

***Angiopteris subcordata* Ching, sp. nov.**

植株高大，高約 1.5 米。叶片互生，闊卵形，寬約 80 厘米，二回羽状；羽片倒卵状長圓形，長約 50 厘米，寬 25 厘米，向基部中度變狹，羽柄長 4—5 厘米，羽軸淡禾桿色，無鱗片，下面多少有些小刺頭突起，向上部稍為起伏，不平滑，向頂端無翅；小羽片 16—18 對，張開，彼此接近，下部的相距 1.7 厘米，向上的相距 2 厘米，披針形，漸尖頭，最下部的長 5—6 厘米，寬 1.5—1.8 厘米，向上方漸長，中部的長 12—14 厘米，頂部的大小几相等，基部略為不等的心臟形，即上方為截形，下方為耳圓形，並多少搭在羽軸上，小羽柄甚短，邊緣有均勻的小鋸齒直达頂端。葉為紙質，上面綠色，下面淡綠色，光滑，僅中肋下部有少數淡棕色薄鱗片伏貼。葉脈開展，分叉或單一，下面較明顯，上面隱約，沒有倒行假脈。孢子囊羣線形，由 18—20 個孢子囊組成，彼此密接，外側有寬約 1 毫米的平伏的不育邊緣。

產于廣東北部（英德、信宜）、雲南東南部（西畴）。生常綠闊葉混交林下的溪溝邊，海拔 600—1500 米。

48. 大頂觀音座蓮***Angiopteris late-terminalis* Ching, sp. nov.**

植株高大，高达 2 米以上。葉柄粗如拇指，褐色，光滑。葉大，二回羽狀；羽片狹長圓形，長 60 厘米，寬 13 厘米，基部寬 8 厘米，羽柄長 1.5—2.5 厘米，褐色，羽軸頂端無翅；小羽片 15—24 對，相距 1.5—2 厘米，對生或近對生，几無柄，基部小羽片長 5 厘米，平展，中部小羽片長 6—6.5 厘米，寬 1—1.3 厘米，披針形，頂生一枚小羽片特大，長 18—20 厘米，寬 3.5 厘米，與下面 1 或 2 枚羽片相連，闊披針形，各小羽片基部圓形，先端漸尖，邊緣有鈍鋸齒。葉脈開展，大部分叉，上面可見，下面明顯，沒有倒行假脈。葉紙質，干後上面黑綠色，下面棕綠色，光滑。孢子囊羣長圓形，長 1.5 毫米，有孢子囊 10 個，密接，在頂生羽片上的為線形，長 3 毫米，有孢子囊 20—30 個（最多至 40），外方不育邊狹，向先端不育。

產于雲南東南部（河口，果樹）。海拔 200 米。

根狀莖可食。

49. 大腳觀音座蓮 大樣赤蕨（海南島）

***Angiopteris crassipes* Wall. List (1828) n. 187; de Vriese, Monogr. (1853) 27; C. Chr. Ind. Fil. (1905) 56; Tard.-Blot et C. Chr. in Fl. Indo-Chine VII, ii (1939) 20.**

植株高大。葉柄粗如拇指，干後棕色，光滑。葉二回羽狀；羽片倒披針狀長圓形，長 60 厘米，基部寬 12 厘米，上部寬 22 厘米，羽柄長 1—1.5 厘米，棕色，羽軸向頂端不

striis recurrentibus nullis; textura folii chartacea, supra obscure viridi, infra virescenti, glabra vel subtus ad costas paleis parvis, rufis, filiformibus persparse vestita; soris linearibus, 2—3 mm longis, contiguis, sporangiis 20—32 compositis, margini magis approximatis.

Yunnan austr., Se-song-ban-ann, Yunnan Complex Expedition No. 295.

46. *Angiopteris magna* Ching, sp. nov.

