squarrosus (G.Forst.) Á.Löve & D.Löve
 杉葉馬尾杉

Lycopodielloideae 小石松亞科

Lycopodiella 小石松屬

Lycopodiella cernua (L.) Pic.Serm. 過山龍

Lycopodiaceae 石松亞科

Lycopodium 木賊葉石松屬

Lycopodium casuarinoides (Spring) Holub ex
 R.D.Dixit 木賊葉石松

Lycopodium 石松屬

Lycopodium annotinum L. 杉葉蔓石松

Lycopodium clavatum L. 石松

Lycopodium complanatum L. 地刷子

Lycopodium obscurum L. 玉柏

Lycopodium veitchii Christ 玉山石松

Polypodiopsida 水龍骨綱

Equisetidae 木賊亞綱

Equisetales 木賊目

Equisetaceae 木賊科

Equisetum 木賊屬

Equisetum arvense L. 問荊^{NZ}

Equisetum praealtum Raf. 大木賊^{NZ} (Fig. 3A)

Equisetum ramosissimum Desf. 木賊

Ophioglossidae 瓶爾小草亞綱

Psilotales 松葉蕨目

Psilotaceae 松葉蕨科

Psilotum 松葉蕨屬

Psilotum nudum (L.) P.Beauv. 松葉蕨

Ophioglossales 瓶爾小草目

Ophioglossaceae 瓶爾小草科

Ophioglossoidae 瓶爾小草亞科

Ophioderma 帶狀瓶爾小草屬

Ophioderma pendulum (L.) C.Presl 帶狀瓶爾小草

Ophioglossum 瓶爾小草屬

Ophioglossum austroasiaticum M. Nishida 高山瓶爾
 小草

Ophioglossum parvifolium Grev. & Hook. 小葉瓶爾小草

Ophioglossum petiolatum Hook. 銳頭瓶爾小草

Ophioglossum thermale Kom. 狹葉瓶爾小草

Helminthostachyoideae 七指蕨亞科

Helminthostachys 七指蕨屬

Helminthostachys zeylanica (L.) Hook. 錫蘭七指蕨

Botrychioideae 陰地蕨亞科

Botrychium 陰地蕨屬

Botrychium lunaria (L.) Sw. 扇羽陰地蕨

Botrypus 蕨其屬

Botrypus virginianus (L.) Michx. 蕨其

Japanobotrychium 日本陰地蕨屬

Japanobotrychium lanuginosum (Wall. ex Hook. &
 Grev.) Nishida ex Tagawa 阿里山陰地蕨

Sceptridium 大陰地蕨屬

Sceptridium formosanum (Tagawa) Holub 臺灣大陰地蕨

Sceptridium ternatum (Thunb.) Lyon 大陰地蕨

Marattiidae 合囊蕨亞綱

Marattiales 合囊蕨目

Marattiaceae 合囊蕨科

Angiopteris 觀音座蓮屬

Angiopteris evecta (G.Forst.) Hoffm. 蘭嶼觀音座蓮

Angiopteris lygodiifolia Rosenst. 觀音座蓮

Angiopteris somae (Hayata) Makino & Nemoto 臺灣觀
 音座蓮^{EN} (Fig. 1H)

Angiopteris ×ittoi (W.C.Shieh) J.M.Camus 伊藤氏觀音
 座蓮^{EN}

Note: = *A. lygodiifolia* × *A. somae*

Ptisana 粒囊蕨屬

Ptisana pellucida (C.Presl) Murdock 粒囊蕨

Polyodiidae 水龍骨亞綱

Osmundales 紫萁目

Osmundaceae 紫萁科

Claytosmunda 絨紫萁屬

Claytosmunda claytoniana (L.) Metzgar & Rouhan 絨
 紫萁

Osmunda 紫萁屬

Osmunda japonica Thunb. 紫萁

Osmundastrum 假紫萁屬

Osmundastrum cinnamomeum (L.) C.Presl 分株假紫萁

Plenasium 革葉紫萁屬

Plenasium banksiifolium (C.Presl) C.Presl 粗齒革葉紫萁

Hymenophyllales 膜蕨目

Hymenophyllaceae 膜蕨科

**Hymenophylloideae 膜蕨亞科***Hymenophyllum* 膜蕨屬

- Hymenophyllum acutum* (C.Presl) Ebihara & K.Iwats. 稀毛毛葉蕨
Hymenophyllum badium Hook. & Grev. 落蕨
Hymenophyllum barbatum (Bosch) Baker 華東膜蕨
Hymenophyllum blandum Racib. 爪哇厚壁蕨
Hymenophyllum denticulatum Sw. 厚壁蕨
Hymenophyllum devolii M.J.Lai 棣氏膜蕨^{EN} (Fig. 1B)
Hymenophyllum digitatum (Sw.) Fosberg 指裂細口團扇蕨
Hymenophyllum fimbriatum J.Sm. 叢葉落蕨
Hymenophyllum holochilum (Bosch) C.Chr. 南洋厚壁蕨
Hymenophyllum javanicum Spreng. 爪哇落蕨
Hymenophyllum nitidulum (Bosch) Ebihara & K.Iwats. 細口團扇蕨
Hymenophyllum okadae Masam. 青綠膜蕨
Hymenophyllum oligosorum Makino 長毛落蕨
Hymenophyllum pallidum (Blume) Ebihara & K.Iwats. 毛葉蕨
Hymenophyllum palmatifidum (Müll.Berol.) Ebihara & K.Iwats. 毛緣細口團扇蕨
Hymenophyllum paniculiflorum C.Presl 頂囊落蕨
Hymenophyllum pilosissimum C.Chr. 星毛膜蕨
Hymenophyllum polyanthos (Sw.) Sw. 細葉落蕨
Hymenophyllum productum Kunze 南洋落蕨
Hymenophyllum semialatum T.C.Hsu 半翼柄落蕨^{EN}
Hymenophyllum simonsianum Hook. 寬片膜蕨
Hymenophyllum taiwanense (Tagawa) C.V.Morton 臺灣落蕨^{EN}

Trichomanoideae 石衣蕨亞科*Abrodictyum* 長片蕨屬

- Abrodictyum clathratum* (Tagawa) Ebihara & K.Iwats. 窗格長片蕨
Abrodictyum cumingii C.Presl 長片蕨
Abrodictyum obscurum (Blume) Ebihara & K.Iwats. 線片長片蕨

Callistopteris 毛桿蕨屬

- Callistopteris apiifolia* (C.Presl) Copel. 毛桿蕨
Cephalomanes 厚葉蕨屬
Cephalomanes javanicum (Blume) C.Presl 菲律賓厚葉蕨
Crepidomanes 假脈蕨屬

- Crepidomanes bilabiatum* (Nees & Blume) Copel. 圓唇假脈蕨
Crepidomanes bipunctatum (Poir.) Copel. 南洋假脈蕨
Crepidomanes grande (Copel.) Ebihara & K.Iwats. 大球桿毛蕨
Crepidomanes humile (G.Forst.) Bosch 厚邊蕨
Crepidomanes kurzii (Bedd.) Tagawa & K.Iwats. 柯氏假脈蕨

- Crepidomanes latealatum* (Bosch) Copel. 翅柄假脈蕨
Crepidomanes latemarginale (D.C.Eaton) Copel. 闊邊假脈蕨

- Crepidomanes makinoi* (C.Chr.) Copel. 變葉假脈蕨
Crepidomanes minutum (Blume) K.Iwats. subsp. *minutum* 團扇蕨

- Crepidomanes minutum* (Blume) K.Iwats. subsp. *proliferum* (Blume) T.C.Hsu 長生團扇蕨

- Crepidomanes parvifolium* (Baker) K.Iwats. 小葉假脈蕨
Crepidomanes rupicola (Racib.) Copel. 石生假脈蕨

- Crepidomanes schmidtianum* (Zenker ex Taschner) K.Iwats. var. *latifrons* (Bosch) K.Iwats. 寬葉假脈蕨

- Crepidomanes thysanostomum* (Makino) Ebihara & K.Iwats. 球桿毛蕨

- Crepidomanes vitiense* (Baker) Bostock 斐濟假脈蕨

Didymoglossum 單葉假脈蕨屬

- Didymoglossum beccarianum* (Cesati) Senterre & Rouhan 短柄單葉假脈蕨

- Didymoglossum bimarginatum* (Bosch) Ebihara & K.Iwats. 叉脈單葉假脈蕨

- Didymoglossum sublimbatum* (Müll.Berol.) Ebihara & K.Iwats. 亞緣單葉假脈蕨

- Didymoglossum tahitense* (Nadeaud) Ebihara & K.Iwats. 盾形單葉假脈蕨

Vandenboschia 瓶蕨屬

- Vandenboschia auriculata* (Blume) Copel. 瓶蕨

- Vandenboschia kalamocarpa* (Hayata) Ebihara 管苞瓶蕨

- Vandenboschia maxima* (Blume) Copel. 大葉瓶蕨

- Vandenboschia striata* (D.Don) Ebihara 南海瓶蕨

- Vandenboschia subclathrata* K.Iwats. 亞窗格狀瓶蕨

Gleicheniales 裏白目**Gleicheniaceae 裏白科***Dicranopteris* 芒萁屬

- Dicranopteris linearis* (Burm.f.) Underw. 芒萁

- Dicranopteris subpectinata* (Christ) C.M.Kuo 賽芒萁

- Dicranopteris taiwanensis* Ching & P.S.Chiu 臺灣芒萁

- Dicranopteris tetraphylla* (Rosenst.) C.M.Kuo 蔓芒萁

Diplopterygium 裏白屬

- Diplopterygium blotianum* (C.Chr.) Nakai 逆羽裏白

- Diplopterygium chinensis* (Rosenst.) DeVol 中華裏白

- Diplopterygium glaucum* (Thunb. ex Hoult.) Nakai 裏白

- Diplopterygium laevissimum* (Christ) Nakai 鱗芽裏白

Dipteridaceae 雙扇蕨科*Cheiropleuria* 燕尾蕨屬

- Cheiropleuria integrifolia* (D.C.Eaton ex Hook.) M.Kato, Y.Yatabe, Sahashi & N.Murak. 燕尾蕨

