

Family 1. OPHIOGLOSSACEAE

(3 genera, 9 species, 1 variety, 2 formae + 2 interforma hybrids)

1. Botrychium Swartz

Botrychium daucifolium Wall. ex Hook. & Grev., Icon. Fil. (1829) t. 161; --Copel., FFP 1 (1958) 20.

Botrychium lanuginosum Wall. ex Hook. & Grev., Icon. Fil. (1828) t. 79; --Copel., FFP 1 (1958) 19.

1. Helminthostachys Kaulfuss

Helminthostachys zeylanica (L.) Hook., Genera (1840) t. 47; --Copel., FFP 1 (1958) 20; --
Holttum, Rev. Fl. Mal. 2 (1954) 42, Fig. 2.

Sri Lanka and India to Hainan, Taiwan, across Malesia to New Caledonia.

Throughout the Philippines. Terrestrial in open brushy places near sea level on damp ground.

1. Ophioglossum Linnaeus

Revision:
Wieffering,

Ophioglossum costatum R Br.

Ophioglossum gramineum Willd.
var. gramineum

Ophioglossum intermedium Hook., Icon. Pl. 10 (1854) t. 995; --Copel., FFP 1 (1958) 18;

Ophioglossum nudicaule L.f., Suppl. (1781) 443; --Copel., FFP 1 (1958) 18;
var. nudicaule

var. macrorrhizum (Kunze) Clausen

Ophioglossum pendulum L., Sp. Pl. ed. 2 (1763) 1518; --Copel., FFP 1 (1958) 19; --Holttum, Rev. Fl. Mal. 2 (1954) 40.

forma pendulum

Old World tropics from Madagascar through tropical Asia to Polynesia.
Throughout the Philippines. Epiphytic in everwet rainforests.

forma pendulum x **forma nutans** Alderw.

forma pendulum x **forma falcatum** (C Presl) Wief.

Ophioglossum reticulatum L., Sp. Pl. (1753) 1063; --Copel., FFP 1 (1958) 17;

forma reticulatum

Ophioglossum petiolatum Hook., Exot. Fl. (1823) pl. 56; --Copel., FFP 1 (1958) 17;
Ophioglossum nudicaule L. f. var. grandifolium Clausen, Mem. Torr. Bot. Club 19 (1938) 151; --Copel., FFP 1 (1958) 18;

? Ophioglossum ramosii Copel., PJS 56 (1935) 97, pl. 1, Fig. 1, 2; FFP 1 (1958) 18.

Pantropic. Probably throughout the Philippines. Terrestrial in humid mostly shaded sites. Only present during the wet season, 0-1600m.

forma dilatatum (Miq.) Wief.

forma complicatum (Miq.) Wief.

Family 2. PSILOTACEAE (2 genera, 4 species)

1. Psilotum Linnaeus

Psilotum complanatum Sw., Syn. Fil. (1806) 188, 414, t. 4, Fig. 5.

Psilotum nudum (L.) Griseb., Prodr. Aethéogam. (1805) 112.

Psilotum triquetrum Sw., Schrad. J. Bot. 1800 (2) 1801

2. Tmesipteris Bernhardt

Tmesipteris lanceolata Dang, Le Botaniste 2^{me} Serie (1891)

Tmesipteris tannensis auctt. non (Spreng.) Bernh.

Family 3. EQUISETACEAE (1 genus, 1 species)

Revision:

Hauke, RI. 1963. A Taxonomic Monograph of the genus Equisetum subgenus Hippochaete.
Beih. Nova Hedwigia 8: 1-123.

Laferrière, JE. 1998. Equisetaceae. Flora Malesiana series 2, 3: 287-288

1. *Equisetum* Linnaeus

Equisetum ramosissimum Desf.

ssp. *debile* (Roxb. ex Vauch.) Hauke, Amer. Fern J. 52 (1962) 33.

Family 4. MARATTIACEAE (4 genera, 5 species)

1. *Angiopteris* Hoffmann

Angiopteris evecta Sw., Syn. Fil. (1806) 395; --Copel., FFP 1 (1958) 22, *in obs., pro syn. A. palmiformis*

Angiopteris palmiformis (Cav.) C Chr., Dansk Bot. Arki 3, 9 (1937) 30, t. 3, Fig. 8, 9; --Copel., FFP 1 (1958) 22.

Angiopteris elmeriana Copel. *in* Elmer, LPB 5 (1913) 1679; --Copel., FFP 1 (1958) 23.

Angiopteris uncinata Christ, PJS 2 c (1907) Bot. 186, *non* Vriese (1853); --Copel., FFP 1 (1958) 24.

Angiopteris caudata Vriese, Monog. (1853) 20; --Copel., FFP 1 (1958) 24.

Angiopteris cartilagidens Christ, Bull. Boiss. 6 (1898) 207, t. 4, Fig. 8; --Copel., FFP 1 (1958) 24.

Angiopteris pruinosa Kunze, Bot. Zeit. 4 (1846) 417; --Copel., FFP 1 (1958) 25.

Angiopteris angustifolia C Presl var. *prunifera* Hieron., Hedwigia 61 (1919) 257; --Copel., FFP 1 (1958) 25.

2. *Christensenia* Maxon

Christensenia aesculifolia (Blume) Maxon, Proc. Biol. Soc. Wash. 18 (1905) 240; --Copel., FFP 1 (1958) 27.

India (Assam) to Malesia.

3. *Macroglossum* Copeland

Macroglossum alidae Copel.

4. *Marattia* Swartz

Marattia pellucida C Presl, Suppl. Tent. (1845) 10; --Copel., FFP 1 (1958) 26.

Marattia ternatea Christ, PJS 2 c (1907) Bot. 185; --Copel., FFP 1 (1958) 26.

C LUZON southwards to MINDANAO: Mt. Matutum.

Marattia sylvatica Blume, Enum. (1828) 256; --Copel., FFP 1 (1958) 27.

LUZON: Cordillera Central. Common in mossy montane forests to ca. 2400 m.

Family 5. OSMUNDACEAE (1 genus, 2-3 species)

1. *Osmunda* Linnaeus

Osmunda bromeliifolia (C Presl) Copel., PJS 2 c (1907) Bot. 147; --Copel., FFP 1 (1958) 30.

Osmunda banksiifolia (C Presl) Kuhn, Ann. Lugd.-Bat. 4 (1869) 299; --Copel., FFP 1 (1958) 30.

Osmunda herbacea Copel., PJS 40 (1929) 291; FFP 1 (1958) 31;

Family 6. HYMENOPHYLLACEAE (5 genera, 60 species)

Revision:

Ebihara, A, J-Y Dubuisson, K Iwatsuki, S Hennequin, & M Ito. 2006: A Taxonomic Revision of the Hymenophyllaceae. *Blumea* 51: 221-280.

Conspectus to the genera:

Subfamily I. Cardiomanoideae [petioles >7 cm; lamina usually of 4 cell-layers] – Only genus: *Cardiomanes* C Presl, not represented in the Philippines.

Subfamily II. Hymenophylloideae [petioles smaller; lamina usually 1 cell thick (except veins): formerly 2 polymorphous genera recognized – *Hymenophyllum* and *Trichomanes* but their limits still controversial. Following generic list is partly based on K Iwatsuki, 1984 and 1985].

Abrodictyum C Presl =Cephalomanes

Callistopteris C Presl =Cephalomanes

1. Cephalomanes C Presl

Cephalomanes apiifolia (C Presl) K Iwats.

Trichomanes apiifolium C Presl, *Hymen.* (1843) 108, 136; --Copel., *PJS* 51 (1933) 227, pl. 42, Fig. 1; *Callistopteris apiifolia* (C Presl) Copel., *PJS* 67 (1938) 65; *FFP* 1 (1958) 75

Cephalomanes atrovirens C Presl, *Hymen.* (1843) 17, pl. 5; --Copel., *FFP* 1 (1958) 77

Trichomanes atrovirens (C Presl) Kunze, *Bot. Zeit.* 6 (1847) 371; --Copel., *PJS* 51 (1933) 251, pl. 52, Fig. 3; pl. 55, Fig. 2;

Cephalomanes crassum (Copel.) MG Price

Trichomanes crassum Copel.

Cephalomanes cumingii (C Presl) K Iwats.

Abrodictyum cumingii C Presl

Trichomanes cumingii (C Presl) C Chr.

Cephalomanes grande (Copel.) K Iwats.

Trichomanes grande Copel., *PJS* 6 c (1911) 70; *PJS* 51 (1933) 224, pl. 40, Fig. 1-4; *Nesopteris grandis* (Copel.) Copel., *PJS* 67 (1938) 66; *FFP* 1 (1958) 76

Cephalomanes javanicum (Blume) Bosch

var. asplenioides (C Presl) K Iwats.

Cephalomanes oblongifolium C Presl, *Epim. Bot.* (1849) 19, pl. 10; --Copel., *FFP* 1 (1923) 78

Trichomanes asplenioides C Presl

Trichomanes laciniatum Roxb.

Cephalomanes meifolium (Bory ex Willd.) K Iwats.

Trichomanes meifolium Bory ex Willd.

Macroglena meifolia (Bory ex Willd.) Copel.

Trichomanes gemmatum J Sm. ex Baker

Cephalomanes obscurum (Blume) K Iwats.

var. obscurum

Trichomanes obscurum Blume

Selenodesmium obscurum (Blume) Copel.

Trichomanes rigidum Sw.

Cephalomanes thysanostomum (Makino) K Iwats.

Trichomanes thysanostomum Makino, Bot. mag. Tokyo 12 (1898) 193;
Nesopteris thysanostoma (Makino) Copel., PJS 67 (1938) 66;

Cephalomanes

Trichomanes extravagans Copel.
Selenodesmium extravagans (Copel.) Copel.

Cephalomanes setaceum (Bosch.) K Iwats.

Trichomanes setaceum Bosch
Macroglena setacea (Bosch) Copel.

2. Crepidomanes (C Presl) C Presl

Crepidomanes auriculatum (Blume) K Iwats.

Trichomanes auriculatum Blume
Vandenboschia auriculata (Blume) Copel.

Crepidomanes brevipes (C Presl) Copel., PJS 67 (1938) 60; FFP 1 (1958) 71

Trichomanes brevipes (C Presl) Baker, Syn. Fil. (1867) 84; --Copel., PJS 51 (1933) 182, pl. 20;

Crepidomanes bipunctatum (Poir.) Copel., PJS 67 (1938) 59; FFP 1 (1958) 72

Trichomanes bipunctatum Poir. in Lam., Encycl. 8 (1808) 69; --Copel., PJS 51 (1933) 177, pl. 18, Fig. 3, 1-4;

Crepidomanes christii (Copel.) Copel., PJS 67 (1938) 60; FFP 1 (1958) 73

Trichomanes christii Copel., PJS 1 (1906) Suppl. 251; PJS 51 (1933) 185, pl. 21;

Crepidomanes digitatum (Sw.) K Iwats.

Trichomanes digitatum Sw., Syn. Fil. (1806) 370; --Copel., PJS 51 (1933) 159, pl. 7, Fig. 3, 4;
Microtrichomanes digitatum (Sw.) Copel., PJS 67 (1938) 36; FFP 1 (1958) 55

Crepidomanes humile (Forst.) Bosch

Trichomanes humile Forst., Prodr. (1786) 12; --Copel., PJS 51 (1933) 164, pl. 12;
Crepidopteris humilis (Forst.) Copel., PJS 67 (1938) 58; FFP 1 (1958) 70
Trichomanes gracillimum Copel., PJS 51 (1933) 168, pl. 13;
Crepidopteris gracillima (Copel.) Copel., PJS 67 (1938) 58; FFP 1 (1958) 70

Crepidomanes johnstonense (Bailey) K Iwats.

Trichomanes johnstonense Bailey
Vandenboschia johnstonensis (Bailey) Copel.

Crepidomanes minutum (Blume) K Iwats.

Trichomanes minutum Blume, Enum. Pl. Jav. (1828) 223
Gonocormus minutus (Blume) Bosch, Hymen. Javan. (1861) 7, pl. 3; --Copel., FFP 1 (1958) 68

Crepidomanes pallidum (Blume) K Iwats.

Pleuromanes pallidum (Blume) C. Presl, Epim. Bot. (1849) 258; --Copel., FFP 1 (1958) 67
Trichomanes pallidum Blume, Enum. Pl. Jav. (1828) 226; --Copel., PJS 51 (1933) 141;

Crepidomanes rupicolum (Raciborski) Copel., PJS 67 (1938) 59; FFP 1 (1958) 73

Trichomanes rupicolum Raciborski, Pterid. Buitenz. (1898) 24

Crepidomanes acutum (C. Presl) K Iwats.

Trichomanes acutum C Presl, Epim. Bot. (1849) 258

Crepidomanes minutum (Blume) K Iwats.

Trichomanes minutum Blume forma alagensis (C Chr.) Copel.
Trichomanes alagensis Christ, PJS 3 c (1908) Bot. 270; --Copel., PJS 51 (1933) 152, pl. 6, Fig. 4-7;
Gonocormus alagensis (Christ) Copel., PJS 67 (1938) 57

Crepidomanes

Trichomanes latifrons Bosch
Vandenboschia latifrons (Bosch) Copel.

Crepidomanes maximum (Blume) K Iwats.

Trichomanes maximum Blume
Vandenboschia maxima (Blume) Copel.

Crepidomanes

Microtrichomanes zamboanganum Copel., PJS 81 (1952) 2; FFP 1 (1958) 56
Trichomanes zamboanganum (Copel.) C Morton

Unplaced taxa:

Trichomanes idoneum C Morton

Trichomanes geminatum *auct. non* Baker

Trichomanes bifidum C Presl *non* Willd.

Trichomanes obtusum (Copel.) C Morton

Crepidopteris Copeland =Crepidomanes

Gonocormus Bosch =Crepidomanes

3. Hymenophyllum Smith

Hymenophyllum acanthoides (Bosch) Rosenst., Bull. Jard. Bot. Buitenz. 2, 2 (1911) 25;
--Copel., PJS 64 (1937) 45, pl. 17;
Meringium acanthoides (Bosch) Copel., PJS 67 (1938) 42; FFP 1 (1958) 63

Hymenophyllum angulosum Christ, PJS 3 c (1908) Bot. 269; --Copel., PJS 64 (1937) 33, pl. 13;
Mecodium angulosum (Christ) Copel., PJS 64 (1937) 109, pl. 50; FFP 1 (1958) 49

Hymenophyllum badium Hook. & Grev., Icon. Fil. (1828) pl. 76; --Copel., PJS 64 (1937) 144, pl. 76;
Mecodium badium (Hook. & Grev.) Copel., PJS 67 (1938) 23; FFP 1 (1958) 53
Mecodium crispatum (Wall.) Copel., PJS 67 (1938) 23; FFP 1 (1958) 54
Hymenophyllum crispatum Wall. in Hook. & Grev., Icon. Fil. (1828) pl. 72

Hymenophyllum bartlettii (Copel.) C Morton
Meringium bartlettii Copel., PJS 73 (1940) 464; FFP 1 (1958) 62

Hymenophyllum bicolanum Copel., PJS 64 (1937) 31, pl. 10
Meringium bicolanum (Copel.) Copel., PJS 67 (1938) 40; FFP 1 (1958) 60

Hymenophyllum blandum Raciborski, Pterid. Buitenz. (1898) 20; --Copel., PJS 64 (1937) 50, pl. 18;
Meringium blandum (Raciborski) Copel., PJS 67 (1938) 43; FFP 1 (1958) 63

Hymenophyllum bontocense Copel., PJS 64 (1937) 33, pl. 12;
Meringium bontocense (Copel.) Copel., PJS 67 (1938) 41; FFP 1 (1958) 60

Hymenophyllum campanulatum Christ, PJS 2 c (1907) Bot. 155; --Copel., PJS 64 (1937) 32, pl. 11;
Meringium campanulatum (Christ) Copel., PJS 67 (1938) 40; FFP 1 (1958) 60

Hymenophyllum crispatum Wall. in Hook. & Grev., Icon. Fil. (1828) pl. 72; --Copel., PJS 64

(1937) 148, pl. 77;
Mecodium crispatum (Wall.) Copel., PJS 67 (1938) 23;

Hymenophyllum denticulatum Sw., Schrad. J. (1801) 100; --Copel., PJS 64 (1937) 41, pl. 15;
Meringium denticulatum (Sw.) Copel., PJS 67 (1938) 42; FFP 1 (1958) 62

Hymenophyllum edanoi (Copel.) C Morton
Mecodium edanoi Copel., PJS 81 (1952) 2; FFP 1 (1958) 50

Hymenophyllum emarginatum Sw., Schrad. J. 2 of 1800 (1801) 101; --Copel., PJS 64 (1937)
118, pl. 58;
Mecodium emarginatum (Sw.) Copel., PJS 67 (1938) 21; FFP 1 (1958) 52

Hymenophyllum fimbriatum J Sm., J. Bot. 3 (1841) 418, *nomen*; --Hook., Sp. Fil. (1844) 102,
pl. 36C; --Copel., PJS 64 (1937) 122, pl. 60;
Mecodium fimbriatum (J Sm.) Copel., PJS 67 (1938) 21; FFP 1 (1958) 52

Hymenophyllum holochilum (Bosch) C Chr., Index Fil. (1905) 226, 362; --Copel., PJS 64
(1937) 34, pl. 14;
Meringium holochilum (Bosch) Copel., PJS 67 (1938) 41; FFP 1 (1958) 62
Hymenophyllum merrillii Christ, PJS 2 c (1907) Bot. 154; --Copel., PJS 64 (1937) 33, pl. 13;
Meringium merrillii (Christ) Copel., PJS 67 (1938) 41; FFP 1 (1958) 61

Hymenophyllum imbricatum Blume, Enum. Pl. Jav (1828) 220; --Copel., PJS 64 (1937) 137,
pl. 70, 71;
Mecodium imbricatum (Blume) Copel., PJS 67 (1938) 22; FFP 1 (1958) 53

Hymenophyllum johorensense Holttum, Gard. Bull. **Sing.** 4 (1929) 408, with fig.; --Copel., PJS 64
(1937) 51, pl. 19;
Meringium johorensense (Holttum) Copel., FFP 1 (1958) 64
Hymenophyllum reductum Copel., PJS 64 (1937) 53, pl. 20;
Meringium reductum (Copel.) Copel., PJS 67 (1938) 43; FFP 1 (1958) 64

Hymenophyllum klabatense Christ, Verh. Nat. Ges. Basel 11 (1894) 4; --Copel., PJS 64
(1937) 30;
Meringium klabatense (Christ) Copel., PJS 67 (1938) 40; FFP 1 (1958) 59

Hymenophyllum nitiduloides Copel., PJS 64 (1937) 112, pl. 52;
Mecodium nitiduloides (Copel.) Copel., PJS 64 (1937) 112, pl. 52; FFP 1 (1958) 50

Hymenophyllum pachydermicum Cesati, Atti Accad. Napoli 8 (1876) 8;
Meringium pachydermicum (Cesati) Copel., PJS 67 (1938) 41; FFP 1 (1958) 57

Hymenophyllum paniculiflorum C Presl, Hymen. (1843) 147; --Copel., PJS 64 (1937) 110,
pl. 51;
Mecodium paniculiflorum (C Presl) Copel., PJS 67 (1938) 19; FFP 1 (1958) 50

Hymenophyllum polyanthos (Sw.) Sw., Schrad. J. ii of 1800 (1801) 102; --Copel., PJS 64
(1937) 97, pl. 46, 47;
Mecodium polyanthos (Sw.) Copel., PJS 67 (1938) 19; FFP 1 (1958) 49

Hymenophyllum productum Kunze, Bot. Zeit. 6 (1848) 305; --Copel., PJS 64 (1937) 118, pl.
54;
Mecodium productum (Kunze) Copel., PJS 67 (1938) 20; FFP 1 (1958) 51

Hymenophyllum ramosii Copel., PJS 64 (1937) 34, pl. 9, Fig. 4-6;
Meringium ramosii (Copel.) Copel., PJS 67 (1938) 31; FFP 1 (1958) 61

Hymenophyllum reinwardtii Bosch., Pl. Jungh. 1 (1856) 567; --Copel., PJS 64 (1937) 115, pl.
55;
Mecodium reinwardtii (Bosch.) Copel., PJS 67 (1938) 20; FFP 1 (1958) 51

Hymenophyllum serrulatum (C Presl) C Chr.

