

上弯, 倒行假脉长超过孢子囊羣。叶草質, 上面无鱗片, 下面沿中肋散生有棕色的鱗片。叶軸粗壮, 光滑, 干时棕色, 羽軸光滑, 粗約 3.5 毫米, 上部稍变細。孢子囊羣长圓形, 长 1.5—2 毫米, 彼此分开, 距叶緣 1.5—2.5 毫米, 由 10—16 个孢子囊組成。

特产于台湾(台中)。

20. 硬叶观音座蓮

Angiopteris crassifolia Ching, sp. nov.

植株高大, 高約 2 米以上。叶为二回羽状; 羽片互生, 长 30—62 厘米以上, 长圓形, 两端变狭, 中部寬 17—23 厘米, 奇数羽状, 羽柄长 1.5—2 厘米; 羽片約 13—22 对, 互生, 相距約 2.5 厘米, 下部的平展或稍下向, 上部的斜升, 具短柄, 基部的一对稍短, 其余的近等大, 长 11—13 厘米, 寬 2.1—3 厘米, 闊披針形, 向頂端短漸尖, 向基部变闊, 圓形, 向頂部的小羽片逐漸变短, 长 7—8 厘米, 叶緣有时稍呈浅波状, 全部具有規則的、灰白色的、軟骨質的三角形鋸齿。叶脉上面不明显, 下面明显, 脉間距离不到 1 毫米, 一般分叉, 稍斜展, 頂端稍向上弯, 水囊肥大, 进入軟骨質的鋸齿, 倒行假脉清晰, 超过孢子囊羣。叶坚紙質或近革質, 上面綠色, 光滑, 下面淡綠色, 有时沿中肋被极疏的棕色鱗片。叶軸粗壮, 上面具縱沟, 光滑, 綠色, 粗約 1 厘米, 羽軸光滑, 干时呈棕色, 腹部具縱沟, 基部粗 2—4 毫米, 向上变細, 頂部粗 1.5 毫米, 并向頂端具狭翅。孢子囊羣短綫形或长圓形, 长 1.5—2 毫米, 彼此密接, 距叶緣約 1 毫米, 由 12—14 个孢子囊組成, 为不整齐排列。

特产于云南(西双版纳, 允景洪, 橄欖坝一带)。

21. 大叶观音座蓮

Angiopteris megaphylla Ching, sp. nov.

植株高大, 高約 2 米以上。叶二回羽状; 羽片互生, 长約 50 厘米, 长圓形, 中部最寬, 約为 30 厘米, 向两端稍变狭, 羽軸向頂部无翅; 小羽片約 7—8 对, 互生, 斜向上, 具明显的柄(长 3 毫米), 长 16.5—21 厘米, 寬 3.6—4.4 厘米, 披針形, 稍呈提琴状, 中部最寬, 向两端变狭, 頂端长漸尖, 基部不等, 上側斜截形, 下側圓形, 頂生小羽片分离, 基部有长約 2.5 厘米的小羽柄, 和下面的小羽片同形, 叶緣全部具有規則的三角形鋸齿。叶脉 2—3 叉, 上面不明显, 下面明显, 相距不到 1 毫米, 近水平开展, 頂部稍向上弯, 达于鋸齿頂端, 倒行假脉超过孢子囊羣, 长达小羽片寬的 1/2。叶草質, 上面深綠色, 下面綠色, 沿中肋疎被棕色鱗片。羽軸綠色, 上面具縱沟, 頂端无翅, 下部粗約 2.5 毫米。孢子囊羣綫形, 长約 1 毫米, 距叶緣約 1.5 毫米, 有孢子囊 8—12 个。

特产于云南(西双版纳, 允景洪, 橄欖坝)。生林下。

paulo lationibus, lanceolatis, acuminatis, basi aequaliter et breviter cuneatis, brevi-petiolulatis vel subsessilibus, pinnula apicali aequali, marginibus acute serratis, dentibus deltoideis, acutis, obliquis, apice grosse serratis; venulis patentibus, laxis, furcatis aut simplicibus, intus marginem paulo curvatis, in dentes intransitibus, utrisque prominulis, striis recurrentibus distinctis, pellucidis, fere usque ad costam progredientibus; textura tenuiter herbacea, in sicco brunnescente viridi, utraque glaberrima; soris ovatis vel ellipticis, a se magis distantibus, sporangiis 8—10 compositis, lineas continuas regulares e basi pinnularum usque ad basin cuspidis occupantibus, 1 mm a apice dentium remotis.