Dipteris 雙扇蕨屬

- Dipteris conjugata* Reinw. 雙扇蕨

Schizaeales 莎草蕨目**Lygodiaceae 海金沙科**

**Lygodium** 海金沙屬

- Lygodium japonicum* (Thunb.) Sw. 海金沙
Lygodium microphyllum (Cav.) R.Br. 小葉海金沙

Schizaeaceae 莎草蕨科

- Actinostachys* 叢穗莎草蕨屬
Actinostachys digitata (L.) Wall. 叢穗莎草蕨
Schizaea 莎草蕨屬
Schizaea dichotoma (L.) Sm. 分枝莎草蕨

Salviniales 槐葉蘋目**Marsileaceae** 田字草科

- Marsilea* 田字草屬
Marsilea minuta L. 田字草

Salviniaceae 槐葉蘋科

- Azolla* 滿江紅屬
Azolla caroliniana Willd. 卡州滿江紅^{NZ}
Azolla pinnata R.Br. 滿江紅
Salvinia 槐葉蘋屬
Salvinia cucullata Bory ex Roxb. 酒杯槐葉蘋^{NZ} (Fig. 3B)
Salvinia molesta D.S.Mitch. 人厭槐葉蘋^{NZ}
Salvinia natans (L.) All. 槐葉蘋

Cyatheales 杪欏目**Plagiogyriaceae** 瘤足蕨科

- Plagiogyria* 瘤足蕨屬
Plagiogyria adnata (Blume) Bedd. 瘤足蕨
Plagiogyria euphlebica (Kunze) Mett. 華中瘤足蕨
Plagiogyria falcata Copel. 倒葉瘤足蕨
Plagiogyria glauca (Blume) Mett. 臺灣瘤足蕨
Plagiogyria japonica Nakai 華東瘤足蕨
Plagiogyria koidzumii Tagawa 小泉氏瘤足蕨
Plagiogyria pycnophylla (Kunze) Mett. 密葉瘤足蕨 (Fig. 3C–D)
Plagiogyria stenoptera (Hance) Diels 耳形瘤足蕨

Cyatheaceae 杪欏科

- Alsophila* 杪欏屬
Alsophila denticulata Baker 韓氏杪欏
Alsophila fenicis (Copel.) C.Chr. 蘭嶼杪欏
Alsophila loheri (Christ) R.M.Tryon 南洋杪欏
Alsophila metteniana Hance 小黑杪欏
Alsophila podophylla Hook. 鬼杪欏
Alsophila spinulosa (Wall. ex Hook.) R.M.Tryon 臺灣杪欏

Sphaeropteris 筆筒樹屬

- Sphaeropteris lepifera* (J.Sm. ex Hook.) R.M.Tryon 筆筒樹

Cibotiaceae 金狗毛蕨科

- Cibotium* 金狗毛蕨屬
Cibotium barometz (L.) J.Sm. 金狗毛蕨
Cibotium taiwanense C.M.Kuo 臺灣金狗毛蕨^{EN}

Polypodiales 水龍骨目**Lindsaeaceae** 鱗始蕨科*Lindsaea* 鱗始蕨屬

- Lindsaea bonii* Christ 海島鱗始蕨
Lindsaea chienii Ching 錢氏鱗始蕨
Lindsaea cultrata (Willd.) Sw. 網脈鱗始蕨
Lindsaea ensifolia Sw. 箭葉鱗始蕨
Lindsaea heterophylla Dryand. 異葉鱗始蕨
Lindsaea javanensis Blume 爪哇鱗始蕨
Lindsaea kawabatae Sa.Kurata 細葉鱗始蕨
Lindsaea lucida Blume 方柄鱗始蕨
Lindsaea yaeyamensis Tagawa 攀緣鱗始蕨
Lindsaea obtusa Hook. 鈍齒鱗始蕨
Lindsaea orbiculata (Lam.) Mett. ex Kuhn 圓葉鱗始蕨

Odontosoria 烏蕨屬

- Odontosoria biflora* (Kaulf.) C.Chr. 闊片烏蕨
Odontosoria chinensis (L.) J.Sm. 烏蕨
Odontosoria gracilis (Tagawa) Ralf Knapp 小烏蕨
Odontosoria biflora (Kaulf.) C.Chr. × *O. chinensis* (L.) J.Sm. 闊片烏蕨 × 烏蕨
Odontosoria chinensis (L.) J.Sm. × *O. gracilis* (Tagawa) Ralf Knapp 烏蕨 × 小烏蕨

Osmolindsaea 香鱗始蕨屬

- Osmolindsaea japonica* (Baker) Lehtonen & Christenh. 日本香鱗始蕨

- Osmolindsaea odorata* (Roxb.) Lehtonen & Christenh. 香鱗始蕨

- Osmolindsaea* × *yakushimensis* Ebihara & Nakato 屋久香鱗始蕨

Note: = *O. japonica* × *O. odorata*.

Tapeinidium 達邊蕨屬

- Tapeinidium biserratum* (Blume) Alderw. 二羽達邊蕨

- Tapeinidium pinnatum* (Cav.) C.Chr. 達邊蕨

Pteridaceae 鳳尾蕨科**Cryptogrammoideae** 珠蕨亞科*Coniogramme* 鳳了蕨屬

- Coniogramme fraxinea* (D.Don) Fée ex Diels 全緣鳳了蕨

- Coniogramme intermedia* Hieron. 華鳳了蕨

- Coniogramme japonica* (Thunb.) Diels 日本鳳了蕨

- Coniogramme procera* (Wall.) Fée 高山鳳了蕨

Cryptogramma 珠蕨屬

- Cryptogramma brunoniana* Wall. ex Hook. & Grev. 高山珠蕨

- Cryptogramma stelleri* (S.G.Gmel.) Prantl 疏葉珠蕨

Parkerioideae 水蕨亞科*Acrostichum* 鹵蕨屬

- Acrostichum aureum* L. 鹵蕨

Ceratopteris 水蕨屬

- Ceratopteris gaudichaudii* Brongn. var. *vulgaris*



Masuyama & Watano 北方水蕨
Ceratopteris thalictroides (L.) Brongn. 水蕨
Pteridoideae 鳳尾蕨亞科
Anogramma 翠蕨屬
Anogramma leptophylla (L.) Link 翠蕨
Onychium 金粉蕨屬
Onychium japonicum (Thunb.) Kunze 日本金粉蕨
Onychium lucidum (D.Don) Spreng. 高山金粉蕨
Onychium siliculosum (Desv.) C.Chr. 金粉蕨
Pityrogramma 粉葉蕨屬
Pityrogramma calomelanos (L.) Link 粉葉蕨^{NZ}
Pteris 鳳尾蕨屬
Pteris angustipinna Tagawa 細葉鳳尾蕨^{EN}
Pteris arisanensis Tagawa 阿里山鳳尾蕨
Pteris bella Tagawa 長柄鳳尾蕨
Pteris biaurita L. 弧脈鳳尾蕨
Pteris cadieri Christ 卡氏鳳尾蕨
Pteris cretica L. 大葉鳳尾蕨
Pteris dactylina Hook. 掌鳳尾蕨
Pteris deltodon Baker 岩鳳尾蕨
Pteris dimorpha Copel. var. *dimorpha* 二形鳳尾蕨
Pteris dimorpha Copel. var. *metagrevilleana* Y.S.Chao, H.Y.Liu & W.L.Chiou 擬翅柄鳳尾蕨
Pteris dimorpha Copel. var. *prolongata* Y.S.Chao, H.Y.Liu & W.L.Chiou 尾葉鳳尾蕨
Pteris dispar Kunze 天草鳳尾蕨
Pteris edanyoi Copel. 耶氏鳳尾蕨
Pteris ensiformis Burm.f. 箭葉鳳尾蕨
Pteris esquirolii Christ 闊葉鳳尾蕨
Pteris fauriei Hieron. var. *fauriei* 傅氏鳳尾蕨
Pteris fauriei Hieron. var. *minor* Hieron. 小傅氏鳳尾蕨
Pteris formosana Baker 臺灣鳳尾蕨
Pteris grevilleana forma *grevilleana* 翅柄鳳尾蕨
Pteris grevilleana forma *ornata* (Alderw.) Y.S.Chao, H.Y.Liu & W.L.Chiou 白斑翅柄鳳尾蕨
Pteris incurvata Y.S.Chao, H.Y.Liu & W.L.Chiou 彎羽鳳尾蕨^{EN}
Pteris kawabatae Sa.Kurata 無柄鳳尾蕨
Pteris kidoi Sa.Kurata 城戶氏鳳尾蕨
Pteris latipinna Y.S.Chao & W.L.Chiou 寬羽鳳尾蕨^{EN}
Pteris longipes D.Don 蓬萊鳳尾蕨
Pteris longipinna Hayata 長葉鳳尾蕨^{EN}
Pteris multifida Poir. 鳳尾蕨
Pteris nipponica W.C.Shieh 日本鳳尾蕨^{NZ}
Pteris venusta Kunze 爪哇鳳尾蕨
Pteris perplexa Y.S.Chao, H.Y.Liu & W.L.Chiou 變葉鳳尾蕨
Pteris rugosifolia Y.S.Chao 皺葉鳳尾蕨^{EN}
Pteris ryukyuensis Tagawa 琉球鳳尾蕨
Pteris scabristipes Tagawa 紅柄鳳尾蕨^{EN}