Meringium meyenianum C Presl, Hymen. (1843) 116, pl. 8 B; --Copel., FFP 1 (1958) 58.
Hymenophyllum meyenianum (C Presl) Copel., PJS 64 (1937) 25, pl. 8; FFP 1 (1958) 58
Hymenophyllum edentulum (Bosch) C Chr., Index Fil. (1905) 360;
Meringium edentulum (Bosch) Copel., PJS 67 (1938) 41; FFP 1 (1958) 58
Hymenophyllum bakeri Copel., Sarawak Mus. J. 2 (1917) 309; --Copel., PJS 64 (1937) 29;
Meringium bakeri (Copel.) Copel., PJS 67 (1938) 40; FFP 1 (1958) 59
Hymenophyllum pulchrum Copel., PJS 64 (1937) 22;
Meringium pulchrum (Copel.) Copel., PJS 67 (1938) 42; FFP 1 (1958) 57

Hymenophyllum thuidium Harrington, J. Linn. Soc. Bot. 16 (1877) 25; --Copel., PJS 64 (1937) 116, pl. 56;

Mecodium thuidium (Harrington) Copel., PJS 67 (1938) 20; FFP 1 (1958) 52

Hymenophyllum vittatum Copel., PJS 64 (1937) 31, pl. 9, Fig. 1-3; FFP 1 (1958) 59

Meringium vittatum (Copel.) Copel., PJS 67 (1938) 40; FFP 1 (1958) 59

Macroglena (C Presl) Copeland =Cephalomanes

Mecodium C Presl =Hymenophyllum subg. Mecodium Copeland sect. Mecodium

Meringium C Presl =Hymenophyllum

Microgonium C Presl =Trichomanes L. *emend.* K Iwatsuki (1984).

Microtrichomanes (Mettenius) Copeland =Crepidomanes

Nesopteris Copeland =Cephalomanes

Pleuromanens Blume =Crepidomanes

Selenodesmium (Prantl) Copeland =Cephalomanes

4. Sphaerocionium C Presl

Sphaerocionium pilosissimum (C Chr.) Copel., PJS 67 (1938) 33; FFP 1 (1958) 54
Hymenophyllum pilosissimum C Chr., Gard. Bull. 7 (1934) 213;

5. Trichomanes Linnaeus

Trichomanes mindorense Christ, PJS 3 c (1908) Bot. 270; --Copel., PJS 51 (1933) 209, pl. 34, Fig. 1, 2;

Microgonium mindorense (Christ) Copel., PJS 67 (1938) 61; PJS 51 (1933) 164, pl. 12;
Trichomanes craspedoneurum Copel., PJS 7 c (1912) Bot. 58; PJS 51 (1933) 208, pl. 33, Fig. 5-7;
Microgonium craspedoneurum (Copel.) Copel., PJS 67 (1938) 61; FFP 1 (1958) 74.

Trichomanes motleyi Bosch, Ned. Kruid. Arch. 5 (1861) 145; --Copel., PJS 51 (1933) 201, pl. xx, Fig. 1-4;

Microgonium motleyi Bosch, Hymen. Javan. (1861) 5, pl. 1; --Copel., FFP 1 (1958) 75
Trichomanes beccarianum Cesati, Atti Accad. Napoli, Part 8 7 (1876) 8, pl. 1, Fig. 2; --Copel., PJS 51
(1933) 200, pl. 29;
Microgonium beccarianum (Cesati) Copel., PJS 67 (1938) 63; FFP 1 (1958) 74

Vandenboschia = Crepidomanes

Family 7. GLEICHENIACEAE (2 genera, 16 species, 4 varieties)

Conspectus to the genera:

Subfamily I. Gleichenioideae [frond at least once-forked]

Dicranopteris Bernh.
Gleichenia Sm.

Subfamily II. Stromatopteridoideae [frond once-pinnate]: Monotypic, not represented in the Philippines.

1. Dicranopteris Bernhardi

Dicranopteris curranii Copel., PJS 81 (1952) 4; --Copel., FFP 1 (1958) 46;
Sumatra, Peninsular Malaysia, W Java, Lesser Sunda Isls (Flores), Borneo,
Sulawesi, Philippines. LUZON (Laguna), NEGROS, MINDANAO

Dicranopteris linearis (Burm.) Underw., Bull. Torrey Bot. Club 34 (1907) 250; --Copel.,
FFP 1 (1958) 45;

var. linearis

var. altissima Holttum

var. latiloba Holttum

var. rigida (Blume) Holttum

Dicranopteris crassifolia (C Presl) Ching, Sunyatsenia 5 (1940) 275; --Copel., FFP 1 (1958) 46;

var. subspeciosa Holttum

Diplopterygium (Diels) Nakai =Gleichenia

2. Gleichenia Smith

Gleichenia dicarpa R Br., Prodr. Fl. Nov. Holl. (1810) 161; --Copel., FFP 1 (1958) 38.
Australia, New Caledonia, Malesia: New Guinea and Philippines. MINDANAO
(Agusan del Norte, Mt Urdaneta; Davao, Mt Apo).

Gleichenia elmeri Copel. in Elmer, LPB 3 (1910) 799;
Hicriopteris elmeri (Copel.) Copel., FFP 1 (1958) 43

Gleichenia hirta Blume, Enum. Pl. Jav. (1828) 250; --Copel., FFP 1 (1958) 40.
Sticherus hirtus (Blume) Ching, Sunyatsenia 5 (1940) 203 (err. 'hirsutus')
Moluccas and the Philippines. LUZON, MINDORO, MINDANAO.

Gleichenia hispida Mett. ex Kuhn, Verh. K.K. Zool.-Bot. Ges. Wien 25 (1875) 600;
Sticherus hispidus (Mett. ex Kuhn) Copel., Gen. Fil. (1947) 27; FFP 1 (1958) 41;
Sticherus koordersii (Christ) Copel., FFP 1 (1958) 40.
Sticherus pinnatus Copel.
Sumatra, Java, Bali, N Sulawesi, Ternate and Philippines.
LUZON: Benguet, Albay (Mt Mayon), NEGROS.

Gleichenia laevis Christ, Bull. Ac. Inst. Geogr. Bot. 3, 11 (1902) 268;
Hicriopteris laevis (Christ) Ching, Sunyatesenia 5 (1940) 280; --Copel., FFP 1 (1958) 44

Gleichenia loheri Christ, Bull. Herb. Boiss. 2, 6 (1906) 1009;
Sticherus loheri (Christ) Copel., FFP 1 (1958) 42
Sticherus perpaleaceus Copel., PJS 81 (1952) 3; FFP 1 (1958) 42.

var. loheri

LUZON: Benguet (Mt Pulog), Rizal, Quezon (Mt Banahaw).

var. major Holttum, Reinwardtia 4 (1959) 272;
NEGROS: Negros Occidental (Mt Kanlaon).

Gleichenia longissima Blume, Enum. Pl. Jav. (1828) 250;
Hicriopteris glauca (Thunb.) Ching, Sunyatsenia 5 (1940) 279; --Copel., FFP 1 (1958) 43
S China to Indochina through Malesia to Melanesia (Fiji, Tahiti). In Malesia not
collected in the Lesser Sunda Isls E of Flores, Sulawesi, the Moluccas and New
Guinea.
Throughout the Philippines, usually at 800-1500m alt. in exposed places.

Gleichenia microphylla R Br.

Gleichenia paleacea (Copel.) Holttum, Reinwardtia 4 (1957) 265;
Hicriopteris paleacea Copel., PJS 81 (1952) 3; FFP 1 (1958) 44

Gleichenia peltophora Copel., PJS 40 (1929) 292, t. 1; --Copel., FFP 1 (1958) 39.
New Guinea, S C Sulawesi, Borneo and Philippines.
MINDANAO: South Cotabato (Mt Matutum), alt. 1600m.

Gleichenia sordida Copel. in Elmer, LPB 3 (1910) 798;
Hicriopteris sordida (Copel.) Copel., FFP 1 (1958) 44

Gleichenia truncata (Willd.) Sprengel, Syst. Veg. ed. 16, 4 (1827) 25;

var. truncata

Sticherus laevigatus (Willd.) C Presl, Tent. (1836) 52; --Copel., FFP 1 (1958) 41;
Throughout Malesia, apparently most common in the west.

Gleichenia vulcanica Blume, Enum. Pl. Jav. (1828) 251;
Sumatra, Peninsular Malaysia, W Java, Borneo, Philippines, Sulawesi and New
Guinea.
MINDORO: Mindoro Oriental (Mt Halcon), PALAWAN (Mt Pulgar and Mt
Mantalingahan, Co 1773), MINDANAO

Of doubtful occurrence in the Philippines:

Gleichenia milnei Baker, Syn. Fil. (1874) 449;
Sulawesi, Moluccas, New Guinea, Admiralty Isls, Solomons, New Hebrides.
?LUZON

Sticherus C Presl = Gleichenia

Family 8. DIPTERIDACEAE (including Cheiropleuriaceae)
(1 genus, 2 species)

1. Cheiropleuria C Presl

Revision:

Laferrière, JE. 1998. Cheiropleuriaceae. Flora Malesiana series 2, 3: 285-286.

Cheiropleuria bicuspis (Blume) C Presl

2. Dipteris Reinw.

Dipteris conjugata Reinw.

Dipteris lobbiana (Blume) Moore

Family 9. MATONIACEAE (1 genus, 1 species)

Revision:

Kato, M. 1998. Matoniaceae. Flora Malesiana series 2, 3: 289-294

1. Matonia R Brown

Matonia foxworthyi Copel.

Family 10. LYGODIACEAE

Revision:

1. Lygodium Swartz

Lygodium auriculatum (Willd.) Alston, Reinwardtia 5 (1959) 16;
Lygodium semihastatum (Cav.) Desv., Prodr. (1827) 203; --Copel., FFP 1 (1958) 34.
Indochina, Micronesia, Malesia: E Borneo, Philippines.
LUZON, POLILLO, MINDORO, SAMAR, MINDANAO. Terrestrial, usually in thickets
and disturbed forests.

Lygodium circinnatum (Burm.) Sw., Syn. Fil. (1806) 153; --Copel., FFP 1 (1958) 33.
Lygodium basilanicum Christ, PJS 2 c (1907) Bot. 179; --Copel., FFP 1 (1958) 34.
Sri Lanka and India to S China, across Malesia to the Solomons.
Throughout the Philippines. Terrestrial, common in brush and open sites and
disturbed lowland forests.

Lygodium flexuosum (L.) Sw., Schrader's J. (1801) 106; --Copel., FFP 1 (1958) 35.
Sri Lanka, India, Himalayas to S China, Hongkong, Taiwan, Ryukyus, across
Malesia, N Queensland, Melanesia. Terrestrial, in brush and open forests at low
altitudes.

Lygodium japonicum (Thunb.) Sw., Schrader's J. (1801) 106; --Copel., FFP 1 (1958) 36.
Lygodium mearnsii Copel., PJS 3 c (1908) Bot. 37; --Copel., FFP 1 (1958) 35.
Sri Lanka, Himalayas (Kashmir eastwards) to E China (Zhejiang), Korea, Japan and
southwards to Thailand and S China; in Malesia: Banka, C & E Java, Sulawesi,

Philippines, Moluccas, Lesser Sunda Isls and New Guinea. Naturalized in Florida and Texas. Terrestrial in open forests and thoroughly cleared sites at low to medium altitudes.

Lygodium longifolium (Willd.) Sw. in Schrader's J. Bot. 1801, pt. 2 (1803) 305; S India, Hainan. In Malesia: Sumatra, Peninsular Malaysia, Riouw and Lingga Isls., Borneo, Philippines.
LUZON (doubtful), PALAWAN.

Lygodium merrillii Copel., PJS 2 c (1907) Bot. 146, t. 4; FFP 1 (1958) 37.
Lygodium matthewii Copel., PJS 3 c (1908) Bot. 36; --Copel., FFP 1 (1958) 37.
SW China (Guizhou), N Vietnam, Sumatra, Borneo (Sarawak), Philippines.
LUZON: Isabela; S Luzon, MINDORO, LEYTE.

Lygodium microphyllum (Cav.) R Br., Prodr. Fl. Nov. Holl. (1810) 162;
Lygodium scandens (L.) Sw., Schrader's J. (1801) 106; --Copel., FFP 1 (1958) 36.
Tropical Africa, SE Asia, N to Bangladesh and Hongkong and the Ryukyus, across Malesia to the Solomons, New Caledonia, N and E Australia S to New South Wales.
LUZON to MINDANAO (along the Pacific side), MINDORO, CULION, BASILAN.
Terrestrial in moe or less open sites.

Lygodium salicifolium Sw.

Lygodium versteegii Christ, Nova Guinea 8 (1909) 161; --Copel., FFP 1 (1958) 37.
New Guinea and Philippines.
LUZON: Laguna (Mt Makiling), Quezon (Guinayangan), Camarines (Bicol National Park), MINDANAO: Agusan del Norte (Mt Hilong-hilong).

Family 11. ANEMIACEAE (no Philippine representatives)

Family 12. SCHIZAEACEAE (2 genera, 13 species)

Revision:

Holttum, RE. 1959. Schizaeaceae. Flora Malesiana series 2, 1: 37-61.

1. Schizaea Smith

Revision:

Barcelona, JF, BF Hernaez & MG Price. 1996. xxxxxxxx Asia Life Sciences 5 (1996) 27-34

Schizaea dichotoma (L.) Sm., Mém. Acad. Turin 5 (1793) 422; --Copel., FFP 1 (1958) 32.

Schizaea digitata (L.) Sw., Syn. Fil. (1806) 150, 380, t. 4, Fig. 1; --Copel., FFP 1 (1958) 32.
Actinostachys digitata (L.) Wall. ex Brackenr.

Schizaea inopinata Selling, Svensk. Bot. Tidskr. 40 (1946) 274, Fig. 1-7; --Copel., FFP 1 (1958) 32.
Actinostachys inopinata (Selling) Reed

Schizaea malaccana Baker

Family 13. MARSILEACEAE

1. Marsilea Linnaeus

Marsilea crenata C Presl

Family 14. SALVINIACEAE (including Azollaceae)

1. **Salvinia** Seguiet

Salvinia

1. **Azolla** Lamarck

Revision:

Saunders, RMK. 1998. Azollaceae. Flora Malesiana series 2, 3: 277-284

Azolla pinnata R Br.

Azolla pinnata R Br. var. *imbricata* (Roxb. ex Griff.) Bonap.

Azolla imbricata (Roxb. ex Griff.) Nakai

Family 15. THYRSOPTERIDACEAE
(No Philippine representatives)

Family 16. LOXOMATAACEAE
(No Philippine representatives)

Family 17. CULCITACEAE
(No Philippine representatives)

Family 18. PLAGIOGYRIACEAE (1 genus, 7 species)

Revision:

Zhang XC & HP Nootboom. 1998. Plagiogyriaceae. Flora Malesiana series 2, 3: 295-316

1. **Plagiogyria** (Kunze) Mettenius

Plagiogyria adnata (Blume) Bedd.

Plagiogyria egenolfioides (Baker) Copel.

var. **latipinna** (Copel.) XC Zhang & Noot.

Plagiogyria tuberculata Copel.

Plagiogyria euphlebica (Kunze) Mett.

Plagiogyria christii Copel.

Plagiogyria falcata Copel.

Plagiogyria glauca (Blume) Mett.

Plagiogyria nana Copel.

Plagiogyria glauca var. *nana* (Copel.) C Chr.

Plagiogyria pycnophylla (Kunze) Mett.

Plagiogyria stenoptera (Hance) Diels

19. Family CIBOTIACEAE

1. *Cibotium* Kaulfuss

Cibotium barometz (L.) J Sm.

Assam to S China, W Malesia.

LUZON: Mountain Province (near Bontoc). Known in the Philippines by a single collection, *CAHUP 16635 Pancho*.

Cibotium cumingii Kunze

Family 20. CYATHEACEAE (1 genus, 40 species)

1. *Cyathea* Smith

Cyathea acuminata Copel.

Cyathea apoensis Copel.

Cyathea lobata Copel.

Cyathea atropurpurea Copel.

Gymnosphaera atropurpurea (Copel.) Copel.

Cyathea biliranensis Copel.

Cyathea binuangensis Copel.

Cyathea callosa Christ

Cyathea foxworthyi Copel.

Cyathea camiguinensis Copel.

Cyathea caudata (J Sm.) Copel.

Cyathea arborescens Copel.

Cyathea brevipes Copel.

Cyathea dupaxensis Copel.

Cyathea christii Copel.

Cyathea cinerea Copel.

Cyathea contaminans (Wall.) Copel., *PJS 4 c* (1909) Bot. 60;

Cyathea clementis Copel.

New Guinea to India. Throughout the Philippines. Usually common in open places and light forests from near sea-level to 1300m.

Cyathea curranii Copel.

Cyathea edanoi Copel.

Cyathea elmeri (Copel.) Copel.

Cyathea argyrolepis Copel.

Cyathea dimorphotricha Copel.

Cyathea fenicis Copel.

Cyathea ferruginea Christ

Cyathea ferrugineoides Copel.

Cyathea fuliginosa (Christ) Copel.

Cyathea bicolor Copel.

Cyathea dura Copel.

Cyathea lanaensis Christ

Cyathea lepidigera Copel.

Cyathea mindanaensis (Christ) Copel.

Cyathea squamicostata Copel.

Cyathea sulitii Copel.

Cyathea warihon Copel.

Cyathea halconensis Christ

Cyathea mearnsii Copel.

Cyathea melanophlebia Copel.

Cyathea heterochlamydea Copel.

Cyathea merrillii Copel.

Cyathea integra J Sm. ex Hook.

Cyathea arguta Copel.

Cyathea breviloba Copel.

Cyathea bulusanensis Copel.

Cyathea latebrosa (Wall.) Copel., PJS 4 c (1909) Bot. 52;

Cyathea latipinnula Copel.

Cyathea lepifera (J Sm. ex Hook.) Copel.

Cyathea calocoma (Christ) Copel.

Cyathea pteridioides Copel.

Cyathea loheri Christ, Bull. Herb. Boiss. 2, 6 (1906) 1007;

Cyathea campbellii Copel.

Cyathea fructuosa Copel.

Cyathea indusiosa Copel.

Cyathea matthewii (Christ) Domin

Cyathea mitrata Copel.

Cyathea lurida (Blume) Copel.

Gymnosphaera melanorhachis (Copel.) Copel.

Cyathea masapilidensis Copel.

Cyathea microchlamys Holttum

Cyathea negrosiana Christ

Cyathea obliqua Copel.

Gymnosphaera obliqua (Copel.) Copel.

Cyathea philippinensis Baker, Ann. Bot. 5 (1891) 186; --Copel., FFP 2 (1960) 205; --Holttum, Fl. Males. ser. 2, 1 (1963) 149. --Type: From a cultivated plant originating from the Philippines, ex Hort. Veitch., Feb. 1878), cult. Kew (K).