Taiwan, Rimogan Rahoa, Y. Kudo, V, 13, 1926.

18. **Angiopteris taiwanensis** Ching, sp. nov.

Species statura *A. rahaoensi* Ching valde similis, differt pinnulis angustioribus, marginibus grosse dentato-serratis, dentibus deltoideis, acutis, subpatentibus, 1 mm altis et basi latis, venulis spuriis distinctis, usque ad costam progredientibus.

Taiwan, Drs. F. et C. Baker, XI, 1914.

19. **Angiopteris lobulata** Ching, sp. nov.

Planta ad 2 m alta, stipite deest, rachide 7 mm crassa, fusco-brunnea, glabra; lamina ampla, bipinnata; pinnis alternis, obliquis, oblongis, ad 50 cm longis, 25 cm supra medium latis, petiolo 4.5 cm longo, supra geniculum nigrum 4 mm crasso, compresso, stramineo, glabro suffultis; pinnulis 11-jugis, alternis, versus basin vix angustatis, infimis 8—9 cm longis, 2.5 cm basi latis, patentibus, breviter aut longe (1—2.5 cm) petiolulatis, sequentibus parum majoribus, supremis terminalique maximis, ad 17 cm longis, 3—3.5 cm latis, e basi latissima deltoidea lanceolatis, acuminatis, integris vel parte inferiore saepe usque ad costam irregulariter lobulatis, lobulis dimensione variabilibus, aut flabellatis, aut obovatis, aut subquadrangularibus, marginibus e basi integra cuneata vel subcordata sursum grosse crenato-serratis; venulis valde obliquis, nigrescentibus, laxis, in parte basium 2-3-furcatis, sursum semel furcatis aut simplicibus, utrinque prominulis, ad apicem intus marginem incurvatis, striis recurrentibus ultra soros progredientibus; textura folii herbacea, statu sicco obscure viridi vel superne nigrescenti, glaberrima; soris oblongis, a se magis distantibus, 1.5 cm longis, lineas continuas vel saepe irregulares et interruptas secus marginem occupantibus, 1.5—2.5 mm e margine remotis, sporangiis 10—16.

Taiwan, Rengechi, Taichu, S. Sasaki, III, 3, 1927.

20. **Angiopteris crassifolia** Ching, sp. nov.

Planta ca. 2 m alta, stipite incompleto, 2 cm crasso, pallide stramineo, glabro; lamina ampla, bipinnata; pinnis alternis, ad 62 cm longis, 17—23 cm medio latis, oblongis, petiolo 1.5—2 cm longo, 5 mm crasso, duro, pallide stramineo, glabro suffultis; pinnulis 13-22-jugis, suboppositis, 2.5 cm inter se remotis, breviter petiolulatis, basalibus parum abbreviatis, deflexis, mediis longissimis, 11—13 cm longis, 2.5—3 cm basi latis, e basi latissima rotundataque late lanceolatis, apice breviter acuminatis, pinnulis supremis decrescentibus, obliquis, ca. 7 cm longis, 2 cm latis, basi cuneato-rotundatis, terminali similibus, marginibus ubique serratis, dentibus deltoideis, obtusis, obliquis, cartilagineis, griseo-albidis, duris; venulis subpatentibus, plerisque furcatis, densis, infra distinctis, supra vix notatis, parte superiore fere rectis et in dentes intransitibus, apice magis incrassatis; textura firmiter chartacea, vel fere subcoriacea, in sicco

brunnescente viridi, utrinque glabra vel saepe ad costas paleis parvis, rufis, filiformibus perparce conspersa, striis recurrentibus luce penetrante perspicuis, ultra soros progredientibus; soris contiguis, oblongis, a parte superiore basium usque ad basin cuspidis protensis, 1.2—1.4 mm a margine plano cartilagineo remotis, sporangiis 10—14.