Pteris semipinnata L. 半邊羽裂鳳尾蕨
Pteris setulosocostulata Hayata 有刺鳳尾蕨
Pteris subesquirolii Y.S.Chao 擬闊葉鳳尾蕨
Pteris terminalis Wall. ex J.Agardh var. *fauriei* (Christ) Ebihara & Nakato 溪鳳尾蕨
Pteris tokioi Masam. 鈴木氏鳳尾蕨
Pteris tripartita Sw. 三腳鳳尾蕨
Pteris vittata L. 鱗蓋鳳尾蕨
Pteris wallichiana J.Agardh 瓦氏鳳尾蕨
Pteris wulaiensis C.M.Kuo 烏來鳳尾蕨^{EN}
Pteris × *namegatae* Sa.Kurata 行方氏鳳尾蕨
 Note: = *P. multifida* × *P. ryukyuensis*

Cheilanthoideae 粉背蕨亞科

Aleuritopteris 粉背蕨屬
Aleuritopteris agetae Saiki 深山粉背蕨^{EN}
Aleuritopteris argentea (S.G.Gmel.) Fée 長柄粉背蕨
Aleuritopteris formosana (Hayata) Tagawa 臺灣粉背蕨
Aleuritopteris henryi (Christ) F.W.Li 亨氏擬早蕨
Aleuritopteris krameri (Franch. & Sav.) Ching 克氏粉背蕨
Aleuritopteris subargentea Ching 擬長柄粉背蕨
Cheilanthes 碎米蕨屬
Cheilanthes chusana Hook. 細葉碎米蕨
Cheilanthes nudiuscula (R.Br.) T.Moore 毛碎米蕨
Cheilanthes tenuifolia (Burm.f.) Sw. 薄葉碎米蕨
Doryopteris 黑心蕨屬
Doryopteris concolor (Langsd. & Fisch.) Kuhn 黑心蕨
Paragymnopteris 金毛裸蕨屬
Paragymnopteris vestita (Hook.) K.H.Shing 金毛裸蕨
Parahemionitis 澤瀉蕨屬
Parahemionitis arifolia (Burm.f.) Panigrahi 澤瀉蕨

Vittarioideae 書帶蕨亞科

Adiantum 鐵線蕨屬
Adiantum capillus-junonis Rupr. 團羽鐵線蕨
Adiantum capillus-veneris forma *capillus-veneris* 鐵線蕨
Adiantum capillus-veneris forma *lanyuanum* W.C.Shieh 蘭嶼鐵線蕨^{EN}
Adiantum caudatum L. 鞭葉鐵線蕨
Adiantum diaphanum Blume 長尾鐵線蕨
Adiantum edgeworthii Hook. 愛氏鐵線蕨
Adiantum flabellulatum L. 扇葉鐵線蕨
Adiantum formosanum Tagawa 深山鐵線蕨^{EN}
Adiantum hispidulum Sw. 毛葉鐵線蕨
Adiantum malesianum J.Ghatak 馬來鐵線蕨
Adiantum menglianense Y.Y.Qian 孟連鐵線蕨
Adiantum monochlamys D.C.Eaton 石長生
Adiantum myriosorum Baker 灰背鐵線蕨
Adiantum philippense L. 半月形鐵線蕨
Adiantum raddianum C.Presl 細葉美葉鐵線蕨^{NZ}
Adiantum soboliferum Wall. ex Hook. 翅柄鐵線蕨



- Adiantum taiwanianum* Tagawa 臺灣鐵線蕨^{EN} (Fig. 1G)
Adiantum tenerum Sw. 脆鐵線蕨^{NZ}
Adiantum ×meishanianum F.S.Hsu ex Yea C.Liu & W.L.Chiou 梅山口鐵線蕨
 Note: = *A. malesianum* × *A. menglianense*
Antrophyum 車前蕨屬
Antrophyum callifolium Blume 美葉車前蕨
Antrophyum castaneum H.Ito 栗色車前蕨^{EN}
Antrophyum formosanum Hieron. 臺灣車前蕨
Antrophyum henryi Hieron. 亨利氏車前蕨
Antrophyum obovatum Baker 車前蕨
Antrophyum parvulum Blume 小車前蕨
Antrophyum sessilifolium (Cav.) Spreng. 無柄車前蕨
Haplopteris 書帶蕨屬
Haplopteris anguste-elongata (Hayata) E.H.Crane 姬書帶蕨
Haplopteris capillaris (Copel.) C.W.Chen, S.Linds. & K.T.Yong 小葉書帶蕨
 Note: Only gametophytes have been found in Taiwan (Kuo *et al.*, 2017; Chen *et al.*, 2019)
Haplopteris elongata (Sw.) E.H.Crane 垂葉書帶蕨
Haplopteris ensiformis (Sw.) E.H.Crane 劍葉書帶蕨
Haplopteris flexuosa (Fée) E.H.Crane 書帶蕨
Haplopteris heterophylla C.W.Chen, Y.H.Chang & Yea C.Liu 異葉書帶蕨
Haplopteris mediosora (Hayata) X.C.Zhang 中孢書帶蕨
Haplopteris taeniophylla (Copel.) E.H.Crane 廣葉書帶蕨
Haplopteris yakushimensis C.W.Chen & Ebihara 屋久書帶蕨 (Fig. 4C–F)
Vaginularia 針葉蕨屬
Vaginularia junghuhnii Mett. 連孢針葉蕨
Vaginularia trichoides Fée 針葉蕨
Dennstaedtiaceae 碗蕨科
Dennstaedtia 碗蕨屬
Dennstaedtia hirsuta (Sw.) Mett. ex Miq. 細毛碗蕨
Dennstaedtia scabra (Wall. ex Hook.) T.Moore 碗蕨
Dennstaedtia scandens (Blume) T.Moore 刺柄碗蕨
Dennstaedtia smithii (Hook.) T.Moore 司氏碗蕨
Histiopteris 栗蕨屬
Histiopteris incisa (Thunb.) J.Sm. 栗蕨
Hypolepis 姬蕨屬
Hypolepis alpina (Blume) Hook. 臺灣姬蕨
Hypolepis pallida (Blume) Hook. 灰姬蕨
Hypolepis polypodioides (Blume) Hook. 無腺姬蕨
Hypolepis punctata (Thunb.) Mett. ex Kuhn 姬蕨
Hypolepis tenuifolia (G.Forst.) Bernh. 細葉姬蕨
Microlepia 鱗蓋蕨屬
Microlepia calvescens (Wall. ex Hook.) C.Presl 光葉鱗蓋蕨
Microlepia hookeriana (Wall. ex Hook.) C.Presl 虎克氏鱗蓋蕨
Microlepia krameri C.M.Kuo 克氏鱗蓋蕨
Microlepia marginata (Panz. ex Houtt.) C.Chr. 邊緣鱗蓋蕨
Microlepia nepalensis (Spreng.) Fraser-Jenk., Kandel & Pariyar 華南鱗蓋蕨
Microlepia obtusiloba Hayata 團羽鱗蓋蕨
Microlepia platyphylla (D.Don) J.Sm. 闊葉鱗蓋蕨
Microlepia rhomboidea (Wall. ex Kunze) Prantl 斜方鱗蓋蕨
Microlepia sinostrigosa Ching 中華鱗蓋蕨
Microlepia speluncae (L.) T.Moore 熱帶鱗蓋蕨
Microlepia strigosa (Thunb.) C.Presl 粗毛鱗蓋蕨
Microlepia substrigosa Tagawa 亞粗毛鱗蓋蕨
Microlepia tenera Christ 嫩鱗蓋蕨
Microlepia trichocarpa Hayata 毛果鱗蓋蕨
Microlepia trichosora Ching 毛囊鱗蓋蕨
Microlepia ×bipinnata (Makino) Shimura 臺北鱗蓋蕨
 Note: = *M. marginata* × *M. strigosa*
Microlepia ×intramarginalis (Tagawa) Seriz. 羽裂光葉鱗蓋蕨^{EN}
 Note: = *M. calvescens* × *M. strigosa*
Microlepia calvescens (Wall. ex Hook.) C.Presl × *Microlepia trichosora* Ching 光葉鱗蓋蕨 × 毛囊鱗蓋蕨^{EN}
Monachosorum 稀子蕨屬
Monachosorum henryi Christ 稀子蕨
Monachosorum maximowiczii (Baker) Hayata 岩穴蕨
Paesia 曲軸蕨屬
Paesia luzonica Christ 曲軸蕨
Pteridium 蕨屬
Pteridium aquilinum (L.) Kuhn subsp. *japonicum* (Nakai) Å.Löve & D.Löve 蕨
Pteridium aquilinum (L.) Kuhn subsp. *wightianum* (Wall. ex J.Agardh) W.C.Shieh 巒大蕨
Hypodermatiaceae 腫足蕨科
Hypodematium 腫足蕨屬
Hypodematium crenatum (Forssk.) Kuhn & Decken 腫足蕨
Hypodematium taiwanense Ching ex K.H.Shing 臺灣腫足蕨^{EN}
Leucostegia 大膜蓋蕨屬
Leucostegia immersa C.Presl 大膜蓋蕨
Dryopteridaceae 鱗毛蕨科
Elaphoglossoideae 舌蕨亞科
Bolbitis 實蕨屬
Bolbitis angustipinna (Hayata) H.Ito 細葉實蕨
Bolbitis appendiculata (Willd.) K.Iwats. 刺蕨