Cyathea bicolorana Copel. in Elmer, LPB 9 (1920) 3108; --Copel., FFP 2 (1960) 204. --Type: Elmer 16528 (L*, U*, US*, isotypes). Luzon: Sorsogon prov., Mt Bulusan, July 1916.

Cyathea bontocensis Copel., PJS 46 (1931) 209; FFP 2 (1960) 205. --Type: Vanoverbergh 813. Luzon:

Mountain Province.

Cyathea heteroloba Copel., PJS 38 (1929) 134; FFP 2 (1960) 204. –Type: BS 45633 Ramos & Edaño (NY*, isotype). Luzon: Quirino prov., Mt Alzapan, altitude 1500m, May-June 1925.

Cyathea ramosiana Alderw., Bull. Jard. Bot. Buitenz. iii, 2 (1920) 137; --Copel., FFP 2 (1960) 206.

–Type: BS 23411 Ramos (L*, US*, isotypes). Luzon: Sorsogon prov., July-Aug. 1915.

LUZON: Mountain Province, Quirino (Mt Alzapan), Aurora (Mt Camatis), Quezon (Mt Banahaw), Camarines Sur (Mt Isarog, apparently common), Sorsogon (Mt Bulusan),

MINDORO: Mindoro Oriental (Mt Halcon). Montane forests, alt. 800-1500m.

Cyathea polypoda Baker *in* Stapf, Trans. Linn. Soc. Lond. Bot. 4 (1894) 250;

Gymnosphaera dinagatensis (Copel.) Copel.

Gymnosphaera glabra sensu Copel. Fern Fl. Philip. 2 (1960) 235, *non* Blume

Cyathea robinsonii Copel.

Cyathea pseudoalbizzia Copel.

Cyathea rufopannosa Christ

Cyathea setulosa Copel.

Cyathea sibuyanensis Copel.

Cyathea squamulata (Blume) Copel., PJS 4 c (1909) Bot. 37;

Gymnosphaera squamulata Blume

Cyathea suluensis Baker

Cyathea sessilipinnula Copel.

Cyathea trichophora Copel., PJS 6 c (1911) Bot. 363;

Gymnosphaera trichophora (Copel.) Copel.

Cyathea tripinnata Copel., PJS 1 (1906) Suppl. 251;

Cyathea densisora Alderw.

Cyathea leucostegia Copel.

Cyathea leytensis Copel.

Cyathea zamboangana Copel.

Cyathea urdanetensis Copel.

Gymnosphaera Blume =*Cyathea*

Family 21. DICKSONIACEAE

1. Calochlaena

Calochlaena javanica

Culcita javanica (Blume) Maxon

Culcita copelandii (Christ) Maxon

Culcita straminea (Labill.) Maxon

2. Dicksonia L'Heritier

Dicksonia mollis Holttum

Dicksonia blumei (Kunze) T Moore

Family 22. METAXYACEAE (No Philippine representatives)

Family 23 LINDSAEACEAE

3 genera, 37 species, 1 ssp., 5 varieties, 1 possible natural hybrid.
Lindsaea Dryander –29 spp., 4 vars.
Sphenomeris Maxon – 3 spp., 1 ssp.
Tapeinidium (C Presl) C Chr. –5 spp. 1 var., 1 poss. hybrid

Revision:

Kramer, KU. 1971. Lindsaea Group. Flora Malesiana series 2, 1: 177-254

Isoloma J Smith =Lindsaea

1. Lindsaea Dryander

Lindsaea adiantoides J Sm.

Lindsaea tropidorhachis Alderw.

Lindsaea apoensis Copel.

Lindsaea havicei Copel.

3. Lindsaea bouillodii Christ, Not. Syst. 1 (1909) 59;

Thailand and N Vietnam to Malesia: Peninsular Malaysia, Sumatra, W Java, Borneo, Banka and Natuna Is. New to the Philippines: PALAWAN: Mt. Mantalingahan, alt. 1200m, Co 1793 (A, PNH, PUH).

Lindsaea capillacea Christ

Lindsaea cultrata (Willd.) Sw., Syn. Fil. (1806) 119;

Lindsaea decomposita *sensu* Copel. (1960) *non* Willd., *pro parte*.

Lindsaea divergens Hook. & Grev.

Isoloma divergens (Hook. & Grev.) J Sm.

Lindsaea doryphora Kramer

Lindsaea parasitica *sensu* Copel. (1960) *non* Wall.

Lindsaea ensifolia Sw.

ssp. ensifolia

Lindsaea fissa Copel.

Lindsaea hymenophylloides *sensu* Copel. (1960), *non* Blume

Lindsaea gueriniana (Gaudich.) Desv., Mem. Soc. Linn. Paris 6 (1827) 312;

Isoloma guerinianum (Gaudich.) Fée

Isoloma fuligineum (Copel.) Copel.

Lindsaea heterophylla Dryander

Lindsaea javanensis Blume

Lindsaea lobata Poir. *in* Lam., Encycl. Suppl. 3 (1813) 448;

Lindsaea longifolia Copel.

Lindsaea lucida Blume, Enum. Pl. Jav. (1828) 216;

Lindsaea securifolia C Presl ex Goldm.
Lindsaea gracilis Blume in Copel. (1960), *excl. syn.*
ssp. lucida

Lindsaea merrillii Copel.
ssp. merrillii

Lindsaea oblanceolata Alderw., Bull. Jard. Bot. Buitenz. 2, 23 (1916) 15;

Lindsaea obtusa J Sm. ex Hook., Sp. Fil. 1 (1846) 224;
Lindsaea decomposita *sensu* Copel. (1960) *non* Willd., *excl. syn.*
Lindsaea davallioides *sensu* Copel. (1960) *non* Blume

Lindsaea odorata Roxb., Calc. J. Nat. Hist. 4 (1844) 511;
Lindsaea cultrata *sensu* Copel. (1960), *pro parte*
Lindsaea cultrata (Willd.) Sw. var. varia Copel.
? Lindsaea cultrata var. minor Hook.
Lindsaea loheriana Christ

Lindsaea orbiculata (Lam.) Mett. ex Kuhn
var. orbiculata

var. conmixta (Tagawa) Kramer

Lindsaea ovata J Sm.
Isoloma ovatum (J Sm.) C Presl

Lindsaea pellaiformis Christ
Luzon: Isabela prov., Divilacan, Aubarede peninsula, 50 m alt., *L. Co 3580*,
distributed as *L. gueriniana* (A, PNH, PUH, CAHUP, L, US, K, MICH). In here
sympatrically occurring with *L. gueriniana*, which according to Kramer (1971), might
just be an extreme form of that variable species. New to the Philippines. Previously
known only from Sulawesi.

Lindsaea philippinensis Kramer
Isoloma angustum (Copel.) Tard., *comb. superfl.*; *non* L. angusta Copel. (1952).
According to Kramer (1971), doubtfully distinct from *L. jamesonioides* Baker of
Sabah.

Lindsaea polyctena Kramer

Lindsaea pulchella (J Sm.) Mett. ex Kuhn
var. pulchella

Lindsaea adiantifolia (Hook.) Copel.
Lindsaea adiantoides *sensu* Copel. (1960), *pro parte*.

var. blanda (Mett. ex Kuhn) Kramer
Lindsaea cyathicola Copel.

Lindsaea ramosii Copel.
Very doubtfully distinct from *L. longifolia*.

Lindsaea repens (Bory) Thwaites
var. sessilis (Copel.) Kramer, Blumea 15 (1968) 568;
Lindsaea longa Copel.
Lindsaea cultripinna Copel.

var. pectinata (Blume) Mett. ex Kuhn in Miq., Ann. Mus. Bot. Lugd.-Bat. 4 (1869) 277;
Lindsaea pectinata Blume

Lindsaea macraeana (Hook. & Arn.) Copel., at least in part.

?*Lindsaea roxasii* Copel.

Lindsaea angusta Copel.

Aberrant form from Mindanao called *L. angusta* Copel. may be distinguished as forma *angusta* (Copel.) Kramer, *Blumea* 15 (1968) 568.

Lindsaea rigida J Sm. ex Hook., *Sp. Fil.* 1 (1846) 217, t. 63A;

Lindsaea monosora Copel.

Lindsaea tetragona Kramer

var. *tetragona*

Lindsaea tenuifolia sensu Copel. (1960) non Blume, excl. syn.

Doubtful species:

Lindsaea decrescens Copel.

“As stated by Copeland, this is intermediate between *L. repens* (*L. macraena*, *L. longa*) and *L. fissa*. The isotype in MICH from Copeland’s herbarium is rather scrappy. I doubt whether it represents a distinct species” –Kramer, *Fl. Males. Ser. ii* 1 (1971) 253.

Lindsaea longa Copel.

Probably only an usually deeply incised form of *L. repens* (Bory) Thwaites var. *sessilis* (Copel.) Kramer.

2. *Sphenomeris* Maxon

Sphenomeris biflora (Kaulf.) Tagawa

Sphenomeris chusana sensu Copel. (1960), *pro parte*

Sphenomeris chinensis (L.) Maxon

Sphenomeris chusana (L.) Copel.

ssp. *chinensis*

Tropical to subtropical Asia and Oceania.

Throughout the Philippines.

Terrestrial or epilithic in exposed sites, from low altitudes to 2100m.

ssp. *divaricata* (Christ) Kramer

Sphenomeris retusa (Cav.) Maxon

3. *Tapeinidium* (C Presl) C Christensen

Tapeinidium acuminatum Kramer

Tapeinidium calomelanos Kramer

Tapeinidium gracile (Blume) Alderw.

Tapeinidium luzonicum (Hook.) Kramer

var. *luzonicum*

var. *leptophyllum* Kramer

Tapeinidium pinnatum (Cav.) C Chr.

Tapeinidium biserratum (Blume) Alderw.

Probably a natural hybrid. According to Kramer (Fl. Males. Ser. ii 1 (1971): "The type of this 'species' is intermediate between *T. luzonicum* and *T. pinnatum*; there are 25-30 intermediates... Their status is not clear. They occur throughout the common range of the two species".

Family 24. SACCOLOMATACEAE

Orthiopteris Copeland = Saccoloma

1. Saccoloma

Orthiopteris campylura (Kunze) Copel.

Family 25. DENNSTAEDTIACEAE (including Hypolepidaceae, Monachosoraceae, and Pteridiaceae)

(7 genera, xx species, x subspecies, x varieties)

1. Dennstaedtia Bernhardt

Dennstaedtia articulata Copel.

Dennstaedtia dennstaedtioides (Copel.) Copel.

Dennstaedtia elmeri Copel.

Dennstaedtia fusca Copel.

Dennstaedtia glabrata (Cesati) C Chr.

Dennstaedtia hooveri Christ

Dennstaedtia macgregori Copel.

Dennstaedtia merrillii Copel.

Dennstaedtia philippinensis Copel.

Dennstaedtia resinifera (Blume) Mett. ex Kuhn

Dennstaedtia cuneata (J Sm. ex Hook.) T Moore

Dennstaedtia rufidula C Chr. *in* C Chr. & Holttum, Gard. Bull. Sing. 7 (1934) 226, t. 51

Dennstaedtia scabra (Wall.) T Moore

Dennstaedtia scandens (Blume) T Moore

Dennstaedtia smithii (Hook.) T Moore

Dennstaedtia williamsii Copel.

2. *Histiopteris* (Agardh) J Smith

Histiopteris incisa (Thunb.) J Sm., Hist. Fil. (1875) 295;
Histiopteris montana Copel.

1. ***Hypolepis*** Bernhardt

Revision:

Blumea 32 (1987) 227-276

Hypolepis alpina (Blume) Hook., Sp. Fil. 2 (1852) 63;

Hypolepis bamleriana Rosenst., Feddes Repert. 10 (1912) 325;

Hypolepis glandulifera Brownsey & Chinnock, J. Adelaide Bot. Gard. 10 (1987) 16;

Hypolepis malesiana Brownsey

Hypolepis pallida (Blume) Hook.?, Sp. Fil. 2 (1852) 64;
Doubtfully occurring in the Philippines (Negros: Amlan, *MG Price 2479*)

Hypolepis polypodioides (Blume) Hook.

Hypolepis punctata (Thunb.) Mett. ex Kuhn
Doubtfully occurring in the Philippines (Luzon: Ilocos Norte, Mt. Bubungkayo, *Iwatsuki et al. P375* (L)).

Hypolepis tenuifolia (Forst. f.) Bernh. ex C Presl

Doubtfully occurring in the Philippines:

Hypolepis punctata (Thunb.) Mett.

4. *Microlepia* C Presl

Microlepia herbacea Ching & C Chr. *apud* Tard. ex C Chr.
Microlepia trapeziformis (Roxb.) Kuhn

Microlepia platyphylla (D Don) J Sm.

Microlepia protracta Copel.

Microlepia speluncae (L.) T Moore
Microlepia sablanensis Christ
? *Microlepia manilensis* C Presl

Microlepia strigosa (Thunb.) C Presl

Microlepia todayensis Christ

Microlepia trichotricha J Sm.

5. *Monachosorum* Kunze

Monachosorum henryi Christ

Luzon: Cordillera Central Mtn. Range, Mt. Data, alt. 2220 m, Co 4086 (L, PNH, PUH). New to the Philippines. Previously known from Taiwan and Mainland China (Guangdong, Guangxi, Guizhou and NE & W Yunnan).

Monachosorum subdigitatum (Blume) Kuhn, Chaetopt. (1882) 345;

6. Paesia St. Hilaire

Paesia radula (Baker) C Chr.

Paesia luzonica Christ

Paesia elmeri Copel.

7. Pteridium Gleditsch ex Scopoli

Revision:

Tryon. 1941. Rhodora 43: 1-70.

Pteridium aquilinum (L.) Kuhn

var. wightianum (J Agardh) Tryon

Pteridium caudatum (L.) Maxon

Pteridium aquilinum (L.) Kuhn var. *yarrabense* Domin

Family 26. PTERIDACEAE (including Acrostichaceae, Adiantaceae, Antrophyaceae, Ceratopteridaceae, Cheilanthaceae, Hemionitidaceae, Parkeriaceae, Sinopteridaceae, Taenitidaceae, Vittariaceae)
(x genera, xx species)

Subfamily I. PLATYZOMATOIDEAE – not represented in the Philippines

Subfamily 2. PARKERIOIDEAE (1 genus, 1 species in the Philippines)

1. Ceratopteris Brongniart

Ceratopteris thalictroides (L.) Brongn.

Ceratopteris siliquosa (L.) Copel.

PTERIDACEAE Subfamily 3. ADIANTOIDEAE (x genus, xx species)

1. Adiantum Linnaeus

1. Adiantum capillus-veneris L.

Adiantum caudatum L.

Adiantum cupreum Copel.

Adiantum edgeworthii Hook.

Adiantum flabellulatum L.

Adiantum hispidulum Sw.

Adiantum malesianum Ghatak

Adiantum mindanaoense Copel.

Adiantum philippense L.

Adiantum scabripes Copel.

Adiantum setulosum J Sm.

Adiantum diaphanum sensu Copel. *non* Blume, Enum. Pl. Jav. (1828) 215;

Adiantum soboliferum Wall.

Adiantum stenochlamys Baker

Adiantum opacum Copel., PJS 1 (1906) Suppl. 255, t. 3.

2. **Antrophyum** Kaulfuss

Antrophyum immersum (Bory ex Willd.) Mett.

Antrophyum nanum Fée

Antrophyum latifolium Blume

Antrophyum ledermannii Hieron.

Antrophyum plantagineum (Cav.) Kaulf.

Antrophyum reticulatum (Forst.) Kaulf.

Antrophyum alatum Brackenr..

Antrophyum callifolium Blume

Antrophyum sessilifolium (Cav.) Sprengel, **syn. nov.**

Antrophyum clementis Christ

Antrophyum semicostatum Blume

Antrophyum williamsii Benedict

3. **Monogramma** **Comm. ex Schkuhr.**

Monogramma capillaris Copel., PJS 6c (1911) Bot. 147

Monogramma dareicarpa Hook.

Monogramma

Vaginularia paradoxa (Fée) Mett.

Monogramma trichoidea J Sm. ex Hook.

Vaginularia trichoidea (J Sm.) Fée

Vaginularia Fée = Monogramma

4. *Vittaria* Smith

Vittaria alternans Copel.

Vittaria anguste-elongata Hayata
Vittaria stenophylla Copel.

Vittaria elongata Sw.
Vittaria zosterifolia Willd.

Vittaria ensiformis Sw.

Vittaria hecistophylla Copel.

Vittaria pachystemma Christ

Vittaria scolopendrina (Bory) Thwaites

Vittaria subcoriacea Christ

Vittaria taeniophylla Copel..

PTERIDACEAE Subfamily 4. CONIOGRAMMOIDEAE, *subfam. nov.*

1. *Coniogramme* Fée

Coniogramme fraxinea (D Don) Diels *in* Engl. & Prantl, Nat. Pflanzenfam. 1 (1899) 262;

Coniogramme macrophylla (Blume) Hieron., Hedwigia 57 (1916) 291;

Coniogramme subcordata Copel.

PTERIDACEAE Subfamily 5. CHEILANTHOIDEAE

(5 genera, 14 species in the Philippines)

1. *Aleuritopteris*

Aleuritopteris farinosa (Forssk.) Fée

Cheilanthes agetae (Saiki) Kuo
Cheilanthes farinosa (Forssk.) Kaulf.

Aleuritopteris albofusca (Baker) Pic.-Serm.

Cheilanthes anceps Blanf.
Cheilanthes albofusca Baker

Aleuritopteris rufa (D Don) Copel.

Cheilanthes dubia Hope
Cheilanthes rufa D Don

2. *Cheilanthes* Swartz

Cheilanthes belangeri (Bory) C Chr.

Cheilanthes javensis (Willd.) T Moore
Cheilanthes densa (J Sm.) Fée

Cheilanthes dilimanensis PM Zamora

Cheilanthes mysurensis Wall. ex Hook.

Cheilanthes tenuifolia (NL Burm.) Sw., Syn. Fil. (1806) 129, 332;

3. **Doryopteris** J Sm.

Doryopteris concolor (Langsdorff & Fischer) Kuhn

Cheilanthes concolor (Langsdorff & Fischer) R & A Tryon

Doryopteris cuspidata Copel.

Doryopteris ludens (Wall.) J Sm.

4 **Gymnopteris** Bernhardt

Gymnopteris vestita (Wall.) Underw.

Hemionitis arifolia (Burm. f.) T Moore =Parahemionitis

5. **Parahemionitis** Panigrahi

Revision:

Panigrahi, G.1993. American Fern Journal 83: 90-92

Parahemionitis arifolia (Burm. f.) Panigr.

Hemionitis arifolia (Burm. f.) T Moore

PTERIDACEAE Subfamily 6. Pteridoideae (incl. Taenitoideae) (x genera, xx species)

1. **Acrostichum** Linnaeus

Acrostichum aureum L.

Acrostichum speciosum Willd.

Copelandiopteris Stone = Pteris

2. **Onychium** Kaulfuss

Onychium japonicum (Thunb.) Kunze

Onychium siliculosum (Desv.) C Chr.

3. **Pityrogramma** Link

Pityrogramma calomelanos (L.) Link, Handb. Gewachs. 3 (1833) 20;

4. **Pteris** Linnaeus

Pteris armata C Presl

Pteris biaurita L.

Pteris pacifica Hieron.

Pteris cumingii Hieron

Pteris blumeana J Agardh

Pteris brevis Copel.

Pteris calocarpa (Copel.) MG Price

Schizostegeopsis calocarpa Copel.

Copelandiopteris calocarpa (Copel.) Stone

Pteris cretica L.

Pteris stenophylla sensu Copel., FFP 1 (1958) 129, *non* Hook. & Grev.