Yunnan austr., Se-song-ban-nan, Ganlangpa, leg. T. L. Li, No. 2089, V, 20, 1953.

21. **Angiopteris megaphylla** Ching, sp. nov.

Planta ca. 2 m alta; lamina ampla, bipinnata; pinnis alternis, ad 50 cm longis, 30 cm latis, oblongis, rachillis gracilibus, ca. 2.5 mm crassis, viridis, glabris, exalatis; pinnulis 7-8-jugis, alternis, obliquis, petiolulatis (petiolulo 3 mm longo), 16.5—21 cm longis, 3.6—4.4 cm medio latis, late lanceolatis, deorsum paulo angustatis, basi 2.5 cm latis, oblique truncatis, apice in cuspidem ca 1.5 cm longam 5 mm basi latam acuminatis, pinnulis inferioribus minoribus, apicalibus supremique saepe mediis parum majoribus vel similibus, pinnula terminali maxima, 5 cm vel ultra lata, petiolulo ca 2 cm longo praedita, marginibus ubique regulariter minute serratis, dentibus minutis, deltoideis, obliquis, acutis; venulis subrecte patentibus, laxis, parte superiore ad marginem antrorsim curvatis, e basi aut supra medium furcatis aut rarius simplicibus, in dentes intrantibus, infra distinctis, supra vix notatis, striis recurrentibus distinctis, usque ad medium semifaciarum pinnularum raro ultra progredientibus; textura folii tenuiter herbacea, statu sicco viridi, utraque glaberrima; soris oblongis, 1 mm longis, a se distantibus, lineas irregulares continuas, vel rarius interruptas a parte superiore basium usque ad cuspidem occupantibus, fere 2 mm e margine plano remotis, sporangiis 8—12.

Yunnan austr., Se-song-ban-nan, Ganlangpa, under forest, alt. 650 m, leg. Koo Ying-ching No. 55.

24. **Angiopteris multijuga** Ching, sp. nov.

Planta 2 m vel ultra longa, stipite 2 cm crasso, brunnescente stramineo, glabro; lamina ampla, bipinnata; pinnis alternis, anguste oblongis, 55—72 cm longis, 16 cm latis, basin versus non abbreviatis, petiolo 1.5—1.8 cm longo, geniculo nigrescente brunneo, tumido praedito suffultis, rachillis 2—2.5 mm crassis, stramineis, exalatis; pinnulis 23—28-jugis, 2—2.5 cm inter se remotis, alternis vel jugis inferioribus oppositis, aliquot deflexis, sequentibus patentibus, supremis obliquis, breviter (ca. 1 mm) petiolulatis, mediis ca. 10—11 cm longis, 0.8—1.2 cm latis, lineari-lanceolatis, ad apicem acuminatam saepe leviter subfalcato-incurvatis, basi rotundatis, pinnula terminali lateralibus conformi sed parum majore, marginibus ubique minute serrulatis et in sicco saepe reflexis; venulis patentibus, rectis vel ad apicem versus paulo incurvatis, furcatis aut simplicibus, infra prominulis, supra vix notatis, striis recurrentibus pellucidis, ultra soros progredientibus; textura folii chartacea, supra pallide viridi, glabra, infra farinaceo-olivacea, ad costas venulasque paleis parvis rufis, filiformibus conspersa; soris linearibus, contiguis, secus marginem lineas continuas formantibus, parte apicale pinnularum sterili excepta, 1 mm e margine remotis, sporangiis 10—16.

Yunnan austr., Se-song-ban-nan, Yunnan Complex Expedition No. 5404.

25. **Angiopteris formosa** Ching, sp. nov.

Planta verisimiliter 1.5 m alta, stipite deest, rachide medio 3.5 mm crassa, straminea, glabra; lamina bipinnata; pinnis alternis, patentibus, oblongis, ca. 35 cm longis, 14.5 cm