- Bolbitis heteroclita* (C.Presl) Ching 尾葉實蕨
Bolbitis rhizophylla (Kaulf.) Hennisman 大刺蕨
Bolbitis sculpturata (Fée) Ching 紅柄實蕨
Bolbitis subcordata (Copel.) Ching 海南實蕨
Bolbitis virens (Wall. ex Hook. & Grev.) Schott var. *compacta* Hennisman 厚葉實蕨
Bolbitis × *laxireticulata* K.Iwats. 網脈刺蕨
 Note: = *B. appendiculata* × *B. subcordata*
Bolbitis × *nanjenensis* C.M.Kuo 南仁刺蕨^{EN}
 Note: = *B. appendiculata* × *B. heteroclita*
Bolbitis heteroclita (C.Presl) Ching × *B. subcordata* (Copel.) Ching 尾葉實蕨 × 海南實蕨^{EN}
Elaphoglossum 舌蕨屬
Elaphoglossum angulatum (Blume) T.Moore 爪哇舌蕨
Elaphoglossum callifolium (Blume) T.Moore 銳頭舌蕨
Elaphoglossum commutatum (Mett. ex Kuhn) Alderw. 大葉舌蕨
Elaphoglossum luzonicum Copel. 臺灣舌蕨
Elaphoglossum marginatum (Wall. ex Fée) T.Moore 垂葉舌蕨
Elaphoglossum yoshinagae (Yatabe) Makino 舌蕨
Lastreopsis 金毛蕨屬
Lastreopsis tenera (R.Br.) Tindale 金毛蕨
Pleocnemia 網脈突齒蕨屬
Pleocnemia winitii Holttum 網脈突齒蕨
Dryopteridoideae 鱗毛蕨亞科
Arachniodes 複葉耳蕨屬
Arachniodes amabilis (Blume) Tindale var. *amabilis* 屋久複葉耳蕨
Arachniodes amabilis (Blume) Tindale var. *fimbriata* K.Iwats. 斜方複葉耳蕨
Arachniodes aristata (G.Forst.) Tindale 細葉複葉耳蕨
Arachniodes chinensis (Rosenst.) Ching 中華複葉耳蕨
Arachniodes festina (Hance) Ching 臺灣兩面複葉耳蕨
Arachniodes globisora (Hayata) Ching 臺灣複葉耳蕨
Arachniodes nigrospinosa (Ching) Ching 黑鱗複葉耳蕨
Arachniodes pseudoaristata (Tagawa) Ohwi 小葉複葉耳蕨
Arachniodes quadripinnata (Hayata) Seriz. 毛苞擬複葉耳蕨
Ctenitis 肋毛蕨屬
Ctenitis eatonii (Baker) Ching 愛德氏肋毛蕨
Ctenitis subglandulosa (Hance) Ching 肋毛蕨
Cyrtomium 貫眾蕨屬
Cyrtomium anomophyllum (Zenker) Fraser-Jenk. 奇葉貫眾蕨
Cyrtomium caryotideum (Wall. ex Hook. & Grev.) C.Presl 細齒貫眾蕨
Cyrtomium devexiscapulae (Koidz.) Koidz. & Ching 披針貫眾蕨
Cyrtomium falcatum (L.f.) C.Presl subsp. *falcatum* 全緣貫眾蕨
Cyrtomium falcatum (L.f.) C.Presl subsp. *australe* S.Matsumoto ex S.Matsumoto & Ebihara 濱海全緣貫眾蕨
Cyrtomium fortunei J.Sm. 貫眾蕨
Cyrtomium macrophyllum (Makino) Tagawa 大葉貫眾蕨
Cyrtomium taiwanianum Tagawa 臺灣貫眾蕨^{EN}
Cyrtomium simadae (Tagawa) Y.H.Chang 尖葉貫眾蕨^{EN}
Dryopteris 鱗毛蕨屬
Dryopteris acutodentata Ching 尖齒鱗毛蕨 (Fig. 5A–C)
Dryopteris alpestris Tagawa 腺鱗毛蕨
Dryopteris apiciflora (Wall. ex Mett.) Kuntze 頂囊擬鱗毛蕨
Dryopteris atrata (Wall. ex Kunze) Ching 暗鱗毛蕨
Dryopteris cacaina Tagawa 蓬萊鱗毛蕨^{EN}
Dryopteris championii (Benth.) C.Chr. ex Ching 闊鱗毛蕨
Dryopteris costalisora Tagawa 近中肋鱗毛蕨
Dryopteris cycadina (Franch. & Sav.) C.Chr. 杪羅鱗毛蕨
Dryopteris decipiens (Hook.) Kuntze var. *decipiens* 迷人鱗毛蕨
 Note: Only variety *decipiens* [sensu Lu and Barrington (2013)] has been found in Taiwan.
Dryopteris dickinsii (Franch. & Sav.) C.Chr. 遠軸鱗毛蕨
Dryopteris diffracta (Baker) C.Chr. 彎柄假複葉耳蕨
Dryopteris edwardsii Fraser-Jenk. 愛氏鱗毛蕨
Dryopteris enneaphylla (Baker) C.Chr. 頂羽鱗毛蕨
Dryopteris erythrosora (D.C.Eaton) Kuntze 紅蓋鱗毛蕨
Dryopteris expansa (C.Presl) Fraser-Jenk. & Jermy 廣布鱗毛蕨
Dryopteris formosana (Christ) C.Chr. 臺灣鱗毛蕨
Dryopteris fructuosa (Christ) C.Chr. 硬果鱗毛蕨
Dryopteris fuscipes C.Chr. 黑足鱗毛蕨
Dryopteris hasseltii (Blume) C.Chr. 哈氏假複葉耳蕨
Dryopteris hendersonii (Bedd.) C.Chr. 小苞肉刺蕨
Dryopteris holttumii Li Bing Zhang 霍氏鱗毛蕨^{EN}
Dryopteris indusiata (Makino) Makino & Yamam. 平行鱗毛蕨
Dryopteris integriloba C.Chr. 羽裂鱗毛蕨
Dryopteris kawakamii Hayata 川上氏擬鱗毛蕨
Dryopteris kinkiensis Koidz. ex Tagawa 近畿鱗毛蕨
Dryopteris komarovii Kosshinsky 近多鱗毛蕨
Dryopteris kwanzanensis Tagawa 關山鱗毛蕨^{EN}
Dryopteris lacera (Thunb.) Kuntze 二型鱗毛蕨
Dryopteris lachoogensis (Bedd.) B.K.Nayar & Kaur 脈紋鱗毛蕨
Dryopteris lepidopoda Hayata 厚葉鱗毛蕨
Dryopteris marginata (C.B.Clarke) Christ 三角葉鱗毛蕨
Dryopteris maximowicziana (Miq.) C.Chr. 馬氏鱗毛蕨
Dryopteris melanocarpa Hayata 黑孢鱗毛蕨



Dryopteris namegatae (Sa.Kurata) Sa.Kurata 黑鱗遠軸鱗毛蕨
Dryopteris nyngchiensis Ching 林芝鱗毛蕨 (Fig. 5D-F)
Dryopteris paleolata (Pic.Serm.) Li Bing Zhang 魚鱗蕨
Dryopteris peranema Li Bing Zhang 柄囊蕨
Dryopteris polita Rosenst. 臺東鱗毛蕨
Dryopteris pseudocaenopteris (Kunze) Li Bing Zhang 紅腺蕨
Dryopteris pseudolunanensis Tagawa 擬路南鱗毛蕨^{EN}
Dryopteris pseudosieboldii Hayata 大頂羽鱗毛蕨^{EN}
Dryopteris redactopinnata S.K.Basu & Panigr. 藏布鱗毛蕨
Dryopteris reflexosquamata Hayata 逆鱗毛蕨
Dryopteris ryo-itoana Sa.Kurata 闊羽鱗毛蕨
Dryopteris scottii (Bedd.) Ching 史氏鱗毛蕨
Dryopteris serratodentata (Bedd.) Hayata 鋸齒葉鱗毛蕨
Dryopteris sordidipes Tagawa 落鱗毛蕨
Dryopteris sparsa (D.Don) Kuntze 長葉鱗毛蕨
Dryopteris squamiseta (Hook.) Kuntze 阿里山肉刺蕨
Dryopteris stenolepis (Baker) C.Chr. 狹鱗毛蕨
Dryopteris subatrata Tagawa 細葉鱗毛蕨^{EN}
Dryopteris subexaltata (Christ) C.Chr. 早田氏鱗毛蕨
Dryopteris sublacera Christ 亞二型鱗毛蕨
Dryopteris subtriangularis (C.Hope) C.Chr. 亞三角鱗毛蕨
Dryopteris tenuicula C.G.Mathew & Christ 疏葉鱗毛蕨
Dryopteris tenuipes (Rosenst.) Seriz. 落葉鱗毛蕨^{EN}
Dryopteris toyamae Tagawa 外山氏鱗毛蕨
Dryopteris transmorrisonensis (Hayata) Hayata 玉山擬鱗毛蕨
Dryopteris varia (L.) Kuntze 南海鱗毛蕨
Dryopteris wallichiana (Spreng.) Hyl. subsp. *wallichiana* 瓦氏鱗毛蕨
Dryopteris wallichiana (Spreng.) Hyl. subsp. *nepalensis* Fraser-Jenk. 尼泊爾鱗毛蕨
Dryopteris woodsii Hayata 擬岩蕨
Dryopteris wuzhaohongii Li Bing Zhang 大孢魚鱗蕨
Dryopteris xanthomelas (Christ) C.Chr. 黃葉鱗毛蕨
Dryopteris yoroii Seriz. 上先型鱗毛蕨
Dryopteris zayuensis Ching & S.K.Wu 察隅鱗毛蕨
Dryopteris × *subreflexipinna* Ogata 微彎假複葉耳蕨
 Note: = *D. diffracta* × *D. hasseltii*
Polystichum 耳蕨屬
Polystichum acanthophyllum (Franch.) Christ 針葉耳蕨
Polystichum acutidens Christ 臺東耳蕨
Polystichum atkinsonii Bedd. 玉山耳蕨
Polystichum attenuatum Tagawa & K.Iwats. 長羽芽孢耳蕨
Polystichum biaristatum (Blume) T.Moore 二尖耳蕨