Pteris dataensis Copel.

Pteris distans J Sm. ex Hook.

Possibly a hybrid or a bizarre freak.

Pteris edanoi Copel., PJS 81 (1952) 8, 'edanyoi'

Pteris elmeri Christ

Pteris endoneura MG Price

Copelandiopteris endoneura (MG Price) Stone

Pteris ensiformis Burm.

var. ensiformis

Pteris mutilata L.

var. victoriae Hort.

Pteris fauriei Hieron., *Hedwigia* 55 (1914) 345; --Hatusima, *Mem. Fac. Kagoshima Univ.* 5 (1966) 20.

Pteris rigidula Copel., FFP 1 (1958) 137.

Pteris glaucovirens Goldm.

Pteris heteromorpha Fée

Pteris loheri Copel.

Pteris longipinnula Wall. ex J Agardh

Pteris luzonensis Hieron.

Pteris macgregorii Copel.

Pteris melanocaulon Fée

Pteris melanorhachis Copel.

Pteris mertensioides Willd.

Pteris gardneri (Fée) Hook.

Pteris excelsa Gaudich.

Pteris micracantha Copel.

Pteris mucronulata Copel.

Pteris opaca (C Presl) J Sm. ex Fée

Pteris taenitis Copel.

Pteris oppositipinnata Fée

Pteris asperula J Sm.

Pteris caesia Copel.

Pteris pachysora (Copel.) MG Price

Schizostegeopsis pachysora Copel.

Copelandiopteris pachysora (Copel.) Stone

Pteris pedicellata Copel.

Pteris pellucida C Presl

Pteris philippinensis Fée

Pteris longipes D Don, Prod. Fl. Nepal. (1825) 15; --Copel., FFP 1 (1958) 133

Pteris longipes D Don var. *philippinensis* (Fée) Christ,

Pteris purpureorhachis Copel.

Pteris ramosii Copel.

Possibly a variant of *P. philippinensis*.

Pteris rangiferina C Presl

Pteris ryukyuensis Tagawa, Acta Phytotax. Geobot. 4 (1935) 204; --Hatusima, Mem. Fac.

Kagoshima Univ. 5 (1966) 20.

?*Pteris cretica sensu* Copel., FFP 1 (1958) 129, *quoad pl. ex* Batanes Islands, *non* L.

Pteris schlechteri Brause

Pteris semipinnata L.

Pteris spinescens C Presl

Pteris setuloso-costulata Hayata

Pteris squamipes Copel.

Pteris tripartita Sw.

Pteris microdictyon (Fée) Hook.

Pteris vittata L.

Pteris wallichiana J Agardh

Confirmed to be in Luzon: Ilocos Norte prov., Mt. Burnay (Iwatsuki & Price, 1975).

Pteris whitfordii Copel.

Schizoloma Gaudich. = Taenitis

5. **Syngamma** J Smith

Revision:

Holttum, RE. 1974. Kew Bulletin 30: 327-343 + pl.

Syngamma alismifolia (C Presl) J Sm., Lond. J. Bot. 4 (1845) 168, t. 7-8, Fig. B.

Syngamma vittiformis J Sm.

Syngamma wallichii (Hook.) Bedd.

6. **Taenitis** Willdenow

Taenitis blechnoides (Willd.) Sw., Syn. Fil. 24 (1806) 220;

Taenitis luzonica (Alderw.) Holttum
Syngamma luzonica Alderw.

Taenitis cordata (Gaudich.) Holttum
Schizoloma cordatum Gaudich.

Family 27. **ASPLENIACEAE** (1 genus, 52 species)

1. **Asplenium** Linnaeus

Asplenium affine Sw., Schrad. J. Bot. 1800 (2) (1801) 56
Asplenium spathulinum J Sm. ex Hook.
Asplenium gracilifolium Copel.

Asplenium amboinense Willd., Sp. Pl. 5 (1810) 303;

Asplenium apoense Copel.

Asplenium caudatum G Forst., Prodr. (1786) 80;
?Asplenium chamissoanum C Presl

Asplenium cheilosorum Kunze ex Mett., Aspl., 133, n. 104 (1859) t. 5, Fig. 12-13;

Asplenium colubrinum Christ

Asplenium crinicaule Hance

Asplenium cuneatum Lam.

Asplenium cymbifolium Christ, Bull. Boiss. 2, 6 (1906) 999;

Asplenium elmeri Christ, PJS 2 c (1907) Bot. 164;

Asplenium epiphyticum Copel.

Asplenium excisum C Presl

Asplenium obscurum Blume

Asplenium exiguum Bedd.

Asplenium griseum Copel.

Asplenium haenkei Copel.

Asplenium insiticium Brackenr.

Asplenium lepturus J Sm. ex C Presl

Asplenium contiguum Kaulf.

Asplenium longissimum Blume

Asplenium acutiusculum Blume

?*Asplenium anisodontum* C Presl

Asplenium mantalingahanum PM Zamora & Co, Nat. Appl. Sc. Bull. Univ. Philipp. 32
(1980) 46, t. 3.

Asplenium militare Copel.

Asplenium nidus L., Sp. Pl. (1753) 1079;

var. nidus

var. curtisorum (C Chr.) Holttum, Gard. Bull. Sing. 27 (1974) 148;

Asplenium normale D Don, Prodr. Fl. Nepal. (1825) 7;

Asplenium ofeliae Salgado, Amer. Fern J. 93(4) (2003) 193. –Type: Merrill Phil. Plts. 700. (US, holo; iso: PRC). Luzon: Benguet prov., May 1911.

Asplenium pellucidum Lam., Encycl. 2 (1786) 305;

Asplenium persicifolium J Sm. ex Mett., Aspl. 97 (1859) no. 32

Asplenium tripinnatifidum Copel.

Asplenium phyllitidis D Don

ssp. malesicum Holttum, Gard. Bull. Sing. 27 (1974) 153;

Asplenium nidus L. var. *phyllitidis* (D. Don) Alder., Handb. Malayan Ferns Suppl. (1917) 282;

–Probably incl. *A. colubrinum*

Asplenium polyodon G Forst., Prodr. (1786) 80;

Asplenium falcatum Lam.

Asplenium robustum Blume

Asplenium laserpitiifolium Lam.

Asplenium scandens J Sm. ex Mett.

Asplenium schizocarpum Copel.

Asplenium scolopendrioides J Sm. ex Hook., Icon. Pl. (1854) t. 930

Asplenium semivarians Viane & Reichst., Pteridol. New Millennium (2003) 78 (-81; fig. 3).
78 (-81; fig. 3) 2003

Tamil Nadu (India, Indian Subcontinent, Asia-Tropical); Yunnan (China South-Central, China, Asia-Temperate); West-Central Tropical Africa (Africa); Manipur (Assam, Indian Subcontinent, Asia-Tropical); Philippines (Malesia, Asia-Tropical); Sri Lanka (Indian Subcontinent, Asia-Tropical); Uganda (East Tropical Africa, Africa); Zimbabwe (South Tropical Africa, Africa);

Type Information

Collector(s):	Fraser-Jenkins 9063
Locality:	Shevaroy Hills, NW of Yercaud, NE of Salem, c. 1550m
Collection Date:	1978-12-13
Type Location:	holotype GENT isotype Herb. R.Viane

32. Asplenium setisectum Blume, Enum. Pl. Jav. (1828) 187;

33. Asplenium stantoni Copel.

34. Asplenium steerei Harrington

35. Asplenium subnormale Copel. in Perkins, Fragm. Fl. Philip. (1905) 183, t. 4, Fig. B.

36. Asplenium subresectum Copel.

37. Asplenium tenerum G Forst., Prodr. (1786) 80;

38. Asplenium tenuifolium Don

39. Asplenium thunbergii Kunze, Linnaea 10 (1836) 517;
Asplenium decorum Kunze

49. Asplenium unilaterale Lam., Encycl. 2 (1786) 305;
Asplenium filipes Copel., PJS 3 c (1908) Bot. 304;

50. Asplenium vittiforme Cav., Descr. (1802) 255;

51. Asplenium vulcanicum Blume, Enum. Pl. Jav. (1828) 176;
Possibly conspecific with *A. salignum* Blume

52. Asplenium yoshinagae Makino

var. planicaule (Wall. ex Mett.) C Morton, Contr. US Nat'l. Herb. 38 (1973) 227;
Asplenium planicaule Wall. ex Mett., Abhandl. Senckenb. Naturf. Gessell. 3 (1859) 201, *non* Lowe (1858).

Family 28. THELYPTERIDACEAE (19 genera, 123 taxa: 118 species (1 possibly new) +4 varieties, + 1 possibly new forma).

Revision: R.E. Holttum. Fl. Males. Ser. ii 1 (1981) 331-599

1. *Ampelopteris* Kunze

1. Ampelopteris prolifera (Retz.) Copel.

Tropical and subtropical regions of the Old World. In the Philippines recorded from LUZON: Abra, Rizal, Laguna, MINDANAO: Davao del Norte (Maco, Lake Leonard), Agusan del Sur (Agusan Marsh). Terrestrial, often forming mats or tangles in swampy sites, lake margins or river embankments. Low altitudes.

2. Amphineuron Holttum

1. Amphineuron attenuatum (Kuntze) Holttum

Cyclosorus alatellus sensu Copel. (1960), *excl. syn.*
Lastrea erubescens sensu Copel. (1960)

2. Amphineuron immersum (Blume) Holttum

Lastrea immersa (Blume) T Moore
Lastrea verrucosa C Presl

3. Amphineuron opulentum (Kaulf.) Holttum

Cyclosorus extensus (Blume) Ching

4. Amphineuron terminans (Hook.) Holttum

Cyclosorus interruptus sensu Copel. (1960), *non* (Willd.) H Ito
Sri Lanka to Polynesia. Throughout the Philippines in the more seasonal regions. Terrestrial, common in thickets on hillsides and in valleys at low and medium altitudes.

3. Chingia Holttum

1. Chingia christii (Copel.) Holttum

Cyclosorus christii (Copel.) Copel.

2. Chingia clavipilosa Holttum

var. clavipilosa

3. Chingia ferox (Blume) Holttum

Cyclosorus ferox (Blume) Ching

4. Chingia paucipaleata Holttum

5. Chingia pricei Holttum

6. Chingia urens Holttum

4. Christella Léville *emend.* Holttum

1. Christella acuminata (Houtt.) Lév.

Cyclosorus acuminatus (Houtt.) Ching

2. Christella arida (D Don) Holttum

Cyclosorus aridus (D Don) Ching

3. Christella dentata (Forssk.) Brownsey & Jermy

Cyclosorus dentatus sensu Copel., 1960, *pro parte*
Cyclosorus mindanaensis (Christ) Copel.

Pantropic. Throughout the Philippines. Terrestrial in exposed sites, light forests, along stream embankments, etc. Common at low altitudes.

4. Christella hispidula (Decne.) Holttum

Cyclosorus falcatus (Christ) Copel.

5. Christella parasitica (L.) Lév.

Cyclosorus dentatus sensu Copel. 1960, *pro parte*

Cyclosorus benguensis Copel.

Cyclosorus procurrens (Mett.) Copel.

SE Asia (**confined here?, or more widely distributed?**). Throughout the Philippines.

Terrestrial, open sites and degraded habitats generally, along stream embankments.

Altitude?

6. Christella subdentata Holttum

7. Christella subpubescens (Blume) Holttum

Cyclosorus subpubescens (Blume) Ching

Cyclosorus latipinna (Hook. & Baker) Tard.

5. Coryphopteris Holttum

1. Coryphopteris borealis Holttum

2. Coryphopteris dura (Copel.) Holttum

Lastrea dura (Copel.) Copel.

3. Coryphopteris pubirhachis (Baker) Holttum

var. philippinensis Holttum

Lastrea viscosa sensu Copel. (1960) *non* (Baker) Bedd., *pro specim. philipp.*

4. Coryphopteris squamipes (Copel.) Holttum

Lastrea squamipes (Copel.) Copel.

Excluded:

Coryphopteris viscosa (J Sm.) Holttum

6. Cyclogramma Tagawa

1. Cyclogramma auriculata (J Sm.) Ching

Thelypteris simulans Ching

7. Cyclosorus Link

1. Cyclosorus interruptus (Willd.) H Ito

Cyclosorus gongylodes auctt., doubtfully based on *Aspidium gongylodes* Schkuhr

Haplodictyum C Presl = *Pronephrium*, *Sphaerostephanos*

8. Macrothelypteris Ching

1. Macrothelypteris polypodioides (Hook.) Holttum

Lastrea leucolepis C Presl

2. Macrothelypteris torresiana (Gaudich.) Ching

Lastrea torresiana (Gaudich.) T Moore

9. Mesophlebion Holttum

1. Mesophlebion crassifolium (Blume) Holttum

Lastrea crassifolia (Blume) Moore

2. Mesophlebion rufescens Holttum

10. Metathelypteris Ching

1. Metathelypteris dayi (Bedd.) Holttum

Thelypteris singalanensis sensu Holttum, *non* (Baker) Ching

2. Metathelypteris gracilescens (Blume) Ching

Lastrea gracilescens (Blume) Moore

Lastrea calva (Copel.) Copel.

3. Metathelypteris uraiensis (Rosenst.) Ching

11. Nannothelypteris Holttum

1. Nannothelypteris aoristisora (Harrington) Holttum

Cyclosorus aoristisorus (Harrington) Copel.

2. Nannothelypteris camarinensis Holttum

3. Nannothelypteris inaequilobata Holttum

Lastrea nervosa sensu Copel. (1960), *pro parte*

4. Nannothelypteris nervosa (Fée) Holttum

Lastrea nervosa (Fée) Copel., *pro parte*

5. Nannothelypteris philippina (C Presl) Holttum

Lastrea confusa (Copel.) Copel.

12. Parathelypteris (H Ito) Ching *emend.* Holttum

1. Parathelypteris beddomei (Baker) Ching

var. beddomei

Lastrea beddomei (Baker) Bedd.

var. eugracilis (Copel.) Holttum

Lastrea eugracilis Copel.

2. Parathelypteris glanduligera (Kunze) Ching

3. Parathelypteris grammitoides (Christ) Holttum

Lastrea grammitoides (Christ) Copel.

13. Plesioneuron (Holttum) Holttum

1. Plesioneuron savaiense (Baker) Holttum

Lastrea quadriaurita (Christ) Copel.

14. *Pneumatopteris* Nakai

1. *Pneumatopteris costata* (Brackenr.) Holttum

Lastrea cavitensis Copel.

2. *Pneumatopteris glabra* (Copel.) Holttum

Cyclosorus glaber Copel.

Cyclosorus viridis Copel.

3. *Pneumatopteris laevis* (Mett.) Holttum

Cyclosorus nitidulus sensu Copel. (1960), *pro parte*

Cyclosorus microlonchus sensu Copel. (1960), *pro parte*

4. *Pneumatopteris ligulata* (C Presl) Holttum

Lastrea ligulata C Presl

Lastrea foxii (Christ) Copel.

5. *Pneumatopteris lithophila* Holttum

6. *Pneumatopteris michaelis* Holttum

7. *Pneumatopteris microloncha* (Christ) Holttum

Cyclosorus microlonchus (Christ) Copel.

8. *Pneumatopteris nitidula* (C Presl) Holttum

Cyclosorus nitidulus (C Presl) Copel. (1960), p.p

9. *Pneumatopteris truncata* (Poir.) Holttum

Cyclosorus truncatus (Poir.) Farw.

15. *Pronephrium* C Presl

1. *Pronephrium amphitrichum* Holttum

2. *Pronephrium asperum* (C Presl) Holttum

Cyclosorus philippinarum (Fée) Copel.

3. *Pronephrium bakeri* (Harrington) Holttum

Haplodictyum bakeri (Harrington) Ching

Cyclosorus bakeri (Harrington) Copel.

4. *Pronephrium balabacensis* PM Zamora & Co, Nat. Appl. Sc. Bull. Univ. Philipp. 32 (1980) 45, t. 2.

Possibly synonymous with *P. merrillii*. The exindusiate condition of the sori mentioned in the original description may actually be due to small, fugaceous indusia.

5. *Pronephrium bulusanicum* (Holttum) Holttum

Haplodictyum bulusanicum Holttum

6. *Pronephrium clemensiae* (Copel.) Holttum

var. *clemensiae*

Cyclosorus clemensiae (Copel.) Ching

var. *degenerum* (Christ) Holttum

Cyclosorus degener (Christ) Copel.

7. *Pronephrium cuspidatum* (Blume) Holttum

Cyclosorus cuspidatus (Blume) Copel.

8. Pronephrium granulosum (C Presl) Holttum

Cyclosorus granulosus (C Presl) Copel.

Cyclosorus subdimorphus Copel.

9. Pronephrium gymnopteridifrons (Hayata) Holttum

Cyclosorus pustulosus Copel.

10. Pronephrium heterophyllum (C Presl) Holttum

Haplodictyum heterophyllum C Presl

11. Pronephrium hosei (Baker) Holttum

Cyclosorus hosei (Baker) Copel.

12. Pronephrium lineatum (Blume) Presl

13. Pronephrium melanophlebium (Copel.) Holttum

forma melanophlebium

Cyclosorus melanophlebius (Copel.) Copel.

forma proliferum Co, *ined.*

14. Pronephrium menisciicarpon (Blume) Holttum

Cyclosorus latifolius (C Presl) Copel.

15. Pronephrium merrillii (Christ) Holttum

Cyclosorus merrillii (Christ) Copel.

16. Pronephrium nitidum Holttum

Cyclosorus urophyllus *sensu* Copel. (1960), *excl. loc.* Malacca

17. Pronephrium ramosii (Christ) Holttum

var. ramosii

Cyclosorus cuspidatus *sensu* Copel. (1960), *excl. syn.* Meniscium cuspidatum Blume

18. Pronephrium rhombeum (Christ) Holttum

Cyclosorus rhombeus (Christ) Copel.

Cyclosorus lanceolus (Christ) Copel.

19. Pronephrium rubidum (J Sm. ex Hook.) Holttum

Cyclosorus rubidus (Hook.) Copel.

20. Pronephrium samarense (Copel.) Holttum

Cyclosorus samarensis Copel.

21. Pronephrium solsonicum Holttum

22. Pronephrium trachyphyllum Holttum

23. Pronephrium triphyllum (Sw.) Holttum

Cyclosorus triphyllus (Sw.) Tard.

24. Pronephrium x xiphioides (Christ) Holttum

Cyclosorus xiphioides (Christ) Copel.

Cyclosorus edanyoi Copel.

Cyclosorus rhombeus *sensu* Copel. (1960), *pro parte*

16. Pseudocyclosorus Ching

1. Pseudocyclosorus tylodes (Kunze) Moore

Lastrea tylodes (Kunze) Moore; 'xylodes' in Copeland's Fern Flora.

17. Pseudophegopteris Ching

1. **Pseudophegopteris aurita** (Hook.) Ching

2. **Pseudophegopteris paludosa** (Blume) Ching

Lastrea pyrrohorhachis *sensu* Copel., Fern Fl. Philipp. (1960) 330, *pro parte*

18. Sphaerostephanos J Sm.

Revision:

Holttum, RE. 1975. Studies in the family Thelypteridaceae. IX. The genus Sphaerostephanos in the Philippines. Kalikasan 4: 47-68.

1. **Sphaerostephanos alcasidii** Holttum

2. **Sphaerostephanos acrostichoides** (Desv.) Holttum

Sphaerostephanos smithianus (C Presl) Holttum

Cyclosorus boholensis Copel.

Cyclosorus productus *sensu* Copel. (1960), *pro parte*

3. **Sphaerostephanos angustifolius** (C Presl) Holttum

Cyclosorus angustifolius (C Presl) Copel.