Planta sine dubio magna; stipite deest; lamina ampla, bipinnata; pinna in specimine ad 48 cm longa, 22 cm lata, late oblonga, petiolo ad 6 cm longo, nigrescente brunneo, glabro suffulta; pinnulis 7-jugis, alternis, inferioribus 2.5 cm, superioribus 4.5 cm inter se remotis, petiolulatis (petiolulo 1.5 cm longo), infimis 10—12 cm longis, sequentibus sensim majoribus, supremis 16—22 cm longis, 2.6—3 cm latis, late lanceolatis, gradatim acuminatis, basi versus non vel vix angustatis, inaequalibus, antice truncatis, brevioribus, postice rotundatis longioribusque, marginibus e basi sursum regulariter et minute serratis; venulis patentibus, laxis, supra basin aut raro e medio furcatis, ad apicem versus vix curvatis, non incrassatis, in serraturas intrantibus, striis recurrentibus nullis; textura folii chartacea, in sicco virescenti, utraque glabra; soris oblongis, ca. 2 mm longis, non contiguis sed approximatis, parum a se distantibus, 1 mm e margine remotis, sporangiis 14—18.

Yunnan austr., Se-song-ban-nan, Yunnan Complex Expedition No. 936.

47. *Angiopteris subcordata* Ching, sp. nov.

Planta ad 1.5 m alta, stipite ca. 1 cm diametro, pallide stramineo, glabro; lamina ampla, bipinnata; pinnis 40—50 cm longis, 22 cm latis, oblongis, alternis, basin versus paulo angustatis, petiolo 2 cm longo, 2 mm crasso, stramineo, glabro suffultis; pinnulis ca. 20-jugis, patentibus, alternis, 2 cm inter se remotis, breviter petiolulatis, basi subcordatis, inferioribus abbreviatis, infimis 5 cm longis, sequentibus majoribus, mediis supremisque ad 12 cm longis, 1.8—2 cm latis, lineari-lanceolatis, acuminatis, apice rectis vel subfalcato-incurvatis, basin versus non angustatis, pinna terminali aequali, margine minute serrulatis; venulis patentibus, furcatis, ad marginem curvatis, supra obscuris, infra distinctis, mesophyllo coloribus, striis recurrentibus nullis; textura folii herbacea, in sicco laete viridi, utraque praeter costas subtus paleis rufis linearibus persparsa glabra; soris linearibus, 2 mm longis, contiguis, e margine 1 mm remotis, sporangiis 16—20.

Kwangtung, without locality, leg. Y. Tsiang No. 30952.

48. *Angiopteris late-terminalis* Ching, sp. nov.

Planta ad 2 m alta, stipite incompleto, in specimine 1.5 cm crasso, nigricante, glabro; lamina ampla, bipinnata; pinnis alternis, elongato-oblongis, ad 60 cm longis, 13 cm medio latis, basin versus angustioribus (ca. 8 cm latis), petiolo 1.5—2.5 longo, nigrescente, 2.5 cm crasso, glabro suffultis; pinnis 15—24-jugis, 1.5—2 cm inter se remotis, suboppositis, subsessilibus, basalibus 5 cm longis, patentibus, supremis 6—6.5 cm longis, 1—1.3 cm latis, lanceolatis, acuminatis, basi rotundatis, margine serrulatis, pinna terminali maxima, 18—20 cm longa, ad 3.5 cm lata, late lanceolata, acuminata, margine serrata; venulis obliquis, furcatis aut simplicibus, ad marginem parum curvatis, supra obscuris, infra distinctis, mesophyllo discoloratis; textura folii chartacea, utraque glabra, supra obscure et infra brunnescente viridi; soris contiguis, in pinnulis inferioribus oblongis, 1.5 mm longis, sporangiis 10—14, in pinnula terminali ad 3 mm longis, sporangiis 20—30 et lineas irregulares, undu-

latis formantibus, 1 mm e margine remotis.

Yunnan austr.-orient., Hokou, Ko-shiu, leg. *Tsai Ke-hwa* No. 409.