Polystichum capillipes (Baker) Diels 小耳蕨
Polystichum chunii Ching 陳氏耳蕨
Polystichum deltodon (Baker) Diels 對生耳蕨
Polystichum formosanum Rosenst. 臺灣耳蕨
Polystichum fraxinellum (Christ) Diels 網脈耳蕨
Polystichum glaciale Christ 玉龍蕨
Polystichum grandifrons C.Chr. 九州耳蕨
Polystichum hancockii (Hance) Diels 韓氏耳蕨
Polystichum hecatopterum Diels 鋸齒葉耳蕨
Polystichum herbaceum Ching & Z.Y.Liu 草葉耳蕨
Polystichum integripinnum Hayata 狹葉貫眾蕨^{EN}
Polystichum lachenense (Hook.) Bedd. 高山耳蕨
Polystichum lepidocaulon (Hook.) J.Sm. 鞭葉耳蕨
Polystichum manmeiense (Christ) Nakaïke 鑷葉耳蕨
Polystichum mayebarae Tagawa 前原耳蕨 (Fig. 6)
Polystichum mucronifolium (Blume) C.Presl 兒玉氏耳蕨
Polystichum neolobatum Nakai 硬葉耳蕨
Polystichum nepalense (Spreng.) C.Chr. 軟骨耳蕨
Polystichum obliquum (D.Don) T.Moore 知本耳蕨
Polystichum parvipinnulum Tagawa 尖葉耳蕨^{EN}
Polystichum piceopaleaceum Tagawa 黑鱗耳蕨
Polystichum prescottianum (Wall. ex Mett.) T.Moore 南湖耳蕨
Polystichum prionolepis Hayata 鋸鱗耳蕨
Polystichum pseudostenophyllum Tagawa 擬芽孢耳蕨^{EN}
Polystichum scariosum (Roxb.) C.V.Morton 阿里山耳蕨
Polystichum sinense (Christ) Christ 福山氏耳蕨
Polystichum stenophyllum Christ 芽孢耳蕨
Polystichum taizhongense H.S.Kung 臺中耳蕨^{EN}
Polystichum tenuius (Ching) Li Bing Zhang 離脈柳葉耳蕨
Polystichum thomsonii (Hook.f.) Bedd. 尾葉耳蕨
Polystichum tsus-simense (Hook.) J.Sm. 馬祖耳蕨
Polystichum xiphophyllum (Baker) Diels 關山耳蕨
Polystichum × *gemmilachenense* Miyam. & T.Nakam. 芽孢高山耳蕨^{EN}
 Note: = *P. lachenense* × *P. stenophyllum*
Polystichum × *pseudoparvipinnulum* Miyam. & T.Nakam. 假尖葉耳蕨^{EN}
 Note: = *P. parvipinnulum* × *P. piceopaleaceum*
Polystichum × *silviamontanum* Miyam. & T.Nakam. 雪山耳蕨^{EN}
 Note: = *P. piceopaleaceum* × *P. sinense*
Lomariopsidaceae 羅蔓藤蕨科
Lomariopsis 羅蔓藤蕨屬
Lomariopsis boninensis Nakai 羅蔓藤蕨
Nephrolepidaceae 腎蕨科
Nephrolepis 腎蕨屬
Nephrolepis biserrata (Sw.) Schott 長葉腎蕨



Nephrolepis brownii (Desv.) Hovenkamp & Miyam. 毛
葉腎蕨

Nephrolepis cordifolia (L.) C.Presl 腎蕨

Nephrolepis × *copelandii* W.H.Wagner 科氏腎蕨

Note: = *N. brownii* × *N. cordifolia*

Nephrolepis × *hippocrepicis* Miyam. 馬蹄腎蕨

Note: = *N. biserrata* × *N. cordifolia*

Nephrolepis × *pseudobiserrata* Miyam. 假長葉腎蕨

Note: = *N. biserrata* × *N. brownii*

Tectariaceae 三叉蕨科

Arthropteris 藤蕨屬

Arthropteris palisotii (Desv.) Alston 藤蕨

Pteridrys 突齒蕨屬

Pteridrys cnemidaria (Christ) C.Chr. & Ching 突齒蕨

Tectaria 三叉蕨屬

Tectaria coadunata (J.Sm.) C.Chr. 陰地三叉蕨

Tectaria decurrens (C.Presl) Copel. 翅柄三叉蕨

Tectaria devexa (Kunze) Copel. 薄葉三叉蕨

Tectaria dissecta (G.Forst.) Lellinger 南洋三叉蕨

Tectaria dubia (C.B.Clarke & Baker) Ching 大葉三叉蕨

Tectaria fauriei Tagawa 傅氏三叉蕨

Tectaria fuscipes (Wall. ex Bedd.) C.Chr. 屏東三叉蕨

Tectaria griffithii (Baker) C.Chr. 葛氏三叉蕨

Tectaria harlandii (Hook.) C.M.Kuo 沙皮蕨

Tectaria impressa (Fée) Holttum 變葉三叉蕨

Tectaria kusukusensis (Hayata) Lellinger 高士佛三叉蕨

Tectaria multicaudata (C.B.Clarke) Ching 鱗柄三叉蕨

Tectaria phaeocaulis (Rosenst.) C.Chr. 蛇脈三叉蕨

Tectaria polymorpha (Wall. ex Hook.) Copel. 南投三
叉蕨

Tectaria simonsii (Baker) Ching 紫柄三叉蕨

Tectaria subfuscipes (Tagawa) C.M.Kuo 排灣三叉蕨^{EN}

Tectaria subtriphylla (Hook. & Arn.) Copel. 三叉蕨

Tectaria sulitii Copel. 多羽三叉蕨

Tectaria zeilanica (Houtt.) Sledge 地耳蕨

Tectaria harlandii (Hook.) C.M.Kuo × *T. subtriphylla*
(Hook. & Arn.) Copel. 沙皮蕨 × 三叉蕨^{EN}

Oleandraceae 蓀蕨科

Oleandra 蓀蕨屬

Oleandra wallichii (Hook.) C.Presl 蓀蕨

Davalliaceae 骨碎補科

Davallia 骨碎補屬

Davallia clarkei Baker 小膜蓋蕨

Davallia divaricata Blume 大葉骨碎補

Davallia griffithiana Hook. 杯狀蓋骨碎補

Davallia pectinata Sm. 馬來陰石蕨

Davallia repens (L.f.) Kuhn 陰石蕨

Davallia solida (G.Forst.) Sw. 闊葉骨碎補

Davallia trichomanoides Blume 海洲骨碎補

Polypodiaceae 水龍骨科

Loxogrammoideae 劍蕨亞科

Loxogramme 劍蕨屬

Loxogramme bififormis Tagawa 二形劍蕨^{EN}

Loxogramme chinensis Ching 中國劍蕨

Loxogramme formosana Nakai 臺灣劍蕨

Loxogramme grammitoides (Baker) C.Chr. 小葉劍蕨

Loxogramme remotefrondigera Hayata 長柄劍蕨^{EN}

Loxogramme salicifolia (Makino) Makino 柳葉劍蕨

Drynarioideae 槲蕨亞科

Arthromeris 肢節蕨屬

Arthromeris lehmannii (Mett.) Ching 肢節蕨

Drynaria 槲蕨屬

Drynaria coronans (Wall. ex Mett.) J.Sm. ex T.Moore
崖薑蕨

Drynaria meyeniana (Schott) Christenh. 連珠蕨

Drynaria roosii Nakaïke 槲蕨

Selliguea 修蕨屬

Selliguea echinospora (Tagawa) Fraser-Jenk. 大葉玉
山蕨^{EN}

Selliguea engleri (Luer) Fraser-Jenk. 恩氏蕨

Selliguea falcato-pinnata (Hayata) H.Ohashi & K.Ohashi
掌葉蕨^{EN}

Selliguea hastata (Thunb.) Fraser-Jenk. 三葉蕨

Selliguea quasidivariata (Hayata) H.Ohashi &
K.Ohashi 玉山蕨^{EN}

Selliguea taiwanensis (Tagawa) H.Ohashi & K.Ohashi
臺灣蕨^{EN}

Selliguea yakushimensis (Makino) Fraser-Jenk. 姬蕨

Platyserioideae 鹿角蕨亞科

Platyserium 鹿角蕨屬

Platyserium bifurcatum (Cav.) C.Chr. 二叉鹿角蕨^{NZ}

Pyrrosia 石筆屬

Pyrrosia angustissima (Giesenh. ex Diels) Tagawa &
K.Iwats. 捲葉蕨

Pyrrosia assimilis (Baker) Ching 相近石筆 (Fig. 7A-C)