4. **Sphaerostephanos appendiculatus** (Blume) Holttum

5. **Sphaerostephanos cartilagens** PM Zamora & Co, Nat. Appl. Sc. Bull. Univ. Philipp. 32 (1980) 43, t. 1.

6. **Sphaerostephanos convergens** Holttum

7. **Sphaerostephanos dichrotrichoides** (Alderw.) Holttum

Lastrea dichrotrichoides (Alderw.) Copel.

8. **Sphaerostephanos diminutus** (Copel.) MG Price

Cyclosorus diminutus (Copel.) Copel.

Pronephrium diminutum (Copel.) Holttum

Sphaerostephanos lucbanii Holttum

9. **Sphaerostephanos diversilobus** (C Presl) Holttum

Cyclosorus diversilobus (C Presl) Ching

10. **Sphaerostephanos ellipticus** (Rosenst.) Holttum

var. ellipticus

Cyclosorus ellipticus (Rosenst.) Copel.

var. glabrior Holttum

11. **Sphaerostephanos erectus** (Copel.) Holttum

Cyclosorus erectus Copel.

12. **Sphaerostephanos foxworthyi** Holttum

13. **Sphaerostephanos grandescens** Holttum

14. **Sphaerostephanos hernaезii** Holttum

15. **Sphaerostephanos heterocarpus** (Blume) Holttum

Eight variants of this polymorphic species were enumerated (but no formal names)

given) by Holttum in the his FM revision. Two are definitely occurring in the Philippines, while another 2 resembles those ascribed to Borneo and New Guinea forms. Thus:

-Mindanao form

-Luzon form [as *Cyclosorus bordenii* (Christ) Ching in 'Fern Flora'].

From Palawan is one collection resembling the Borneo form, while another one from San Ramon, Zamboanga is nearer to the New Guinea form.

16. Sphaerostephanos hirsutus (Kunze ex Mett.) Holttum
var. hirsutus

Cyclosorus adenophorus (C Chr.) Ching

17. Sphaerostephanos irayensis (Copel.) Holttum

Plesioneuron irayense (Copel.) Holttum

Cyclosorus irayensis Copel.

Sphaerostephanos fenixii Holttum

18. Sphaerostephanos lastreoides (C Presl) Holttum

Cyclosorus duplosetosus Copel.

19. Sphaerostephanos latebrosus (Kunze ex Mett.) Holttum

Sphaerostephanos todayensis (Christ) Holttum

Cyclosorus todayensis (Christ) Copel.

Cyclosorus sagittifolioides Copel.

Cyclosorus halconensis Copel.

Cyclosorus polypterus Copel.

20. Sphaerostephanos lobatus (Copel.) Holttum

Cyclosorus lobatus Copel.

Cyclosorus bordenii sensu Copel. (1960), *pro parte*

21. Sphaerostephanos loherianus (Christ) Holttum

Cyclosorus loherianus (Christ) Copel.

22. Sphaerostephanos magnus (Copel.) Holttum

Cyclosorus magnus Copel.

23. Sphaerostephanos major (Copel.) Holttum

Haplodictyum majus Copel.

Cyclosorus dimorphus Copel.

24. Sphaerostephanos norrisii (Rosenst.) Holttum

Sphaerostephanos elmerorum (Copel.) Holttum

Cyclosorus elmerorum Copel.

Cyclosorus ellipticus sensu Copel. (1960), *pro parte*

25. Sphaerostephanos perglanduliferus (Alderw.) Holttum

26. Sphaerostephanos polisianus Holttum

27. Sphaerostephanos polycarpus (Blume) Copel.

Sphaerostephanos asplenioides J Sm.

28. Sphaerostephanos porphyricola (Copel.) Holttum

Cyclosorus pophyricola (Copel.) Ching

29. Sphaerostephanos productus (Kaulf.) Holttum

Cyclosorus productus (Kaulf.) Ching

Cyclosorus serratus Copel.

Cyclosorus weberi Copel.

Cyclosorus rigidus Copel.

Cyclosorus leucadenius Copel.
Sphaerostephanos punctatus Holttum
Cyclosorus megaphyllus *sensu* Copel. (1960)
Cyclosorus nitidulus *sensu* Copel. (1960), *pro parte*

30. Sphaerostephanos santomasii Holttum

31. Sphaerostephanos sessilipinna (Copel.) Holttum
Cyclosorus sessilipinna (Copel.) Ching
Cyclosorus austrophilippinus (Copel.) Copel.

32. Sphaerostephanos simplicifolius (J Sm. ex Hook.) Holttum
Cyclosorus simplicifolius (J Sm.) Copel.

33. Sphaerostephanos spenceri (Christ) Holttum
Cyclosorus spenceri (Christ) Copel.

34. Sphaerostephanos stenodontus (Copel.) Holttum
Cyclosorus stenodontus Copel.

35. Sphaerostephanos subcordatus Holttum

36. Sphaerostephanos tephrophyllus (Copel.) Holttum
Cyclosorus tephrophyllus (Copel.)

37. Sphaerostephanos unitus (L.) Holttum

var. unitus

Cyclosorus unitus (L.) Ching
Sri Lanka, S India, across Malesia. Throughout the Philippines. Terrestrial. Degraded habitats generally, along waterways, etc. at low to medium altitudes. Very common.

var. mucronatus (Christ) Holttum

38. Sphaerostephanos urdanetensis (Copel.) Holttum
Cyclosorus urdanetensis Copel.
Cyclosorus matutumensis Copel.

39. Sphaerostephanos williamsii (Copel.) Holttum
Lastrea williamsii Copel.

Status?:

Sphaerostephanos mindorensis Holttum, Kalikasan 4 (1975) 54. Type: MG Price 690 (K, holotype; isotype in PNH). Mindoro: Mt Halcon.

MINDORO: Mt Halcon, in forest, 750m. Known from two collections from the type locality. Not accounted for in Holttum's Flora Malesiana revision.

19. Stegnogramma Blume

1. Stegnogramma calcicola Co, sp. nov., ined.
BOHOL.

2. Stegnogramma dissitifolia Holttum

3. Stegnogramma gymnocarpa (Copel.) K Iwats.
ssp. gymnocarpa
Lastrea gymnocarpa Copel.

Family 29. WOODSIACEAE (incl. Athyriaceae)
(6 genera, xx species)

Anisocampium Presl =Athyrium

1. Athyrium Roth

- 1. Athyrium anisopterum** Christ
- 2. Athyrium aristulatum** Copel.
- 3. Athyrium brevipinnulum** Copel.
Athyrium meansianum (Copel.) Alderw.
Athyrium philippinense Christ *apud* Copel.
- 4. Athyrium cumingianum** (C Presl) Ching
Anisocampium cumingianum C Presl
- 5. Athyrium drepanopteron** (Kunze) A. Braun
- 6. Athyrium oreopteris** Copel.
- 7. Athyrium puncticaule** (Blume) Moore
- 8. Athyrium ramosii** Copel.
- 9. Athyrium stramineum** Copel.

Callipteris Bory =Diplazium

2. Cornopteris Nakai

- 1. Cornopteris banahaoensis** (C Chr.) K Iwats. & MG Price
Athyrium nudum Copel.
- 2. Cornopteris**
Athyrium elmeri Copel.
- 3. Cornopteris**
Athyrium gymnocarpum Copel.

Curraria Copeland =Gymnocarpium

3. Cystopteris Bernhardt

- 1. Cystopteris tenuisecta** (Blume) Mett., Ann. Lugd. Bat. 1 (1864) 241
Acystopteris tenuisecta (Blume) Tagawa
Ctenitis tenerifrons (Christ) Copel.

4. Deparia Hooker & Greville

- 1. Deparia boryana** (Willd.) Kato, Bot. Mag. Tokyo 90 (1977) 36.

Dryoathyrium boryanum (Willd.) Ching
Ctenitis boryana (Willd.) Copel.

2. **Deparia confluens** (Kunze) Kato

3. Deparia formosana (Rosenst.) Sano, Act. Phytotax. Geobot. 51 (2000) 17.
Diplaziopsis formosana (Rosenst.) MG Price, Contrib. Univ. Mich. Herb. 17 (1990) 269; -- Diplazium formosanum Rosenst., Hedw. 56 (1915) 337

3. Deparia japonica (Thunb.) Kato, Bot. Mag. Tokyo 90 (1977) 37.
Lunathyrium japonicum (Thunb.) Kurata
Athyrium japonicum (Thunb.) Ching
Athyrium grammitoides (C Presl) Milde

4. **Deparia subfluviatilis** (Hayata) Kato

Diplaziopsis C Christensen = Diplazium

5. **Diplazium** Swartz

1. **Diplazium allantoideum** MG Price

2. Diplazium atratum Christ
Athyrium atratum (Christ) Copel.

3. Diplazium bantamense Blume
Athyrium bantamense (Blume) Milde

4. Diplazium bolsteri Copel.
Athyrium bolsteri (Copel.) Copel.

5. Diplazium brachysoroides Copel.
Athyrium brachysoroides (Copel.) Copel.

6. Diplazium calliphyllum (Copel.) MG Price, Contrib. Univ. Mich. Herb. 17 (1990) 270.
Athyrium calliphyllum Copel.

7. Diplazium cordifolium Blume
Athyrium cordifolium (Blume) Copel.
Athyrium parvum Copel.

8. Diplazium costulisorum (Copel.) C Chr.
Athyrium costulisorum Copel.

9. Diplazium cultratum C Presl
Athyrium cultratum (C Presl) Milde

10. Diplazium cumingii (C Presl) C Chr.
Athyrium cumingii (C Presl) Milde

11. Diplazium davaoense Copel.
Athyrium davaoense (Copel.) Copel.

12. Diplazium deltoideum (C Presl) C Presl
Athyrium deltoideum (C Presl) Milde

13. Diplazium dilatatum Blume
Athyrium dilatatum (Blume) Milde

- 14. Diplazium doederleinii** (Lueresen) Makino
Athyrium irayense Copel.
- 15. Diplazium dolichosorum** Copel.
Athyrium dolichosorum (Copel.) Copel.
- 16. Diplazium egenolfooides** MG Price, Brit. Fern Gaz. 10 (1973) 258, t. 1
LUZON: Mt. Makiling (several collections from this type locality); Nueva Vizcaya prov., Sta. Fe, mtns N of Imugan, c. 1200m, *L.L.Co 1640* (MICH, PNH, PUH).
- 17. Diplazium esculentum** (Retz.) Sw.
Athyrium esculentum (Retz.) Copel.
Asplenium manilense Sprengel
- 18. Diplazium fraxinifolium** C Presl
Athyrium fraxinifolium (C Presl) Milde
- 19. Diplazium fructuosum** Copel.
Athyrium fructuosum (Copel.) Copel.
- 20. Diplazium fuliginosum** (Hook.) MG Price, Brit. Fern Gaz. 10 (1973) 260.
Asplenium fuliginosum Hook.
Diplazium longissimum (Copel.) C Chr.
Athyrium longissimum Copel.
- 21. Diplazium geophilum** (Copel.) Alderw.
Athyrium geophilum Copel.
- 22. Diplazium griffithii** T Moore
Athyrium platyphyllum Copel., 1908, non Diplazium platyphyllum Christ, 1906
Diplazium mearnsii Hieron.
Athyrium platyphyllum Copel.
- 23. Diplazium irigense** (Copel.) MG Price, Contrib. Univ. Mich. Herb. 17 (1990) 273
Athyrium irigense Copel.
- 24. Diplazium javanicum** (Blume) Makino, Phan. Pter. Jap. Ic. 111. 1(1901) pl. 46
Diplaziopsis javanica (Blume) C Chr.
- 25. Diplazium lanceum** (Thunb.) C Presl
Diplazium subsinuatum (Wall. ex Hook. & Grev.) Tagawa
Athyrium dubium (Don) Copel.
- 26. Diplazium lomariaceum** (Christ) MG Price, Gard. Bull. Sing. 36 (1983) 27
Diplazium altum (Copel.) C Chr.
Athyrium altum Copel.
Diplazium merrillii Copel.
Athyrium merrillii (Copel.) Copel.
- 27. Diplazium macrosorum** (Copel.) MG Price, Contrib. Herb. Univ. Mich. 17 (1990) 273
Athyrium macrosorum Copel.
- 28. Diplazium magnificum** (Copel.) MG Price, 1982
Athyrium magnificum Copel.
- 29. Diplazium melanopodium** Fée
Athyrium melanopodium (Fée) Copel.
- 30. Diplazium mollifrons** (C Chr.) MG Price

- 31. Diplazium muricatum** (Mett.) Alderw.
Athyrium muricatum (Mett.) Copel.
- 32. Diplazium oligosorum** Copel.
Athyrium oligosorum (Copel.) Copel.
- 33. Diplazium pallidum** (Blume) Moore
Athyrium pallidum Blume
- 34. Diplazium pariens** (Copel.) C Chr.
Athyrium pariens Copel.
- 35. Diplazium petiolare** C Presl
Athyrium petiolare (C Presl) Milde
- 36. Diplazium pinatubicum** MG Price, Contrib. Herb. Univ. Michigan 17 (1990) 273
- 37. Diplazium polypodioides** Blume
Athyrium blumei (Bergsmann) Copel.
Diplazium ophiodontum (Copel.) C Chr.
Athyrium ophiodontum Copel.
Diplazium asperum Blume
Athyrium asperum (Blume) Milde
- 38. Diplazium proliferum** (Lam.) Thouars
Callipteris prolifera (Lam.) Bory
Diplazium accedens Blume
- 39. Diplazium propinquum** (Copel.) Alderw.
Athyrium propinquum Copel.
- 40. Diplazium pseudocyatheifolium** Rosenst.
Athyrium pseudocyatheifolium (Rosenst.) Copel.
Athyrium ebenirachis Copel.
- 41. Diplazium sibuyanense** (Copel.) Alderw.
Athyrium sibuyanense Copel.
- 42. Diplazium sorzogonense** (C Presl) C Presl
Athyrium sorzogonense (C Presl) Milde
- 43. Diplazium symmetricum** (Copel.) MG Price, Gard. Bull. Sing. 36 (1983) 26.
Athyrium symmetricum Copel.
SAMAR: Mt. Cabayanan, *Edano PNH 15148*, lectotype (MICH).
- 44. Diplazium tenuifolium** (Copel.) Lellinger, Am. Fern J. 74 (1954) 57
Athyrium tenuifolium Copel.
Formally published new combination?
- 45. Diplazium tomentosum** Blume
Athyrium crenato-serratum (Blume) Milde
- 46. Diplazium vestitum** C Presl
Athyrium vestitum (C Presl) Milde
- 47. Diplazium whitfordii** Copel.
Athyrium whitfordii (Copel.) Copel.
- 48. Diplazium williamsii** Copel.
Athyrium williamsii (Copel.) Copel.

Athyrium banahaoense Copel.
Diplazium banahaoense (Copel.) C Chr.

49. Diplazium woodwardioides (C Presl) Holttum

Athyrium sylvaticum (Blume) Milde

50. Diplazium xiphophyllum (Baker) Copel.

Athyrium xiphophyllum (Baker) Copel.

Diplazium accedens Blume

Polillo, PNBG 184 Sotalbo (PUH). New record for the Philippines?

Most specimens in *D. proliferum*; the rest in *D. vestitum* & *D. dolichosorum*

Dryoathyrium Ching =Deitaria

6. Gymnocarpium Newman

1. Gymnocarpium oyamense (Baker) Ching

Currania gracilipes Copel.

Lunathyrium Koidzumi =Deitaria

Family 30. BLECHNACEAE

Conspectus of the genera:

Subfamily I. Blechnoideae [scales not peltate, petiole vascular bundles U-shaped in cross section]:

Blechnum L.

Brainea J SM.

Woodwardia SM.

Subfamily II. Stenochlaenoideae [scales peltate, petiole vascular bundles in 2 circles]:

Stenochlaena J SM.

1. Blechnum Linnaeus

1. Blechnum egregium Copel. in Perkins, *Fragm. Fl. Philip.* (1905) 187;

2. Blechnum finlaysonianum Hook. & Grev., *Icon. Fil.*, t. (1831) 225;

3. Blechnum fraseri (A. Cunningham) Luer., *Flora* (1876) 292;

4. Blechnum orientale L., *Sp. Pl.* (1753) 1077;

5. Blechnum patersonii (R Br.) Mett., *Fil. Lips.* (1856) 64, t. 4, Fig. 4-10;

6. Blechnum vestitum (Blume) Kuhn, *Ann. Lugd.-Bat.* 4 (1869) 284;
Blechnum capense (L.) Schlecht.

7. Blechnum vulcanicum (Blume) Kuhn, *Ann. Lugd.-Bat.* 4 (1869) 284;

2. *Brainea* J Smith

1. *Brainea insignis* (Hook.) J Sm.

1. *Stenochlaena* J Smith

1. *Stenochlaena areolaris* (Harrington) Copel.

2. *Stenochlaena cumingii* Holttum

Stenochlaena laurifolia C Presl

3. *Stenochlaena milnei* Underw.

Stenochlaena juglandifolia C Presl

4. *Stenochlaena palustris* (NL Burm.) Bedd., Ferns Brit. Ind. Suppl. (1876) 26;

4. *Woodwardia* Smith

1. *Woodwardia orientalis* Sw.

var. *prolifera* (Hook. & Arn.) Hook.

2. *Woodwardia unigemmata* (Makino) Nakai

Family 31. ONOCLEACEAE (No Philippine representatives)

Family 32. DRYOPTERIDACEAE (including "Aspidiaceae", Bolbitidaceae, Elaphoglossaceae, Hypodematiaceae, Peranemataceae)
(xx genera, xxx species)

Revisions:

Holttum, RE. 1978. Flora Malesiana series 2, 1: 255-330 (Bolbitis treatment by E. Hennipman)

Tribe 2. Dryopterideae –7 genera, 44 species in the Philippines.

Acrophorus C Presl -1

Arachniodes Blume – 5

Cyrtomium C Presl -2

Didymochlaena Desv. -1

Dryopteris Adans. -14

Dryopsis Holttum & Edwards -1

Hypodematium Kunze

Lastreopsis Ching -1

Leucostegia

Lomagramma

Nothoperanema (Tagawa) Ching -1

Peranema D Don -2

Polystichum Roth -11

1. *Acrophorus* C Presl

1. Acrophorus nodosus C Presl

Acrophorus stipellatus (Wall.) T Moore

Acystopteris Nakai = *Cystopteris*

2. Arachniodes Blume

1. Arachniodes amabilis (Blume) Tindale

Rumohra amabilis (Blume) Ching

2. Arachniodes aristata (Forster) Tindale

Rumohra aristata (Forst.) Ching

3. Arachniodes coniifolia (Wall. ex T Moore) Ching

Rumohra wallichii Ching

4. Arachniodes hasseltii (Blume) Ching

Rumohra hasseltii (Blume) Ching

5. Arachniodes tripinnata (Goldm.) Sledge

Rumohra carvifolia (Kunze) Ching

Arthrobotrya J Smith = *Teratophyllum*

3. Bolbitis Schott

Revision:

E. Hennipman, *Leid. Bot. Ser.* 2 (1977) 123-

1. Bolbitis angustipinna (Hayata) H Ito

2. Bolbitis appendiculata (Willd.) K Iwats.

ssp. appendiculata

Egenolfia appendiculata (Willd.) J Sm.

3. Bolbitis heteroclita (C Presl) Ching

Bolbitis cuspidata (C Presl) Ching

Bolbitis pseudoscalpturata (Copel.) Ching

Bolbitis foxworthyi (Copel.) Ching

Bolbitis tenuissima (Copel.) Copel.

Bolbitis membranacea (Copel.) C Chr.

Bolbitis edanyoi Copel.