50. *Angiopteris angustipinnula* Ching, sp. nov.

Planta ad 2 m alta, stipite 2.5 cm diametro, sordide brunneo, subglabro; lamina ampla, bipinnata; pinnis ad 75 cm longis, 20 cm latis, anguste oblongis, ad basin versus vix angustatis, petiolo ad 4 cm longo, supra geniculum nigrescentem pallide stramineo, sursum non marginato; pinnulis ca. 23-jugis, sessilibus, inferioribus patentibus, parum vel vix abbreviatis, 2.5—3 cm inter se remotis, superioribus obliquis, mediis ad 11 cm longis, 9—11 mm latis, linear-lanceolatis, ad apicem versus gradatim acuminatis, basi rotund-truncatis, marginibus minute et dense serrulatis; textura firmiter herbacea, utrinque pallide viridi, ad costas squamulis rufis, filiformibus subtus sparse vestitis; venulis subrecto-patentibus, plerisque furcatis, rectis, infra distinctis, mesophyllo obscurioribus, supra notatis, striis recurrentibus nullis; soris contiguis, oblongis, ca. 1.6 mm longis, submarginalibus, sporangiis 10—12.

Yunnan austr., Yan-shan, Pie-shih-eih, alt. 1200 m, leg. *C. W. Wang* No. 84794, under dense forest. The swollen base edible.

51. *Angiopteris pingpienensis* Ching, sp. nov.

Planta ad 2 m alta, stipite incompleto, in specimine ad 1.5 cm crasso, fusco-brunneo, glabro; lamina ampla, bipinnata; pinnis alternis, subpatentibus, elongato-oblongis, ad 60 cm longis, 16 cm medio latis, inferioribus parum brevioribus, petiolo 3 cm longo, 5 mm crasso, stramineo, glabro suffultis; pinnulis 20-jugis, suboppositis, ca. 2 cm inter se remotis, sub-sessilibus, inferioribus parum brevioribus, infimis 6—7 cm longis, patentibus vel subdeflexis, sequentibus gradatim majoribus, supremis 10 cm longis, 1.3—1.5 cm latis, e basi subrotundata linear-lanceolatis, acuminatis, obliquis, margine integris, apice paulo serrulatis; venulis sub-patentibus, furcatis aut simplicibus, mesophyllo obscurioribus, supra notatis, infra distinctis, ad marginem parum curvatis, striis recurrentibus nullis; textura folii herbacea, supra obscura, infra farinaceo-olivacea, ad costas praesertim basin pinnularum paleis rufis filiformibus persparse obtecta; soris contiguis, oblongis, 1.7 mm longis, lineas continuas e basi usque ad apicem pinnularum occupantibus, margini proxime approximatis, sporangiis 16—18.

Yunnan austr.-orient., Ping-pien Hsien, by stream side, alt. 1200 m, leg. *H. T. Tsai* No. 55230, V, 19, 1934.

52. *Angiopteris petiolulata* Ching, sp. nov.

Species gregis *A. omeiensis* Ching, differt pinnulis magis longioribus, versus basin pinnularum plus minusve abbreviatis; margine acute serratis, basi longe petiolulatis, subcordatis, venulis laxioribus, basalibus vel saepe jugis inferioribus bis dichotome furcatis, soris margini proxime approximatis.

Szechuan, Omei Shan, vicinity of Pao-ko-sze, alt. ca. 800 m, as a medicine, leg. *Chu Chiao-ji* No. 468, VI, 13, 1956.

53. *Angiopteris longipetiolata* Ching, sp. nov.

Planta ad 2 m vel ultra alta, stipite deest, rachi 1 cm crassa, fusco-brunnea, glabra; lamina ampla, bipinnata; pinnis alternis, a rachi recte patentibus, 55 cm longis, 16 cm medio latis, anguste oblongis, longe petiolatis, petiolo 18—23 cm longo, 2.5 mm crasso,