Pyrrosia lanceolata (L.) Farw. 披針葉石筆

Pyrrosia linearifolia (Hook.) Ching 絨毛石筆

Pyrrosia lingua (Thunb.) Farw. 石筆

Pyrrosia matsudae (Hayata) Tagawa 松田氏石筆^{EN}

Pyrrosia polydactylos (Hance) Ching 槭葉石筆^{EN}
(Fig. 1E)

Pyrrosia porosa (C.Presl) Hovenkamp 柔軟石筆

Pyrrosia sheareri (Baker) Ching 廬山石筆

Pyrrosia × *pseudopolydactylis* Seriz. 擬槭葉石筆^{EN}
Note: = *P. matsudae* × *P. polydactylos*

Microsorioideae 星蕨亞科

Goniophlebium 水龍骨屬

Goniophlebium amoenum (Wall. ex Mett.) Bedd. var.
arisanense (Hayata) Rödl-Linder 阿里山水龍骨^{EN}

Goniophlebium fieldingianum (Kunze ex Mett.)
T.Moore 栗柄水龍骨



Goniophlebium formosanum (Baker) Rödl-Linder 臺灣水龍骨
Goniophlebium mengtzeense (Christ) Rödl-Linder 蒙自水龍骨
Goniophlebium persicifolium (Desv.) Bedd. 稜脈蕨
Goniophlebium raishaense (Rosenst.) L.Y.Kuo 大葉水龍骨^{EN}
Goniophlebium transpianense (Yamam.) L.Y.Kuo 疏毛水龍骨^{EN}
Lemmaphyllum 伏石蕨屬
Lemmaphyllum microphyllum C.Presl 伏石蕨
Lemmaphyllum rostratum (Bedd.) Tagawa 骨牌蕨
Lepidomicrosorium 鱗果星蕨屬
Lepidomicrosorium ningpoense (Baker) L.Y.Kuo 攀援星蕨
Lepisorus 瓦葦屬
Lepisorus contortus (Christ) Ching 扭瓦葦 (Fig. 7D–F)
Lepisorus kawakamii (Hayata) Tagawa 川上氏瓦葦^{EN}
Lepisorus kuchenensis (Y.C.Wu) Ching 獐山瓦葦
Lepisorus megasorus (C.Chr.) Ching 長柄瓦葦^{EN}
Lepisorus miyoshianus (Makino) Fraser-Jenk. & Subh.Chandra 二條線蕨
Lepisorus monilisorus (Hayata) Tagawa 擬芟瓦葦^{EN} (Fig. 1C)
Lepisorus morrisonensis (Hayata) H.Ito 玉山瓦葦
Lepisorus mucronatus (Fée) Li Wang 尖嘴蕨
Lepisorus obscurevenulosus (Hayata) Ching 奧瓦葦
Lepisorus papakensis (Masam.) Ching & Y.X.Lin 網眼瓦葦
Lepisorus pseudoussuriensis Tagawa 擬烏蘇里瓦葦^{EN}
Lepisorus suboligolepidus Ching 擬鱗瓦葦
Lepisorus thunbergianus (Kaulf.) Ching 瓦葦
Lepisorus tosaensis (Makino) H.Ito 擬瓦葦
Leptochilus 菜蕨屬
Leptochilus decurrens Blume 菜蕨
Leptochilus ellipticus (Thunb.) Noot. 橢圓線蕨
Leptochilus hemionitideus (C.Presl) Noot. 斷線蕨
Leptochilus henryi (Baker) X.C.Zhang 亨利氏線蕨
Leptochilus insignis (Blume) Fraser-Jenk. 箭葉星蕨
Leptochilus longissimus (Blume) L.Y.Kuo 水社擬蕨蕨
Leptochilus nigrescens (Blume) L.Y.Kuo 薄葉擬蕨蕨
Leptochilus pteropus (Blume) Fraser-Jenk. 三叉葉星蕨
Leptochilus wrightii (Hook.) X.C.Zhang 萊氏線蕨
Leptochilus ×shintenensis (Hayata) X.C.Zhang & Noot. 新店線蕨
Note: = *L. ellipticus* × *L. wrightii*
Microsorium 星蕨屬
Microsorium membranaceum (D.Don) Ching 膜葉星蕨
Microsorium punctatum (L.) Copel. 星蕨

Microsorium scolopendria (Burm.f) Copel. 海岸星蕨
Microsorium steerei (Harr.) Ching 廣葉星蕨
Neolepisorus 盾蕨屬
Neolepisorus ensatus (Thunb.) Ching 盾蕨
Neolepisorus fortunei (T.Moore) Li Wang 大星蕨
Neolepisorus platyphyllus (Tagawa) L.Y.Kuo 寬葉盾蕨 (Fig. 7G–H)
Grammitidoideae 禾葉蕨亞科
Calymmodon 荷包蕨屬
Calymmodon gracilis (Fée) Copel. 疏毛荷包蕨
Calymmodon oligotrichus T.C.Hsu 寡毛荷包蕨^{EN}
Calymmodon ordinatus Copel. 姬荷包蕨
Chrysogrammitis 金禾蕨屬
Chrysogrammitis glandulosa (J.Sm.) Parris 金禾蕨
Dasygrammitis 毛禾蕨屬
Dasygrammitis mollicoma (Nees & Blume) Parris 毛禾蕨
Micropolypodium 鋸蕨屬
Micropolypodium okuboi (Yatabe) Hayata 梳葉蕨
Oreogrammitis 濱禾蕨屬
Oreogrammitis adspersa (Blume) Parris 無毛禾葉蕨
Oreogrammitis beddomeana (Alderw.) T.C.Hsu 無鱗禾葉蕨
Oreogrammitis blechnifrons (Hayata) T.C.Hsu 蒿蕨
Oreogrammitis caespitosa (Blume) Parris 穴孢禾葉蕨
Oreogrammitis congener (Blume) Parris var. *congener* 大武禾葉蕨
Oreogrammitis congener (Blume) Parris var. *polytricha* T.C.Hsu 多毛禾葉蕨
Oreogrammitis ilanensis (T.C.Hsu) T.C.Hsu 宜蘭禾葉蕨^{EN}
Oreogrammitis marivelesensis (Copel.) Parris 弼昭禾葉蕨
Oreogrammitis moorei (Parris & Ralf Knapp) T.C.Hsu 牟氏禾葉蕨^{EN}
Oreogrammitis orientalis T.C.Hsu 東亞禾葉蕨
Oreogrammitis reinwardtii (Blume) Parris 毛禾葉蕨
Oreogrammitis setigera (Blume) T.C.Hsu 大禾葉蕨
Oreogrammitis subevenosa (Baker) Parris 長孢禾葉蕨
Oreogrammitis subnervosa (T.C.Hsu) T.C.Hsu 亞顯脈禾葉蕨^{EN}
Oreogrammitis taiwanensis (Parris & Ralf Knapp) T.C.Hsu 臺灣禾葉蕨^{EN} (Fig. 1C)
Oreogrammitis tenuisecta (Blume) T.C.Hsu 細葉蒿蕨
Prosaptia 穴子蕨屬
Prosaptia celebica (Blume) Tagawa & K.Iwats. 南亞穴子蕨
Prosaptia contigua (G.Forst.) C.Presl 穴子蕨
Prosaptia formosana (Hayata) T.C.Hsu 寶島穴子蕨
Prosaptia nutans (Blume) Mett. 俯垂穴子蕨



- Prosaptia obliquata* (Blume) Mett. 密毛穴子蕨
Prosaptia pectinata T.Moore 篋齒穴子蕨
Prosaptia urceolaris (Hayata) Copel. 臺灣穴子蕨
Scleroglossum 革舌蕨屬
Scleroglossum sulcatum (Mett. ex Kuhn) Alderw. 革舌蕨
Tomophyllum 裂禾蕨屬
Tomophyllum hayatae (Masam.) T.C.Hsu 早田裂禾蕨^{EN}
Xiphopterella 劍羽蕨屬
Xiphopterella devolii S.J.Moore, Parris & W.L.Chiou
 劍羽蕨

Cystopteridaceae 冷蕨科

- Acystopteris* 亮毛蕨屬
Acystopteris taiwaniana (Tagawa) Á.Löve & D.Löve
 臺灣亮毛蕨
Acystopteris tenuisecta (Blume) Tagawa 禾稈亮毛蕨
Cystopteris 冷蕨屬
Cystopteris fragilis (L.) Bernh. 冷蕨
Cystopteris moupinensis Franch. 寬葉冷蕨
Gymnocarpium 羽節蕨屬
Gymnocarpium oyamense (Baker) Ching 羽節蕨
Gymnocarpium remotepinnatum (Hayata) Ching 細裂
 羽節蕨