Edanyoa difformis Copel.

4. Bolbitis quoyana (Gaudich.) Ching

Bolbitis enormis (Copel.) C Chr.

Stenosemia dimorpha Copel.

5. Bolbitis repanda (Blume) Schott

6. Bolbitis rhizophylla (Kaulf.) Hennipman

Egenolfia intermedia (J Sm.) Fée

Egenolfia rhizophylla (Kaulf.) Fée

Egenolfia fluviatilis Copel.

7. Bolbitis scalpturata (Fée) Ching

8. *Bolbitis sinuata* (C Presl) Hennipman

Bolbitis diversifolia (Blume) Schott
Bolbitis subsimplex (Fée) Ching
Bolbitis hydrophylla (Copel.) Ching

Hybrids:

H. 1. *Bolbitis* x *arguta* (Fée) Ching

Hennipman doubts whether this fern warrants a separate treatment as a hybrid; it may be close to *Edanyoa difformis* (= *B. heteroclita*).

H. 2. *Bolbitis heteroclita* x *rhizophylla* Hennipman, Leid. Bot. Ser. 2 (1977) 291, Fig. 831-0

H. 3. *Bolbitis* x *sinuosa* (Fée) Copel., two nothomorphs distinguished: nm. *sinuosa*

nm. *foxii* (Copel.) Hennipman
Bolbitis x *foxii* Copel.

Dubious species:

Leptochilus stolonifer Christ, Bull. Herb. Boiss. li, 6 (1906) 1004.

Luzon: Rizal prov., Angilog (type locality). Possibly synonymous with *B. heteroclita* but the venation pattern as given by Christ is deviating. Type not traced (Hennipman, Fl. Males. Ser ii 1 (1978) 330).

Excluded:

Bolbitis presliana (Fée) Ching

Included in Copeland's treatment in Fern Fl. Philipp. 2 (1960) 260. This taxon does not occur in the Philippines nor anywhere in Malesia.

4. *Cyrtomium* C Presl

1. *Cyrtomium* cf. *caryotideum* (Wall.) Presl

Phanerophlebia caryotideum (Wall. ex Hook. & Grev.) Copel.

Philippine record based on a sterile specimen by Mearns from Mt. Sto. Tomas [Copeland, Fern Fl. Philipp. 2 (1960) 248].

2. *Cyrtomium* cf. *falcatum* (L.f.) C Presl

Phanerophlebia falcata (L. f.) Copel.

Philippine record based on a Loher collection from Mt. Data [Copeland, Fern Fl. Philipp. 2 (1960) 248] at the turn of the 1900s.

Diacalpe Blume = *Peranema*

5. *Didymochlaena* Desvaux

1. *Didymochlaena truncatula* (Sw.) J Sm.

6. *Dryopsis* Holttum & PJ Edwards

1. ***Dryopsis manipurensis*** (Bedd.) Holttum & PJ Edwards, Kew Bull. 41 (1986) 200.
Ctenitis copelandii (Christ) Copel.

Ctenitis manipurensis (Bedd.) Ching

7. **Dryopteris** Adanson

1. **Dryopteris cacaina** Tagawa
2. **Dryopteris cochleata** (Don) C Chr.
3. **Dryopteris chrysocoma** C Chr.
4. **Dryopteris formosana** (Christ) C Chr.
5. **Dryopteris hirtipes** (Blume) Kuntze
6. **Dryopteris permagna** MG Price
7. **Dryopteris polita** Rosenst.
8. **Dryopteris pulvinulifera** (Bedd.) Kuntze
9. **Dryopteris purpurascens** (Blume) Christ
10. **Dryopteris sparsa** (Don) Kuntze
11. **Dryopteris subarborea** (Baker) C Chr.
12. **Dryopteris uropinna** MG Price
Dryopteris erythrosora sensu Copel. (1960), *non* (Eaton) Kuntze
13. **Dryopteris varia** (L.) Kuntze
14. **Dryopteris wallichiana** (Sprengel) Alston & Bonner
Dryopteris paleacea (Sw.) C Chr., *nom. illeg.*

Edanyoa Copeland = *Bolbitis heteroclita*

Egenolfia Schott = *Bolbitis*

8. **Elaphoglossum** Schott ex J Smith

1. **Elaphoglossum angulatum** (Blume) T Moore
2. **Elaphoglossum apoense** Holttum
3. **Elaphoglossum blumeanum** (Fée) J Sm.
var. blumeanum
Elaphoglossum copelandii Christ
var. philippinense Christ ex Holttum
4. **Elaphoglossum calanasanicum** Holttum

5. Elaphoglossum callifolium (Blume) T Moore

6. Elaphoglossum luzonicum Copel.

Elaphoglossum elmeri Copel.

7. Elaphoglossum melanostictum (Blume) T Moore

Elaphoglossum basilanicum Copel.

8. Elaphoglossum negrosensis Holttum

Elaphoglossum angulatum sensu Copel. (1960), *pro parte*, non (Blume) T Moore

9. Elaphoglossum ophioglossoides (Goldm.) Holttum

Elaphoglossum merrillii Christ

Hemigramma Christ =Tectaria

9. Hypodematium Kunze

1. Hypodematium crenatum (Forssk.) Kuhn

10. Lastreopsis Ching

1. Lastreopsis tenera (R Br.) Tindale

Ctenitis recedens (J Sm.) Copel.

11. Leucostegia C Presl

1. Leucostegia immersa (Wall.) C Presl, Tent. (1836) 95, t. 4, Fig. 11;

2. Leucostegia pallida Mett.

12. Lomagramma J Smith

Lomagramma brooksii Copel.

Lomagramma copelandii Holttum

Lomagramma merrillii Holttum

Lomagramma pteroides J Sm.

Lomagramma subcoriacea Copel.

Lomagramma pedicellata Copel.

Lomagramma cordata Copel.

13. Nothoperanema (Tagawa) Ching

Nothoperanema hendersonii (Bedd.) Ching

Ctenitis mearnsii Copel.

As *Ct. mearnsii*:

LUZON: Benguet (Pauai; Mt Pulag). Terrestrial in mossy forest, altitude 2100-2750m.

14. *Peranema* D Don

Peranema aspidioides (Blume) Mett.
Diacalpe aspidioides Blume

Peranema cyatheoides D Don
var. *luzonicum* (Copel.) Ching & SH Wu, *Acta Phytotax. Sin.* 21 (1983) 373.
Peranema luzonica Copel.

Phanerophlebia C Presl = *Cyrtomium*

15. *Polystichum* Roth

Polystichum biaristatum (Blume) T Moore
Polystichum aquilinum Copel.

Polystichum copelandii Christ

Polystichum deltodon (Baker) Diels

Polystichum doianum Tagawa
Polystichum pulogense Copel.

Polystichum elmeri Copel.

Polystichum fuscum Copel.

Polystichum horizontale C Presl

Polystichum nepalense (Sprengel) C Chr.

Polystichum nudum Copel.

Polystichum obliquum (D Don) T Moore

Polystichum obtusum J Sm. ex C Presl
Polystichum edanoi Copel.

Rumohra sensu Copel. (1960) *non* Raddi = *Arachniodes*

16. *Teratophyllum* Mettenius

Teratophyllum aculeatum (Blume) Mett. ex Kuhn
var. ***aculeatum***

Teratophyllum arthropteroides (Christ) Holttum

Teratophyllum articulatum (J Sm. ex Fée) Mett. ex Kuhn
Arthrobotrya articulata J Sm.

Teratophyllum koordersii Holttum

Teratophyllum leptocarpum (Fée) Holttum

Teratophyllum luzonicum Holttum

Family 33. LOMARIOPSIDACEAE (including Nephrolepidaceae)

1. Cyclopeltis J Smith

Cyclopeltis crenata (Fee) C Chr.
Cyclopeltis zamboangana Copel.

Cyclopeltis presliana (J.Sm.) Berkeley
Cyclopeltis cumingiana (Fee) C Morton

2. Lomariopsis Fée

Lomariopsis kingii (Copel.) Holttum

Lomariopsis lineata (C Presl) Holttum
Lomariopsis smithii Fée
Lomariopsis papyracea Copel.

Lomariopsis subtrifoliata (Copel.) Holttum

Doubtfully occurring in the Philippines:

Lomariopsis spectabilis (Kunze) Mett.

Philippine specimens formerly so-named to this species all appear to have narrower fertile pinnae and hence believed by Holttum to be *L. kingii*. (Fl. Males. ser. 2, 1 (1978) 262.

3. Nephrolepis Schott

Nephrolepis acutangula C Presl
Nephrolepis pubescens Copel.

Nephrolepis auriculata (L.) Trimen

Nephrolepis biserrata (Sw.) Schott

Nephrolepis clementis Christ
Probably synonymous with *N. radicans*.

Nephrolepis cordifolia (L.) Presl
Nephrolepis glabra Copel.

Nephrolepis exaltata (L.) Schott

Nephrolepis falcata (Cav.) C Chr.

Nephrolepis hirsutula (G Forst.) C Presl

Nephrolepis multiflora (Roxb.) Jarrett ex C Morton

Nephrolepis radicans (Burm.) Kuhn

Family 34. TECTARIACEAE

Revision:

Holttum, RE. 1991. Tectaria Group. Flora Malesiana series 2, 2: 1-132. (Tectaria Group = Tribe Tectarieae)

Aenigmopteris Holttum -2
Arthropteris J Sm. ex JD Hook. -4
Ctenitis (C Chr.) C Chr. – 14
Heterogonium C Presl - 6
Pleocnemia C Presl -6
Psomiocarpa C Presl -1
Pteridrys C Chr. & Ching -2
Tectaria Cav. –32 spp., 3 hybrids
Tectaridium Copel. -1

1. Aenigmopteris Holttum

Aenigmopteris dubia (Copel.) Holttum

Ctenitis dubia (Copel.) Copel.

LUZON: Quezon (Mt Banahaw de Lucban), NEGROS: Negros Oriental (Cuernos Mtns), LEYTE, CAMIGUIN. Terrestrial, altitude 850-1200m.

Aenigmopteris mindanaensis Holttum

2. Arthropteris J Smith ex JDHook.

Arthropteris beckleri (Hook.) Mett.

Arthropteris oblitterata (R Br.) J Sm.

Arthropteris palisotii (Desv.) Alston

Arthropteris glabra Copel.

Arthropteris repens (Brackenr.) C Chr.

Arthropteris wollastonii (Ridley) Holttum

Arthropteris orientalis (J. Gmel.) C Chr.

3. Ctenitis (C Christensen) C Christensen

Ctenitis aciculata (Baker) Ching

Ctenitis atrorubens Holttum

Ctenitis vilis sensu Copel. (1960), *pro parte, non* (Kunze) Ching

Ctenitis boholensis Holttum

Ctenitis bulusanica Holttum

Ctenitis decurrentipinnata (Ching) Ching

Ctenitis erythradenia Holttum

Ctenitis vilis sensu Copel. (1960), *pro parte, non* (Kunze) Ching

Ctenitis humilis Holttum

Ctenitis paleolata Copel.

LUZON: Benguet (Pauai), altitude c. 2400m. Known only from the type collection.

Ctenitis pallens (Brackenr.) MG Price

Ctenitis rizalensis (Christ) Copel.

As *C. rizalensis*: LUZON: Rizal, Laguna (Mt Makiling), SAMAR, MINDANAO: Zamboanga (San Ramon), Davao (Mt Apo). Terrestrial under moist forest shade, altitude 400-1200m.

Ctenitis propinqua (J Sm. ex C Presl) Copel.

LUZON: Pampanga (Mt Arayat), Laguna (Mt Makiling), Quezon (Mt Banahaw), Batangas (Mt Makulod).

Ctenitis setosa (C Presl) Holttum

Ctenitis vilis sensu Copel. (1960), *pro parte, non* (Kunze) Ching

Ctenitis silvatica Holttum

Ctenitis vilis sensu Copel. (1960), *pro parte, non* (Kunze) Ching

Ctenitis subglandulosa (Hance) Ching

Ctenitis rhodolepis (Clarke) Ching

Ctenitis subobscura (Christ) Holttum

Excluded:

Ctenitis subconnexa (Christ) Holttum var. **subconnexa** and var. **alstonii** Holttum

A mislocalization to the Philippines by Holttum, Fl. Males. ser. 2, 2 (1991) 28. The locality Batjan is in Halmahera (of the Moluccas).

4. **Heterogonium** C Presl

Heterogonium aspidioides C Presl

Heterogonium lobulatum Holttum

Heterogonium pinnatum (Copel.) Holttum

Stenosemia pinnata Copel.

Heterogonium profereoides (Christ) Copel.

Heterogonium aspidioides sensu Holttum, Kalikasan 4 (1975) 224, *pro parte*

Heterogonium sagenioides (Mett.) Holttum

Ctenitis sagenioides (Mett.) Copel.

Ctenitis obscura (Hook.) Copel.

Heterogonium obscurum (Hook.) Holttum

Heterogonium wenzelii (Copel.) Holttum

Ctenitis wenzelii Copel.

LEYTE.

5. **Pleocnemia** C Presl

Pleocnemia brongniartii (Bory) Holttum

Arcypteris brongniartii (Bory) Holttum

Tectaria irregularis sensu Copel. (1960), *pro parte*

Pleocnemia conjugata (Blume) C Presl

Pleocnemia cumingiana C Presl

Tectaria leuzeana sensu Copel. (1960), *pro parte*

Pleocnemia irregularis (C Presl) Holttum

Arcypteris irregularis (C Presl) Ching

Tectaria irregularis sensu Copel. (1960), *pro parte*

Pleocnemia macrodonta (Fee) Holttum

Arcypteris macrodonta (C Presl) Holttum

Tectaria irregularis sensu Copel. (1960), *pro parte*

Pleocnemia presliana Holttum

LUZON: Cagayan, Aurora, Laguna, PALAWAN (Mt Gantung; Imolnod), LEYTE (Palo), MINDANAO: Davao (Mt Apo, Todaya), Surigao del Norte. Terrestrial, usually in partly shaded area, near sea-level to at least 400m.

6. **Psomiocarpa** C Presl

Psomiocarpa apiifolia C Presl

LUZON: Cagayan, Isabela, Bataan, Rizal, Laguna (Mt Makiling), Quezon, POLILLO, MASBATE, LEYTE, SAMAR, MINDANAO: Zamboanga (San Ramon). Terrestrial in forest, from near sea-level to c. 450m altitudes.

7. **Pteridrys** C Christensen & Ching

Pteridrys microthecia (Fee) C Chr. & Ching

Pteridrys syrmatica (Willd.) C Chr. & Ching

Stenosemia C Presl = *Tectaria*, *Heterogonium*

8. **Tectaria** Cavanilles

Tectaria adenophora Copel.

SIBUYAN.

Tectaria angulata (Willd.) Copel.

Tectaria trifolia (Alderw.) C Chr.

Tectaria athyriosora MG Price

BOHOL, SAMAR, MINDANAO: Surigao del Norte.

Tectaria aurita (Sw.) S. Chandra

Stenosemia aurita (Sw.) Presl

Tectaria barberi (Hook.) Copel.

Tectaria beccariana (Cesati) C Chr.

Tectaria calcarea (C Presl) Copel.

POLILLO, in wet forest, altitude 50m, BOHOL, LEYTE.

Tectaria christii Copel.

LUZON: Mountain Province, Benguet, MINDORO: Mindoro Oriental (Mt Halcon).
Usually on limestone, altitude c. 1500m.

Tectaria crenata Cav.

Tectaria grandifolia sensu Copel. (1960), *pro parte*

Tectaria decurrens (C Presl) Copel.

Tectaria peralata Copel.

Tectaria devexa (Kunze ex Mett.) Copel.

var. devexa

Tectaria dissecta (G Forst.) Lellinger

Ctenitis dissecta (G Forst.) Copel.

Tectaria dolichosora Copel.

LUZON: Cagayan, Quezon (Infanta, Tignoan). Steep slopes near summits.

Tectaria griffithii (Baker) C Chr.

var. griffithii

Tectaria malayensis (Christ) Copel.

Tectaria hilocarpa (Fée) MG Price

Hemigramma latifolia (Meyen ex Goldm.) Copel., excl. *Hemionitis zollingeri* and other latter names based on this.

Tectaria laxa (Copel.) MG Price

Ctenitis laxa Copel.

LUZON: Ilocos Norte (Mt Quebrada; Mt Siminublan). Altitude 80-1100m.

Tectaria lobbii (Hook.) Copel.

var. lobbii

Tectaria manilensis (C Presl) Holttum

var. manilensis

Lastreopsis manilensis (C Presl) MG Price

Ctenitis manilensis (C Presl) Holttum

Ctenitis loheri (Christ) Copel.

Tectaria melanocaula (Blume) Copel.

Tectaria 'melanocaulis' in Copel. (1960).

Tectaria menyanthidis (C Presl) Copel.

Tectaria mesodon (Copel.) MG Price

Ctenitis mesodon (Copel.) Copel.

Dryopteris mesodon Copel.

LUZON: Ilocos Norte, MINDANAO: Agusan del Norte (Mt Hilong-hilong), altitude 120m.

Tectaria polymorpha (Wall. ex Hook.) Copel.

Tectaria ramosii (Copel.) Holttum

Ctenitis ramosii Copel.

As *C. ramosii*: BOHOL (Dimiao), SAMAR (Catubig River). Possibly near sea-level to

c. 300m.

Probable hybrids:

Tectaria ramosii x Psomiocarpa apiifolia C Presl

Tectaria ramosii x Tectaria aurita (Sw.) S. Chandra

Tectaria repanda (Willd.) Holttum

Tectaria crenata sensu Copel. (1960), *pro parte*

Probable hybrid:

Tectaria repanda x Tectaria hilocarpa (Fée) MG Price

Tectaria siifolia (Willd.) Copel.

Tectaria stalactica MG Price

Tectaria sulitii Copel.

Tectaria loheri Copel.

Tectaria grandifolia sensu Copel. (1960), *pro parte*

According to Holttum, Fl. Males. ser. 2, 2 (1991) 91, there may be intermediates between this species and *T. crenata*.

As *T. loheri*: LUZON: Rizal (Montalban; Sumag).

Tectaria suluensis Holttum

Tectaria tabonensis MG Price

Tectaria taccifolia (Fée) MG Price

Hemigramma taccifolia (Fée) Copel.

Tectaria trichotoma (Fée) Tagawa

Tectaria balabacensis (Christ) MG Price

Ctenitis balabacensis (Christ) Copel.

As *Ct. balabacensis*: LUZON: Quezon (Guinayangan), PALAWAN, BALABAC, SIBUYAN. Petrophytic along rivers and streams in forests, altitude 100-200m in Palawan.

Tectaria trifida (Fée) MG Price

Tectaria irrigua (J Sm. ex Presl) Copel.

9. Tectaridium Copeland

Tectaridium macleanii Copel.

Tectaridium primitivum Copel.

Family 35. OLEANDRACEAE

1. Oleandra Cavanilles

1. **Oleandra benguetensis** Copel.

2. **Oleandra cumingii** J Sm.

Oleandra scandens Copel.

3. **Oleandra herrei** Copel.

4. Oleandra maquilingsis Copel.

Oleandra colubrina sensu Copel., Fern Fl. Philipp. 1 (1958) 181, *pro parte*

5. Oleandra nitida (Copel.) Copel.

6. Oleandra pistillaris (Sw.) C Chr.

Oleandra neriiiformis Cav.

Oleandra colubrina (Blanco) Copel.

7. Oleandra sibbaldii Grev.

Family 36. DAVALLIACEAE (2 genera, 15 species, 2 varieties)

Araiostegia Copeland =Davallia

1. Davallia J Smith

1. Davallia angustata Hook. & Grev.

Humata angustata (Wall.) J Sm.

Humata microsora Alderw.

2. Davallia brevipes Copel. ; --Hovenkamp & de Joncheere, Blumea 33 (1988) 408.

Philippines, Sulawesi, New Guinea.

3. Davallia denticulata (NL Burm.) Mett., ex Kuhn, Fil. Deck., (1867) 27;

var. denticulata

var. elata (G Forst.) Kuhn

4. Davallia divaricata Blume

var. divaricata

5. Davallia embolostegia Copel., PJS 1 (1906) Suppl. 147, t. 3;

6. Davallia falcinella (J Sm.) C Presl

Trogostolon falcinellus (C Presl) Copel.

7. Davallia heterophylla Sm.

Humata heterophylla (J Sm.) Desv., Prodr. (1825) 323

Humata ophioglossa Cav.

8. Davallia hymenophylloides (Blume) Kuhn

Araiostegia hymenophylloides (Blume) Copel., PJS 34 (1927) 241;

9. Davallia pectinata Sm.

Humata pectinata (J Sm.) Desv.

10. Davallia repens (L.f.) Kuhn

Humata intermedia C Chr.

Humata obtusata Alderw.

Humata pusilloides Copel.

Humata repens (L.f.) Diels in Engl. & Prant, Nat. Pflanzenfam. 14 (1899) 209;

Humata trifoliata Cav.

Humata vestita (Blume) T Moore, Index (1857) 92;

11. Davallia sessilifolia Blume

12. Davallia solida (Forst.) Sw., Schrad. J. Bot. 1800 (1801) 87;

Davallia elmeri Copel.

Davallia robinsonii Copel.

Malesia to Polynesia. Throughout the Philippines. Epiphytic or epilithic, sea-level to c. 600m.

13. Davallia trichomanoides Blume

var. trichomanoides

var. lorrainii (Hance) Holttum

Davallia lorrainii Hance, Ann. Sci. Nat. 5, 5 (1866) 254;

14. Davallia wagneriana Copel.

2. Davallodes (Copeland) Copeland

1. Davallodes hirsutum (C Presl) Copel.

Davallodes grammatosorum Copel.

Davallodes gymnocarpum Copel.

Davallodes laxum Copel.

Davallodes congestum Copel.

Humata Cavanilles =*Davallia*

Trogostolon Copeland =*Davallia falcinella*

Family 37. POLYPODIACEAE (including Drynariaceae, Grammitidaceae, Loxogrammaceae, Platyceriaceae)

(23 genera, 166 species, 2 varieties; in addition, 1 possible new record in Loxogramme)

Revision:

Hovenkamp, PH, MTM Bosman, E Hennipman, HP Nootboom, G. Rodl-Linder & MC Roos. 1998. Polypodiaceae. Flora Malesiana series 2, 3: 1-234.

1. Acrosorus Copeland

1. Acrosorus friderici-et-pauli (Christ) Copel.,

Acrosorus exaltatus Copel.

Acrosorus merrillii Copel.

Acrosorus symmetricus Copel.

2. Acrosorus nudicarpus PM Zamora & CO, Nat. Appl. Sc. Bull. Univ. Philipp. 32 (1980) 47, t. 2

Xiphopteris nudicarpa (PM Zamora & Co) Parris in Parris et al., Pl. Mt Kinabalu 1 (1992) 77.

Grammitis palasaba MG Price, Contr. Univ. Mich. Herb. 16 (1987) 196.

Acrosorus streptophyllus (Baker) Copel.

Recorded by Price (1972); some material so identified belongs to *A. friderici-et-pauli*. Occurrence in the Philippines needs confirmation.

Acrosorus triangularis (Scort. ex Bedd.) Copel.

2. **Aglaomorpha** Schott

1. **Aglaomorpha acuminata** (Willd.) Hovenkamp

Photinopteris acuminata (Willd.) C Morton

Photinopteris speciosa C Presl

2. **Aglaomorpha cornucopia** (Copel.) Roos

Thayeria cornucopia Copel.

3. **Aglaomorpha heraclea** (Kunze) Copel.

Drynariopsis heraclea (Kunze) Ching

4. **Aglaomorpha meyeniana** (Hook.) Schott

5. **Aglaomorpha pilosa** (Hook. & Bauer) Copel.

6. **Aglaomorpha splendens** (Hook. & Bauer) Copel.

Anapausia C Presl =*Leptochilus*

3. **Arthromeris** (T Moore) J Sm.

1. **Arthromeris proteus** (Copel.) Tagawa

4. **Belvisia** Mirbel

1. **Belvisia mucronata** (Fée) Copel.

var. *mucronata*

2. **Belvisia platyrhynchos** (Kunze) Copel.

3. **Belvisia spicata** (L.f.) Copel.

Belvisia revoluta (Blume) Copel.

4. **Belvisia validinervis** (Kunze) Copel.

var. *validinervis*

5. **Calymmodon** C Presl

1. **Calymmodon clavifer** (Hook.) T Moore

2. **Calymmodon cucullatus** (Nees & Blume) C Presl

3. **Calymmodon gracilis** (Fée) Copel.

4. **Calymmodon muscoides** (Copel.) Copel.

5. **Calymmodon ordinatus** Copel.

Chrysogrammitis Parris

Chrysogrammitis glandulosa (J Sm.) Parris
Ctenopteris merrittii (Copel.) Tagawa

Chrysogrammitis musgraviana (Baker) Parris
Xiphopteris apoensis (Copel.) Copel.

Ctenopteris Blume = To Chrysogrammitis, Ctenopterella, Dasygrammitis,
Prosaptia, Themelium, Tomophyllum

Christiopteris Copeland =Christopteris

7. Christopteris Copeland
[probably assignable to Tribe Microsoreae]

1. Christopteris sagitta (Christ) Copel.
Christopteris copelandii Christ

Colysis Presl =Leptochilus

Crypsinus Presl =Selligaea

Ctenopterella Parris

Ctenopterella blechnoides (Grev.) Parris, Gard. Bull. Sing. 58 (2007) 235.
Ctenopteris blechnoides (Grev.) Wagner & Grether

Ctenopterella denticulata (Blume) Parris
Ctenopteris solida Kunze *in* Zoll., Syst. Verz. (1854) 37

Ctenopterella pediculata (Baker) Parris, Gard. Bull. Sing. 58 (2007) 237.
Ctenopteris pediculata (Baker) Copel.

Dasygrammitis Parris

Dasygrammitis fuscata (Blume) Parris, Gard. Bull. Sing. 58 (2007) 239.
Ctenopteris fuscata (Blume) Kunze

Dasygrammitis malaccana (Baker) Parris
Ctenopteris matutumensis Copel., Fern Fl. Philip. 3 (1960) 528, *anglice, non rite publice*
Ctenopteris pachycaulis (Copel.) Copel.

Dasygrammitis mollicoma (Nees & Blume) Parris, Gard. Bull. Sing. 58 (2007) 239.
Ctenopteris mollicoma (Nees & Blume) Kunze

Dendroglossa C Presl =Leptochilus

Diblemma J Smith =Microsorium samarense

Drymoglossum C Presl =Pyrrosia

8. *Drynaria* (Bory) J Smith

1. *Drynaria descensa* Copel.

2. *Drynaria quercifolia* (L.) J Sm.

India and S China, across Malesia to tropical Australia and Fiji. Throughout the Philippines. A very common epiphyte or lithophyte in seasonal areas, in open forests, about settlements, etc., usually at low altitudes.

3. *Drynaria rigidula* (Sw.) Bedd.

4. *Drynaria sparsisora* (Desv.) T Moore

Drynariopsis (Copeland) Ching =Aglaomorpha

9. *Goniophlebium* (Blume) C Presl

1. *Goniophlebium benguetense* (Copel.) Copel.

Schellolepis benguetensis (Copel.) Pic.-Serm.

2. *Goniophlebium coadunatum* Barcelona & MG Price

3. *Goniophlebium mengtzeense* (Christ) Rödl-Linder

Goniophlebium argutum *auctt. philipp. non* J Sm.

4. *Goniophlebium percussum* (Cav.) Wagner & Grether

Schellolepis percussa Pic.-Serm.

5. *Goniophlebium persicifolium* (Desv.) Bedd.

Schellolepis persicifolia (Desv.) Pic.-Serm.

6. *Goniophlebium pseudoconnatum* (Copel.) Copel.

7. *Goniophlebium subauriculatum* (Blume) C Presl

Goniophlebium tomentellum (C Chr.) Copel.

Schellolepis tomentella (C Chr.) Pic.-Serm.

Goniophlebium integrum Copel.

8. *Goniophlebium terrestre* Copel.

Schellolepis terrestris (Copel.) MG Price

Grammitis *auctt. Males., non* Swartz =*Oreogrammitis*

10. *Lecanopteris* Reinwardt

1. *Lecanopteris curtisii* Baker, J. Bot. (1881) Icon. Plant, pl. 1607; --H Gay, Gard. Bull. Sing. 45 (1993) 301.

Lecanopteris deparioides (Cesati) Baker

Lecanopteris pumila Copel., Polyp. Philipp. (1905) 134; Fern Fl. Philip. 3 (1960) 499, *non* Blume (1829)

Lecanopteris philippinensis Alderw., Bull. Jard. Bot. Buitenz. Ser. 2, no. 1 (1911) 8.

Sumatra, Peninsular Malaysia, Philippines to the Moluccas. MINDANAO: Lanao del

Sur, Davao (Mt Apo), Davao Oriental (Mt Hamiguitan). Altitude 800-1200m.

2. *Lecanopteris lomarioides* (Mett.) Copel.

LUZON: Nueva Ecija.

3. *Lecanopteris luzonensis* Hennisman, Blumea 32

Lecanopteris carnosae *auctt. philipp. non* (Reinw.) Blume

LUZON: Pangasinan, Pampanga, Bataan (Mt Mariveles), Laguna, Quezon, Camarines Norte.

4. *Lecanopteris sinuosa* (Wall. ex Hook.) Copel.

11. *Lemmaphyllum* C Presl

1. *Lemmaphyllum accedens* (Blume) Donk

Weatherbya accedens (Blume) Copel.

2. *Lemmaphyllum carnosum* (Hook.) C Presl

var. *carnosum*

Lemmaphyllum spathulatum (C Presl) C Presl

12. *Lepisorus* (J Smith) Ching

1. *Lepisorus longifolius* (Blume) Holttum

Pleopeltis longifolia (Blume) Bedd.

Paragramma longifolia (Bl) T Moore

2. *Lepisorus thunbergianus* (Kaulf.) Ching

Pleopeltis thunbergiana Kaulf.

13. *Leptochilus* Kaulfuss

1. *Leptochilus axillaris* (Cav.) Kaulf.

2. *Leptochilus decurrens* Blume

Anapausia decurrens (Blume) C Presl

3. *Leptochilus ellipticus* (Thunb.) Noot.

Colysis elliptica (Thunb.) Ching

Colysis pothifolia (D Don) C Presl

4. *Leptochilus macrophyllus* (Blume) Noot.

var. *macrophyllus*

Colysis macrophylla (Blume) C Presl

Colysis bolsteri (Copel.) Alderw.

var. *fluviatilis* (Lauterb.) Noot.

var. *pedunculatus* (Hook. & Grev.) Noot.

Colysis membranacea (Blume) C Presl

5. *Leptochilus minor* Fée

Dendoglossa minor (Fée) Copel.

Colysis minor (Fée) MG Price

6. *Leptochilus*

Colysis hemionitidea (Wall.) C Presl

For some reason, this is not accounted for in the FM revision, although quite a common species in the Philippines.

14. *Loxogramme* (Blume) Presl

1. *Loxogramme antrophyoides* (Baker) C Chr.

2. *Loxogramme avenia* (Blume) C Presl
Loxogramme malayana Copel.

3. *Loxogramme conferta* Copel.

4. *Loxogramme dimorpha* Copel.

5. *Loxogramme forbesii* Copel.

6. *Loxogramme parallela* Copel.

7. *Loxogramme scolopendrioides* (Gaudich.) C Morton
Loxogramme scolopendrina (Bory) C Presl

8. *Loxogramme subselliguea* (Baker) Alston
Loxogramme major Copel.

Possible new record to the Philippines:

9. *Loxogramme chinensis*

Micropolypodium Hayata

Micropolypodium pulogense (Copel.) AR Sm.
Xiphopteris pulogensis (Copel.) Copel.

15. *Microsorium* Link

1. *Microsorium commutatum* (Blume) Copel.
Phymatosorus commutatus (Blume) Pic.-Serm.
Microsorium phanerophlebium (Copel.) Copel.

2. *Microsorium congregatifolium* (Alderw.) Holttum
Microsorium mindanaense (Christ) Copel.

3. *Microsorium ensatum* (Thunb.) H Ito
Neocheiropteris ensata (Thunb.) Ching

4. *Microsorium heterocarpum* (Blume) Ching

5. *Microsorium heterolobum* (C Chr.) Copel.
Probably a hybrid.

6. *Microsorium insigne* (Blume) Copel.
Microsorium decurrens (Brackenr.) Copel.
Microsorium palmatum auct. non (Blume) Fee

7. *Microsorium longissimum* Fée
Microsorium sablanianum (Christ) Copel.

8. *Microsorium membranifolium* (R Br.) Ching

Microsorium plukenetii (C Presl) MG Price
Microsorium alternifolium auct.: Copel., Gen. Fil. (1947), *pro parte*
Microsorium longipes Copel., nom. nud.
Microsorium nigrescens (Blume) Copel.
Phymatosorus nigrescens (Blume) Pic.-Serm.
? *Microsorium schneideri* (Christ) Copel.

9. *Microsorium monstrosus* (Copel.) Copel.

10. *Microsorium pentaphyllum* (Baker) Copel.

Microsorium curranii (Copel.) Copel.

11. *Microsorium pteropus* (Blume) Copel.

12. *Microsorium punctatum* (L.) Copel.

Microsorium musifolium (Blume) Copel.
Microsorium validum (Copel.) Ching

13. *Microsorium rubidum* (J Sm.) Copel.

14. *Microsorium samarense* (J Sm.) Bosman

Diblemma samarense J Sm.
Microsorium tenuilore (J Sm. ex Mett.) Copel.

15. *Microsorium sarawakense* (Baker) Ching

Microsorium rizalense Copel.

16. *Microsorium scolopendria* (Burm. f.) Copel.

Phymatosorus scolopendria (Burm. f.) Pic.-Serm.
Tropical Africa to Polynesia and Australia. Throughout the Philippines. Epiphytic or lithophytic in exposed sites and disturbed forests at low elevations, even on coastal bluffs subjected to salt spray. Common.

17. *Microsorium zippelii* (Blume) Ching

Note: Included in Copeland's Fern Flora but not ascribed to the Philippines in the FM revision is:

***Microsorium linguiforme* (Mett.) Copel.**

What is *Microsorium trifidum*?

Neocheiropteris Christ = *Microsorium*

16. *Oreogrammitis* Copeland

***Oreogrammitis adspersa* (Blume) Parris, Gard. Bull. Sing. 58 (2007) 255.**

Grammitis adspersa (Blume) Blume

***Oreogrammitis caespitosa* (Blume) Parris, Gard. Bull. Sing. 58 (2007) 257.**

Grammitis caespitosa Blume

***Oreogrammitis congener* (Blume) Parris, Gard. Bull. Sing. 58 (2007) 258.**

Grammitis congener Blume

***Oreogrammitis dolichosora* (Copel.) Parris, Gard. Bull. Sing. 58 (2007) 258.**

Grammitis dolichosora (Copel.) Copel.

Oreogrammitis fasciata (Blume) Parris, Gard. Bull. Sing. 58 (2007) 259.
Grammitis fasciata Blume

Oreogrammitis fenicis (Copel.) Parris, Gard. Bull. Sing. 58 (2007) 259.
Grammitis fenicis Copel.

Oreogrammitis knutsfordiana (Baker) Parris, Gard. Bull. Sing. 58 (2007) 262.
Grammitis knutsfordiana (Baker) Copel.

Oreogrammitis locellata (Baker) Parris, Gard. Bull. Sing. 58 (2007) 262.
Grammitis locellata (Baker) Copel.
Grammitis stenocrypta Copel.

Oreogrammitis marivelesensis (Copel.) Parris, Gard. Bull. Sing. 58 (2007) 263.
Grammitis marivelesensis Copel.

Oreogrammitis merrillii (Baker) Parris, Gard. Bull. Sing. 58 (2007) 263.
Grammitis merrillii (Copel.) Copel.

Oreogrammitis oncobasis (MG Price) Parris, Gard. Bull. Sing. 58 (2007) 264.
Grammitis oncobasis MG Price,

Oreogrammitis padangensis (Baker) Parris, Gard. Bull. Sing. 58 (2007) 264.
Grammitis padangensis (Baker) Copel.

Oreogrammitis pilosiuscula (Blume) Parris

Oreogrammitis reinwardtii (Blume) Parris, Gard. Bull. Sing. 58 (2007) 266.
Grammitis reinwardtii Blume

Oreogrammitis scabristipes (Baker) Parris, Gard. Bull. Sing. 58 (2007) 267.
Grammitis scabristipes (Baker) Copel.
Grammitis bulbotricha (Copel.) Copel.
Grammitis limapes Copel.

Oreogrammitis sumatrana (Baker) Parris, Gard. Bull. Sing. 58 (2007) 269.
Grammitis sumatrana (Baker) Copel.

Oreogrammitis torricellana (Brause) Parris, Gard. Bull. Sing. 58 (2007) 270.
Grammitis torricellana (Brause) Parris
Grammitis microtricha Copel.

Oreogrammitis aff. insularis

Oreogrammitis aff. knutsfordiana

Photinopteris J Smith =Aglaomorpha

Phymatodes C Presl =Microsorium

Phymatopsis J Smith =Selliginea

Phymatopteris Pichi-Sermolli =Selliginea

Phymatosorus Pichi-Sermolli =Microsorium

17. *Platycterium* Desvaux

1. *Platycterium coronarium* (König ex Müller) Desv.

Tenasserim, Thailand and Malesia. In the Philippines reported from LUZON: Cagayan to MINDANAO: Davao. High canopy epiphyte in lowland primary dipterocarp forests. Also cultivated as an ornamental.

2. *Platycterium grande* (Fée) Kunze

MINDANAO: Zamboanga, **Lanao**, Davao (Mt Apo). Also reported by Copeland (1960) from S LUZON (Mt Cristobal), possibly in error. Majestic crown epiphyte in forest, lowland to 1000m. Also cultivated as an ornamental.

Pleopeltis Humboldt & Bonpland =Lepisorus

18. *Podosorus* Holttum

1. *Podosorus angustatus* Holttum

19. *Prosaptia* C Presl

Prosaptia alata (Blume) Christ

Prosaptia pinnatifida C Presl
Prosaptia toppingii Copel.

Prosaptia ancestralis Copel.

Prosaptia barathrophylla (Baker) MG Price

Prosaptia celebica (Blume) Tagawa & K Iwats., Acta Phytotax. Geobot. 24 (1969) 61.
Ctenopteris celebica (Blume) Copel.
Ctenopteris pseudoarticulata (Copel.) Tagawa

Prosaptia contigua (Forst.) C Presl

Prosaptia cryptocarpa Copel.

Prosaptia davalliacea (F Muell. & Baker) Copel.

Prosaptia linearis Copel.

Prosaptia khasyana (Hook.) C Chr. & Tardieu, Notul. Syst. (Paris) 8 (1939) 180.

Ctenopteris khasyana (Hook.) Holttum

Prosaptia micropora (Copel.) Parris

Ctenopteris microcarpa Copel. Fern Fl. Philip. 3 (1960) 531, *anglice, non rite publice*

Prosaptia multicaudata (Copel.) Parris, Kew Bull. 50 (1995) 166.