Rhachidosoraceae 軸果蕨科

- Rhachidosorus* 軸果蕨屬
Rhachidosorus pulcher (Tagawa) Ching 軸果蕨

Diplaziopsidaceae 腸蕨科

- Diplaziopsis* 腸蕨屬
Diplaziopsis javanica (Blume) C.Chr. 腸蕨

Aspleniaceae 鐵角蕨科

- Asplenium* 鐵角蕨屬
Asplenium adiantum-nigrum L. 深山鐵角蕨
Asplenium antiquum Makino 山蘇花
Asplenium bullatum Wall. ex Mett. 大鐵角蕨
Asplenium capillipes Makino 姬鐵角蕨
Asplenium crinicaule Hance 毛軸鐵角蕨
Asplenium cuneatiforme Christ 大蓬萊鐵角蕨^{EN}
Asplenium ensiforme Wall. ex Hook. & Grev. 劍葉鐵角蕨
Asplenium exiguum Bedd. 雲南鐵角蕨
Asplenium formosae Christ 南海鐵角蕨
Asplenium griffithianum Hook. 叢葉鐵角蕨
Asplenium gueinzianum Mett. ex Kuhn 鱗柄鐵角蕨
Asplenium incisum Thunb. 縮羽鐵角蕨
Asplenium matsumurae Christ 蘭嶼鐵角蕨^{EN}
Asplenium nidus L. 臺灣山蘇花
Asplenium normale D.Don var. *normale* 生芽鐵角蕨
Asplenium normale D.Don var. *boreale* Ohwi ex
 Sa.Kurata 北方生芽鐵角蕨
Asplenium oldhamii Hance 俄氏鐵角蕨
Asplenium pekinense Hance 北京鐵角蕨
Asplenium pifongiae L.Y.Kuo, F.W.Li & Y.H.Chang 碧

鳳鐵角蕨^{EN}

- Asplenium polyodon* G.Forst. 革葉鐵角蕨
Asplenium prolongatum Hook. 長生鐵角蕨
Asplenium pseudolaserpitiifolium Ching 大黑柄鐵角蕨
Asplenium pulcherrimum (Baker) Ching ex Tardieu 細
 葉鐵角蕨
Asplenium ritoense Hayata 尖葉鐵角蕨
Asplenium ruta-muraria L. 銀杏葉鐵角蕨
Asplenium scolopendrium L. subsp. *japonicum* (Kom.)
 Rasbach, Reichst. & Viane 對開蕨
Asplenium septentrionale (L.) Hoffm. 線葉鐵角蕨
Asplenium setoi N.Murak. & Seriz. 東洋山蘇花
Asplenium steerei Harr. 劍羽鐵角蕨
Asplenium sublaserpitiifolium Ching 黃鱗大黑柄鐵角蕨
Asplenium subtrialatum (Seriz.) Y.H.Chang 擬鐵角蕨^{EN}
Asplenium tenerum G.Forst. 鈍齒鐵角蕨
Asplenium tenuicaule Hayata 小葉鐵角蕨
Asplenium tenuifolium D.Don 薄葉鐵角蕨
Asplenium trichomanes L. 鐵角蕨
Asplenium tripteropus Nakai 三翅鐵角蕨
Asplenium viride Huds. 綠柄鐵角蕨
Asplenium wilfordii Mett. ex Kuhn var. *wilfordii* 威氏
 鐵角蕨
Asplenium wilfordii Mett. ex Kuhn var. *densum* Rosenst.
 密生鐵角蕨^{EN}
Asplenium wrightii D.C.Eaton ex Hook. 萊氏鐵角蕨
Asplenium yoshinagae Makino 斜葉鐵角蕨
Asplenium ×shikokianum Makino 四國鐵角蕨
 Note: = *A. ritoense* × *A. wrightii*.
Asplenium × wangii C.M.Kuo 王氏鐵角蕨^{EN}
 Note: = *A. bullatum* × *A. wrightii*
Asplenium formosae Christ × *A. griffithianum* Hook. 南
 海鐵角蕨 × 叢葉鐵角蕨^{EN}
Hymenasplenium 膜葉鐵角蕨屬
Hymenasplenium adiantifrons (Hayata) Viane &
 S.Y.Dong 阿里山膜葉鐵角蕨^{EN}
Hymenasplenium apogamum (N.Murak. & Hatan.)
 Nakaike 無配膜葉鐵角蕨
Hymenasplenium cheilosorum (Kunze ex Mett.) Tagawa
 薄葉孔雀鐵角蕨
Hymenasplenium excisum (C.Presl) S.Linds. 剪葉膜葉
 鐵角蕨
Hymenasplenium murakami-hatanakae Nakaike 單邊
 膜葉鐵角蕨
Hymenasplenium obliquissimum (Hayata) Sugim. 陰濕
 膜葉鐵角蕨
Hymenasplenium obscurum (Blume) Tagawa 綠柄剪葉
 鐵角蕨
Hymenasplenium pseudobscurum Viane 尖峰嶺膜葉
 鐵角蕨



Hymenasplenium subnormale (Copel.) Nakaike 小膜葉
鐵角蕨

Thelypteridaceae 金星蕨科

Phegopteridoideae 卵果蕨亞科

Macrothelypteris 大金星蕨屬

Macrothelypteris polypodioides (Hook.) Holttum 抄襪
大金星蕨

Macrothelypteris torresiana (Gaudich.) Ching 大金星蕨

Phegopteris 卵果蕨屬

Phegopteris connectilis (Michx.) Watt 長柄卵果蕨

Phegopteris decursivopinnata (H.C.Hall) Fée 短柄卵
果蕨

Pseudophegopteris 紫柄蕨屬

Pseudophegopteris hirtirachis (C.Chr.) Holttum 毛囊
紫柄蕨

Pseudophegopteris levingei (C.B.Clarke) Ching 星毛
紫柄蕨

Pseudophegopteris subaurita (Tagawa) Ching 光囊紫
柄蕨

Thelypteridoideae 金星蕨亞科

Amauropelta 泛美金星蕨屬

Amauropelta angustifrons (Miq.) Y.H.Chang 小梯葉泛
美金星蕨

Amauropelta beddomei (Baker) Y.H.Chang 縮羽泛美
金星蕨

Amauropelta glanduligera (Kunze) Y.H.Chang 密腺泛
美金星蕨

Amauropelta angustifrons (Miq.) Y.H.Chang × *A.*
glanduligera (Kunze) Y.H.Chang 小梯葉泛美金星
蕨 × 密腺泛美金星蕨

Ampelopteris 星毛蕨屬

Ampelopteris prolifera (Retz.) Copel. 星毛蕨

Christella 小毛蕨屬

Christella acuminata (Houtt.) H.Lév. 小毛蕨

Christella arida (D.Don) Holttum 密腺小毛蕨

Christella dentata (Forssk.) Brownsey & Jermy 野小毛蕨

Christella ensifer (Tagawa) Holttum ex C.M.Kuo 突尖
小毛蕨^{EN}

Christella jaculosa (Christ) Holttum 小密腺小毛蕨

Christella latipinna (Benth.) H.Lév. 微縮小毛蕨

Christella papilio (C.Hope) K.Iwats. 薄葉梳小毛蕨

Christella parasitica (L.) H.Lév. ex Y.H.Chang 密毛小
毛蕨

Christella × *acuminatoides* (W.C.Shieh & J.L.Tsai)
Y.H.Chang 賽小毛蕨^{EN}

Note: = *C. acuminata* × *C. ensifer*

Christella × *intermedius* (W.C.Shieh & J.L.Tsai)
Y.H.Chang 擬密毛小毛蕨

Note: = *C. dentata* × *C. parasitica*

Coryphopteris 泛亞金星蕨屬

Coryphopteris angulariloba (Ching) L.J.He &
X.C.Zhang 鈍頭泛亞金星蕨

Coryphopteris castanea (Tagawa) Y.H.Chang 栗柄泛
亞金星蕨

Cyclogramma 鈎毛蕨屬

Cyclogramma auriculata (J.Sm.) Ching 耳羽鈎毛蕨

Cyclogramma leveillei (Christ) Ching 狹基鈎毛蕨

Cyclosorus 毛蕨屬

Cyclosorus interruptus (Willd.) H.Ito 毛蕨

Glaphyopteridopsis 方桿蕨屬

Glaphyopteridopsis erubescens (Wall. ex Hook.) Ching
方桿蕨

Leptogramma 茯蕨屬

Leptogramma mollissima (Kunze) Ching 毛葉茯蕨

Leptogramma tottooides Hayata ex H.Ito 尾葉茯蕨

Metathelypteris 凸軸蕨屬

Metathelypteris adscendens (Ching) Ching 微毛凸軸蕨

Metathelypteris flaccida (Blume) Ching 薄葉凸軸蕨

Metathelypteris gracilescens (Blume) Ching 光葉凸軸蕨

Metathelypteris laxa (Franch. & Sav.) Ching 柔葉凸軸蕨

Metathelypteris uraiensis (Rosenst.) Ching 毛柄凸軸蕨

Pneumatopteris 稀毛蕨屬

Pneumatopteris truncata (Poir.) Holttum 稀毛蕨

Pronephrium 新月蕨屬

Pronephrium gymnopteridifrons (Hayata) Holttum 大
羽新月蕨

Pronephrium longipetiolatum (K.Iwats.) Holttum 長柄
新月蕨^{EN}

Pronephrium megacuspis (Baker) Holttum 微紅新月蕨

Pronephrium parishii (Bedd.) Holttum 羽葉新月蕨

Pronephrium ramosii (Christ) Holttum 琉球新月蕨

Note: After carefully examining the photographs of the related taxa, the earlier published *Dryopteris ramosii* from the Philippines (type: *Ramos 39771*, miswritten as *Ramos 1792* in protologue) is identical to *Meniscium liukuense* from Japan (the Ryukyus) and *Abacopteris triphylla* var. *simplicifolia* from Taiwan (type: *U. Faurie 214*). The broad-sensed *Meniscium cuspidatum* Blume (type: *Blume s.n.*, from Indonesia, Java), which represents a complicated species complex in reality, is not accepted herein.

Pronephrium simplex (Hook.) Holttum 單葉新月蕨

Pronephrium triphyllum (Sw.) Holttum 三葉新月蕨

Pronephrium × *pseudoliukuense* (Seriz.) Nakaike 假琉
球新月蕨

Note: = *P. ramosii* × *P. triphyllum*

Pseudocyclosorus 假毛蕨屬

Pseudocyclosorus esquirolii (Christ) Ching 假毛蕨

Pseudocyclosorus tyloides (Kunze) Ching 疣狀假毛蕨

Sphaerostephanos 圓腺蕨屬

Sphaerostephanos productus (Kaulf.) Holttum 蘭嶼圓
腺蕨



Sphaerostephanos taiwanensis (C.Chr.) Holttum ex
C.M.Kuo 臺灣圓腺蕨

Stegnogramma 溪邊蕨屬

Stegnogramma dictyoclinoides Ching 溪邊蕨

Stegnogramma griffithii (T.Moore) K.Iwats. 聖蕨

Stegnogramma wilfordii (Hook.) Seriz. 威氏聖蕨

×*Chrinephrium* 新月小毛蕨屬

×*Chrinephrium insulare* (K.Iwats.) Nakaike 變葉新月
小毛蕨

Note: = *Christella dentata* × *Pronephrium triphyllum*

Woodsiaceae 岩蕨科

Woodsia 岩蕨屬

Woodsia andersonii (Bedd.) Christ 蜘蛛岩蕨

Woodsia okamotoi Tagawa 岡本氏岩蕨^{EN} (Fig. 1F)

Woodsia polystichoides D.C.Eaton 岩蕨

Athyriaceae 蹄蓋蕨科

Athyrium 蹄蓋蕨屬

Athyrium anisopterum Christ 宿蹄蓋蕨

Athyrium arisanense (Hayata) Tagawa 阿里山蹄蓋蕨

Athyrium atkinsonii Bedd. 亞德氏蹄蓋蕨

Athyrium auriculatum Seriz. 耳垂蹄蓋蕨^{EN}

Athyrium cryptogrammoides Hayata 合歡山蹄蓋蕨

Athyrium cumingianum (C.Presl) Ching 安蕨

Athyrium decurrentialatum (Hook.) Copel. var.
decurrentialatum 貞蕨

Athyrium decurrentialatum (Hook.) Copel. var.
pilosellum (H.Ito) Ohwi 毛葉貞蕨

Athyrium delavayi Christ var. *delavayi* 溪谷蹄蓋蕨

Athyrium delavayi Christ var. *subrigescens* Hayata 姬
蹄蓋蕨

Athyrium epirachis (Christ) Ching 軸果蹄蓋蕨

Athyrium erythropodum Hayata 紅柄蹄蓋蕨

Athyrium fluviale (Hayata) C.Chr. 大葉貞蕨

Athyrium iseanum Rosenst. var. *angustisectum* Tagawa
細葉蹄蓋蕨

Athyrium leiopodum (Hayata) Tagawa 小葉蹄蓋蕨^{EN}

Athyrium minimum Ching 七星山蹄蓋蕨

Athyrium mupinense Christ 細裂蹄蓋蕨

Athyrium nakanoi Makino 紅苞蹄蓋蕨

Athyrium niponicum (Mett.) Hance 日本蹄蓋蕨

Athyrium opacum (D.Don) Copel. 黑葉貞蕨

Athyrium oppositipennum Hayata var. *oppositipennum*
對生蹄蓋蕨

Athyrium oppositipennum Hayata var. *pubescens*
(Tagawa) Tagawa 逆羽蹄蓋蕨

Athyrium otophorum (Miq.) Koidz. 光蹄蓋蕨

Athyrium palustre Seriz. 沼生蹄蓋蕨

Athyrium pubicostatum Ching & Z.Y.Liu 假軸果蹄蓋蕨

Athyrium puncticaule (Blume) T.Moore 密腺蹄蓋蕨

Athyrium purpurascens (Tagawa) Sa.Kurata 紫柄蹄蓋蕨

Athyrium sheareri (Baker) Ching 華東安蕨

Athyrium silvicola Tagawa 高山蹄蓋蕨

Athyrium strigillosum (E.J.Lowe) Salomon 生芽蹄蓋蕨

Athyrium tozanense (Hayata) Hayata 蓬萊蹄蓋蕨

Athyrium tripinnatum Tagawa 三回蹄蓋蕨^{EN}

Athyrium vidalii (Franch. & Sav.) Nakai 山蹄蓋蕨

Deparia 對囊蕨屬

Deparia deflexa (Kunze) L.Y.Kuo, M.Kato &
W.L.Chiou 逆羽假蹄蓋蕨

Deparia formosana (Rosenst.) R.Sano 假腸蕨

Deparia jiulungensis (Ching) Z.R.Wang 亞蹄蓋蕨

Deparia lancea (Thunb.) Fraser-Jenk. 單葉對囊蕨

Deparia petersenii (Kunze) M.Kato var. *petersenii*
假蹄蓋蕨

Note: Only variety *petersenii* [sensu Kato (1984)] has been found in
Taiwan.

Deparia subfluvialis (Hayata) M.Kato 南洋假鱗毛蕨

Deparia unifurcata (Baker) M.Kato 東亞假鱗毛蕨

Deparia × *tomitaroana* (Masam.) R.Sano 羽裂葉對囊蕨

Note: = *D. lancea* × *D. petersenii*

Diplazium 雙蓋蕨屬

Diplazium asperum Blume 粗柄雙蓋蕨

Diplazium chinense (Baker) C.Chr. 華雙蓋蕨

Diplazium chioui T.C.Hsu 邱氏雙蓋蕨^{EN} (Fig. 1I)

Diplazium crassiusculum Ching 厚葉雙蓋蕨

Diplazium dilatatum Blume 廣葉鋸齒雙蓋蕨

Diplazium doederleinii (Lueres.) Makino 德氏雙蓋蕨

Diplazium donianum (Mett.) Tardieu var. *donianum* 細
柄雙蓋蕨

Diplazium donianum (Mett.) Tardieu var. *aphanoneuron*
(Ohwi) Tagawa 隱脈細柄雙蓋蕨

Diplazium donianum (Mett.) Tardieu var. *lobatum*
Tagawa 裂葉雙蓋蕨

Diplazium esculentum (Retz.) Sw. var. *esculentum* 過溝
菜蕨

Diplazium esculentum (Retz.) Sw. var. *pubescens* (Link)
Tardieu & C.Chr. 毛軸過溝菜蕨

Diplazium fauriei Christ 小葉雙蓋蕨

Diplazium incomptum Tagawa 翅柄雙蓋蕨

Diplazium kawakamii Hayata var. *kawakamii* 川上氏雙
蓋蕨

Diplazium kawakamii Hayata var. *subglabratum*
Tagawa 亞光滑川上氏雙蓋蕨

Diplazium ketagalaniorum T.C.Hsu 凱達格蘭雙蓋蕨^{EN}

Diplazium kuoi T.C.Hsu 郭氏雙蓋蕨^{EN}

Diplazium laxifrons Rosenst. 疏葉雙蓋蕨

Diplazium maonense Ching 馬鞍山雙蓋蕨

Diplazium megaphyllum (Baker) Christ 大葉雙蓋蕨

Diplazium mettenianum (Miq.) C.Chr. 深山雙蓋蕨

Diplazium okinawaense Tagawa 琉球雙蓋蕨

Diplazium okudairae Makino 假耳羽雙蓋蕨



- Diplazium petrii* Tardieu 廣葉深山雙蓋蕨
Diplazium pullingeri (Baker) J.Sm. 樸氏雙蓋蕨
Diplazium squamigerum (Mett.) Matsum. 長苞雙蓋蕨
Diplazium virescens Kunze var. *virescens* 綠葉雙蓋蕨
Diplazium virescens Kunze var. *conterminum* (Christ) Sa.Kurata 邊生雙蓋蕨
Diplazium virescens Kunze var. *taiwanense* (Tagawa) Sa.Kurata 臺灣雙蓋蕨
Diplazium viridissimum Christ 擬德氏雙蓋蕨
Diplazium wichurae (Mett.) Diels 鋸齒雙蓋蕨

Onocleaceae 球子蕨科

- Pentarhizidium* 東方莢果蕨屬
Pentarhizidium orientale (Hook.) Hayata 東方莢果蕨

Blechnaceae 烏毛蕨科

Woodwardioideae 狗脊蕨亞科

- Woodwardia* 狗脊蕨屬
Woodwardia harlandii Hook. 哈氏狗脊蕨
Woodwardia japonica (L.f.) Sm. 日本狗脊蕨
Woodwardia kempii Copel. 細葉狗脊蕨
Woodwardia prolifera Hook. & Arn. 珠芽狗脊蕨
Woodwardia unigemmata (Makino) Nakai 頂芽狗脊蕨

Blechnoideae 烏毛蕨亞科

- Blechnidium* 烏木蕨屬
Blechnidium melanopus (Hook.) T.Moore 烏木蕨
Blechnopsis 擬烏毛蕨屬
Blechnopsis orientalis (L.) C.Presl 擬烏毛蕨
Brainea 蘇鐵蕨屬
Brainea insignis (Hook.) J.Sm. 蘇鐵蕨
Cleistoblechnum 閉囊蕨屬
Cleistoblechnum eburneum (Christ) Gasper & Salino 閉囊蕨
Diploblechnum 假杪羅屬
Diploblechnum fraseri (A.Cunn.) DeVol 假杪羅
Spicantopsis 羅曼蕨屬
Spicantopsis hancockii (Hance) Masam. 韓氏羅曼蕨

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