Ctenopteris multicaudata (Copel.) Copel.

Prosaptia negrosensis (Copel.) MG Price, Contr. Univ. Michigan Herb. 17 (1990) 276.
Ctenopteris negrosensis (Copel.) Copel.
Ctenopteris spongiosa (Copel.) Copel.

Prosaptia nutans (Blume) Mett.
Ctenopteris nutans (Blume) J Sm.

Prosaptia obliquata (Blume) C Chr. & Tardieu, Notul. Syst. (Paris) 8 (1939) 180.
Ctenopteris obliquata (Blume) Copel.

Prosaptia pectinata T Moore
Prosaptia leysii (Baker) Ching

Prosaptia urceolaris (Hayata) Copel.

Prosaptia venulosa (Blume) MG Price, Contr. Univ. Michigan Herb. 16 (1987) 197.
Ctenopteris venulosa (Blume) Kunze

Prosaptia aff. cavisora

Pteropsis Desvaux = Pyrrosia

20. Pyrrosia Mirbel

1. **Pyrrosia lanceolata** (L.) Farw.

Pyrrosia adnascens (Sw.) Ching
Pyrrosia varia (Kaulf.) Farwell

India and S China, across Malesia to Polynesia. Throughout the Philippines. In exposed sites, open forests, etc., Epiphytic or lithophytic, usually at low altitude.

2. **Pyrrosia longifolia** (Burm.f.) C Morton

Pyrrosia acrostichoides (G Forst.) Ching

3. **Pyrrosia nummularifolia** (Sw.) Ching

4. **Pyrrosia piloselloides** (L.) MG Price

Drymoglossum piloselloides (L.) Presl
Pteropsis piloselloides (L.) Desv.
Pteropsis heterophyllum *auct. non* (L.) Trimen

India to New Guinea. Throughout the Philippines. Epiphytic on tree trunks and branches or epilithic on outcrops and boulders along rivers and streams at low altitudes. Common.

5. **Pyrrosia porosa** (C Presl) Hovenkamp

var. porosa

Pyrrosia mollis *auct. non* (Kunze) Ching

6. **Pyrrosia rasamalae** (Raciborski) Shing

Pyrrosia lanuginosa (Giesenh.) Copel.

This species has often been named *P. floccigera*, properly a synonym of *P. albicans*, a species not known to occur in the Philippines.

7. *Pyrrrosia samarensis* (C Presl) Ching
Pyrrrosia philippinensis Copel., *nom. superfl.*

8. *Pyrrrosia sphaerotricha* (Mett.) Ching

9. *Pyrrrosia splendens* (C Presl) Ching

Radiogrammitis Parris

Radiogrammitis alepidota (MG Price) Parris, Gard. Bull. Sing. 58 (2007) 241.
Grammitis alepidota MG Price, Philip. Agriculturist 57 (1973) 34, Fig. 1;
Taiwan (BJ Wang 17447-B, HAST) and Philippines. LUZON (Ilocos Norte, Mt Burnay; Cagayan, Mt Cetaceo; Quezon, Mt Banahaw, type locality), PALAWAN (Mt Mantalingahan).

Radiogrammitis jagoriana (Mett. ex Kuhn) Parris, Gard. Bull. Sing. 58 (2007) 242.
Grammitis jagoriana (Mett.) Copel.

Radiogrammitis setigera (Blume) Parris
Grammitis intromissa (Christ) Parris
Grammitis fasciculata Blume, *nom. illegit. pro* *Polypodium setigerum* Blume

Radiogrammitis subpinnatifida (Blume) Parris
Xiphopteris subpinnatifida (Blume) Copel.

Schellolepis Pic.-Serm. =Goniophlebium

21. *Scleroglossum* Alderwerelt

Scleroglossum pusillum (Blume) Alderw.
Scleroglossum minus (Fée) C Chr.

Scleroglossum sulcatum (Kuhn) Alderw.
Scleroglossum intermedium (Copel.) C Chr.
Scleroglossum pusillum Copel., non (Blume) Alderw.

22. *Selliguea* Bory

1. *Selliguea albidosquamata* (Blume) Parris
Crypsinus albidosquamatus (Blume) Copel.

2. *Selliguea caudiformis* (Blume) Carruth.
Selliguea calophlebia (Copel.) Copel.

3. *Selliguea elmeri* (Copel.) Ching
Selliguea feei Bory var. *elmeri* (Copel.) Tagawa

4. *Selliguea enervis* (Cav.) Ching
Crypsinus enervis (Cav.) Copel.

5. *Selliguea feei* Bory
Selliguea feei Bory var. *vulcanica* (Blume) Tagawa

6. *Selliguea glauca* (J Sm. ex T Moore) Hovenkamp
Crypsinus glaucus (J Sm. ex T Moore) Copel.

7. Selligaea heterocarpa (Blume) Blume

8. Selligaea lagunensis (Christ) Hovenkamp

Crypsinus lagunensis (Christ) Copel.
Phymatopteris lagunensis (Christ) Pic.-Serm.

9. Selligaea lateritia (Baker) Hovenkamp

10. Selligaea oodes (Kunze) Hovenkamp

Crypsinus oodes (Kunze) Copel.

11. Selligaea pyrolifolia (Goldm.) Hovenkamp

Crypsinus pyrolifolius (Goldm.) Copel.

12. Selligaea stenophylla (Blume) Parris

Crypsinus stenophyllus (Blume) Copel.

13. Selligaea taeniata (Sw.) Parris

Crypsinus taeniatus (Sw.) Copel., including var. *palmatus* C Chr.
Phymatopteris taeniata (Sw.) Pic.-Serm.
Crypsinus ramosii Copel.

14. Selligaea triloba (Houtt.) MG Price

Crypsinus trilobus (Houtt.) Copel.
Phymatopteris triloba (Houtt.) Pic.-Serm.
Selliguea matutumensis Copel.

15. Selligaea whitfordii (Copel.) Hovenkamp

Crypsinus whitfordii (Copel.) Copel.
Crypsinus subdimorphus Copel.

Doubtful occurrence in the Philippines:

Crypsinus hastatus (Thunb.) Copel.

Phymatopteris hastata (Thunb.) Pic.-Serm.

India, China, Japan. In the Philippines known only from LUZON: Benguet. Epiphytic or lithophytic, alt. c. 2400m.

According to Hovenkamp et.al. [Fl. Males. ser. 2, 3 (1998) 227], simple fronded plants from the Philippines have been identified as *Phymatopteris hastata* by Zamora & Co [Guide to Philipp. Flora & Fauna 2 (1986) 29], and that other than through this reference, *P. hastata* is not known from the Philippines.

This is incorrect as Copeland (Fern Fl. Philipp. 2 (1960) 505) reported this species to be common in Benguet at 2400 m.

Themelium (T Moore) Parris

Themelium cf. blechnifrons (Hayata) Parris

Ctenopteris curtisii (Baker) Copel.

Themelium halconense (Baker) Parris, Kew Bull. 59 (2004) 225.

Ctenopteris halconensis (Copel.) Copel.

Themelium loherianum (Christ) Parris, Kew Bull. 59 (2004) 225.

Grammitis loheriana (Christ) Copel.

Themelium taxodioides (Baker) Parris, Kew Bull. 52 (1997) 739.

Ctenopteris taxodioides (Baker) Copel.

Themelium tenuisectum (Blume) Parris, Kew Bull. 52 (1997) 740.
Ctenopteris tenuisecta (Blume) J Sm.

Themelium yoderi (Copel.) Parris, Kew Bull. 52 (1997) 739.
Ctenopteris yoderi (Copel.) Copel.

Themelium aff. tenuisectum sp. 1

Themelium aff. tenuisectum sp. 2

23. **Thylacopteris** Kunze ex J Smith

1. **Thylacopteris papillosa** (Blume) J Sm.

Tomophyllum (E Fournier) Parris

Tomophyllum macrum (Copel.) Parris, Gard. Bull. Sing. 58 (2007) 247.
Ctenopteris macra (Copel.) Copel.

Tomophyllum millefolium (Blume) Parris, Gard. Bull. Sing. 58 (2007) 247.
Ctenopteris millefolia (Blume) Copel.

Tomophyllum minutum (Blume) Parris, Gard. Bull. Sing. 58 (2007) 247.
Ctenopteris minuta (Blume) Holttum
Possibly conspecific with *C. macra*. Blume's name has priority.

Tomophyllum repandulum (Mett.) Parris

Tomophyllum subsecundodissectum (Zoll.) Parris, Gard. Bull. Sing. 58 (2007) 249.
Ctenopteris subsecundodissecta (Zoll.) Copel.

Weatherbya Copel. =Lemmaphyllum

Xiphopteris Kaulfuss

Family ISOETACEAE (1 genus, 1 species)

Revision:

Alston, AHG. 1959. Isoetaceae. Flora Malesiana series 2, 1: 63-64.

1. **Isoetes** Linnaeus

1. **Isoetes philippinensis** Merr. & Perry, Amer. Fern J. 30 (1940) 19, fig.; --Alston, Fl. Males. ser. 2, 1 (1959) 64.
MINDANAO (Lanao, near Momungan, vicinity of Olanu). Bottom of a stream, 400-500m.

Family LYCOPODIACEAE (7 genera, 32 spp. + 1 var.)

- [Lycopodium barbatum Kaulf.](#) -- Enum. Filic. 18 (-19). 1824 [Apr-May 1824]

Diphasium Rothmaler =Diphasiastrum

1. Diphasiastrum Holub

Diphasiastrum multispicatum (J Wilce) Holub, Preslia 47 (1975) 108.
Lycopodium multispicatum J Wilce, Nova Hedwigia 3 (1961) 103
Lycopodium complanatum *non* L.

Diphasiastrum sitchense (C Presl) Holub, Preslia 47 (1975) 108.
ssp. nikoense (Franch. & Savigny) A Löve & D Löve, Taxon 26 (1977) 324.
Diphasiastrum nikoense (Franch. & Savigny) Holub, Preslia 47 (1975) 108.
Lycopodium sitchense Rupr. var. nikoense (Franch. & Sav.) Takeda

Diphasiastrum

Diphasium scariosum (G Forst.) Rothm., Repert. Spec. Nov. Reg. Veg. (1944) 54 .
Lycopodium scariosum G Forst., Fl. Ins. Austr. (1786) 87

Diphasiastrum wightianum (Wall. ex Grev. & Hook.) Holub, Preslia 47 (1975) 108.
Lycopodium wightianum Wall. ex Grev. & Hook., Bot. Misc. 2 (1831) 379.
Diphasium wightianum (Wall. ex Grev. & Hook.) Pic.-Serm., Webbia 24 (1970) 720.

2. Huperzia Bernhardt

Huperzia banayanica (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 71.
Urostachys banayanicus Herter,
Lycopodium banayanicum (Herter) Copel.

Huperzia carinata (Desv.) Trevis., Atti Soc. Ital. Sci. Nat. 17 (1874) xxx
Phlegamariurus carinatum (Desv.) Ching,
Lycopodium carinatum Desv.

Huperzia delbrueckii (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 72.
Urostachys delbrueckii Herter,

Huperzia edanoi (Copel.) Holub, Folia Geobot. Phytotax. 20 (1985) 72.
Lycopodium edanoi Copel. Type: BS 77930 Edaño

Huperzia elmeri (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 72.
Urostachys elmeri Herter

Huperzia fordii (Baker) Holub, Folia Geobot. Phytotax. 20 (1985) 72.
Lycopodium fordii Baker, Fern Allies (1887) 17; --Hatusima, Mem. Fac. Agr. Kagoshima Univ. 5 (1966)
18.

Huperzia gigantea (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 73.
Urostachys verticillatus L.f. var. giganteus Herter

Huperzia magnusiana (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 74.
Lycopodium magnusianum Herter Type: MS Clemens s.n., April 1907.

Huperzia merrillii (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 74.
Lycopodium merrillii (Herter) Copel.
Urostachys merrillii Herter, Type: Merrill 965

- Huperzia minima** (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 74.
Urostachys minimus Herter
- Huperzia nummulariifolia** (Blume) Jermy in T Chambers, Jermy & Crabbe, Brit. Fern Gaz. 10 (1971) 176.
Phlegmariurus nummularifolius (Blume) Ching, Acta Bot. Yunnanica 3 (1981) 298
Lycopodium nummularifolium Blume,
- Huperzia phlegmaria** (L.) Rothm., Feddes Repert. 54 (1944) 62.
Lycopodium phlegmaria L., Sp. Pl. 2 (1753) 1101.
Urostachys phlegmaria (L.) Herter, Bot. Arch. 3 (1923) 17; PJS 22 (1923) 66.
- Huperzia phyllantha** (Hook. & Arn.) Holub, Folia Geobot. Phytotax. 20 (1985) 75.
Lycopodium phyllanthum Hook. & Arn., Bot. Veechey Voy. (1832) 102.
- Huperzia pinifolia** Trevis., Atti Soc. Ital. Sci. Nat. 17 (1874) 247
Lycopodium pinifolium Blume
Urostachys pinifolius (Blume) Herter, Bot. Arch. 3 (1923) 65.
- Huperzia piscium** (Herter) Holub, Folia Geobot. Phytotax. 26 (1991) 93.
Lycopodium piscium (Herter) Tagawa & K Iwatsuki, Acta Phytotax. Geobot. 22 (1967) 103.
Urostachys piscium Herter, Ind. Lycopod. (1949) 75.
- Huperzia salvinioides** (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 76.
Urostachys salvinioides Herter
Lycopodium salvinioides (Herter) Tagawa
Phlegmariurus salvinioides (Herter) Ching,
- Huperzia selago** (L.) Bernh. ex Schrank ex Mart., Hortus Reg. Monac. (1829) 3.
var. miniata (Spring) Co, stat. nov.
Lycopodium selago L. var. miniatum (Spring) BC Tan & Tolentino
Lycopodium miniatum Spring,
- Huperzia serrata** (Thunb. ex Murray) Trevis., Atti Soc. Ital. Sci. Nat. 17 (1874) 248.
Lycopodium serratum Thunb. ex Murray, Syst. Veg. ed.14 (1784) 944.
- Huperzia squarrosa** (G Forst.) Trevis., Atti Soc. Ital. Sci. Nat. 17 (1874) 247
Lycopodium squarrosum G Forst., Fl. Ins. Aust. (1786) 479.
- Huperzia toppingii** (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 77.
Urostachys toppingii Herter
- Huperzia verticillata** (L.f.) Trevis., Atti Soc. Ital. Sci. Nat. 17 (1874) 248.
Lycopodium verticillatum L.f., Suppl., pl. 448.
Lycopodium verticillatum var. maximum Herter
- Huperzia whitfordii** (Herter) Holub, Folia Geobot. Phytotax. 20 (1985) 78.
Urostachys whitfordii Herter,

3. Lateristachys Holub

- Lateristachys halconensis** (Copel.) Holub, Folia Geobot. Phytotax., 18 (1983) 441.
Lycopodium halconense Copel.

4. Lycopodiastrum Holub ex RD Dixit

- Lycopodiastrum casuarinoides** (Spring) Holub ex RD Dixit, J. Bombay Nat. Hist.Soc. 77 (1980 publ. 1981)
Lycopodium casuarinoides Spring, Bull. Acad. Roy. Sci. Belg. 8 (1841) 521;

5. *Lycopodiella* Holub

Lycopodiella cernua (L.) Pic.-Serm., *Webbia* 23 (1968) 166.
Lycopodium cernuum L., *Sp. Pl.* 2 (1753) 1103; Herter, *PJS* 22 (1923) 69.
var. *cernua*

var. *ingens* (BC Tan & Tolentino) *stat. nov.*

6. *Lycopodium* Linnaeus

Lycopodium clavatum L., *Sp. Pl.* (1753) 1101;

Phlegmariurus (Herter) Holub = *Huperzia* **sect. ---**

7. *Pseudodiphasium* Holub

Pseudodiphasium volubile (G Forst.) Holub,
Lycopodium volubile G Forst., *Fl. Ins. Austr.* (1786) 86.

Don't know in what segregate genus to put this:

Lycopodium subsentaceum C Chr.

Family SELAGINELLACEAE

1. *Selaginella* Palisot de Beauvois

Selaginella aenea Warb.

Selaginella alligans Hieron.

Selaginella apoensis Hieron.

Selaginella aristata Spring

Selaginella atimonanensis BC Tan & Jermy, *Fern Gaz.* 12 (1981) 170, Fig. 1-6. --Type: BC Tan 77-2005 (CAHUP,holo; iso: BM, KYO, L, US).
LUZON (Quezon, Atimonan, Quezon National Park). Forest on limestone, 250-430m.
Known only from the type locality.

Selaginella auriculata Spring

Selaginella boninensis Baker

Selaginella ciliaris (Retz.) Spring, *Bulletin de L'Academie Royale des Sciences et Belles-Lettres de Bruxelles* 10 (1) 1843

Selaginella cumingiana Spring

Selaginella cupressina (Willd.) Spring
Selaginella flabelloides Warb.

Selaginella delicatula (Desv.) Alston, J. Bot. 70 (1932) 282.

Selaginella elmeri Hieron.

Selaginella engleri Hieron.

Selaginella eschscholzii Hieron.

Selaginella fenixii Hieron.

Selaginella flagellifera Bull., Cat. (Bull.) 225 (1886) 9.
Selaginella biformis A. Braun, Forsch. Gaz. 4, Bot. 6 (1889) 17.

Selaginella gastrophylla Warb.

Selaginella heterostachys Baker

Selaginella intermedia (Blume) Spring, Bull. Acad. Brux. 10 (1843) 144;
Selaginella ascendens Alderw.

Selaginella intertexta Spring

Selaginella involvens (Sw.) Spring, Bull. Acad. Brux. 10 (1843) 136;
Selaginella peltata C Presl
Selaginella polyura Warb.

Selaginella jagori Warb.
Selaginella halconensis Hieron.

Selaginella lacerata Warb.

Selaginella latifrons Warb.
Selaginella agusanensis Hieron.
Selaginella copelandii Hieron.

Selaginella llanosii Hieron.

Selaginella longiaristata Hieron.
Selaginella springiana Alderw.

Selaginella luzonensis Hieron.

Selaginella magnifica Hieron.

Selaginella moellendorffii Hieron.

Selaginella myosuroides (Kaulf.) Spring
[Lycopodium myosuroides Kaulf.](#) -- Enum. Filic. 19. 1824 [Apr-May 1824]

Selaginella neei Hieron.

Selaginella negrosensis Hieron.

Selaginella nummularia Warb.

Selaginella opaca Warb.

Selaginella ornata (Hook. & Grev.) Spring, Bull. Acad. Brux. 10 (1843) 232;

Selaginella philippina Spring

Selaginella presliana Spring

Selaginella pricei BC Tan & Jermy, Fern Gaz. 12 (1981) 170, Fig. 7-10. --Type: BC Tan 75-414 (CAHUP, holo; iso: BM, KYO, L, US).

SAMAR (Western Samar, trail from Concord to Bagacay, Hinabangan, type locality; Gandara and Matuginao). Primary forest on limestone, along trail and cliffs, c. 200m.

Selaginella procera Alston

Selaginella ramosii Hieron.

Selaginella remotifolia Spring

Selaginella repanda (Desv.) Spring

Selaginella tamariscina (P Beauv.) Spring

Selaginella usterii Hieron.

Cultivated/Introduced

Selaginella plana (Desv.) Hieron.

Selaginella uncinata (Desv.) Spring

Occurring as an escape in Luzon. Native to China.

Selaginella willdenovii (Desv.) Baker

Burma and Indochina to Peninsular Malaysia and Sumatra. Pantropic in cultivation. Introduced to the Philippines.