

羽片 7—16 对, 长圆披针形, 长 3.5 厘米, 向基部略短(长 2—3 厘米), 顶生一片稍长, 宽 6—7 毫米, 短渐尖头, 基部短楔形, 几无柄, 互生, 开展, 相距 1.5 厘米, 被闊間隔分开, 最长的羽片(第二对)上有小羽片 16 对, 顶生的羽片只有 7 对, 边缘稍反卷, 有均密的细锯齿。叶脉细密, 都为二叉, 偶为单一, 纤细, 斜出, 下面明显, 上面不显。叶为纸质, 干后暗绿色, 羽轴及叶下面沿中肋有棕色的粘质腺绒毛, 久则大部脱落, 上面光滑。孢子囊羣长圆形, 长不到 1 毫米, 彼此接近, 距叶边约 $2/3$ 毫米, 向上部 $1/3$ 的边缘为不育。

产于云南西南部, 特有种。

45. 闊羽观音座蓮

Angiopteris latipinnula Ching, sp. nov.

植株高大。叶柄粗如拇指, 干后暗棕色或褐色, 光滑。叶片宽广, 二回羽状; 羽片互生, 长圆形, 长 57 厘米, 宽 27 厘米, 羽柄长 12 厘米, 暗棕色, 羽轴向顶端无翅; 小羽片 10 对, 相距 3—4 厘米, 对生或几对生, 柄长 3 厘米, 基部小羽片长 12 厘米, 略向上斜, 上部小羽片长 11—14 厘米, 宽 2.5—3 厘米, 闊披针形, 基部圆形, 先端渐尖, 略呈尾头, 边缘有尖齿牙, 上面为灰白色的软骨质。叶脉开展, 大部分叉, 上面可见, 下面明显, 顶端膨大, 伸入软骨质的齿牙, 没有倒行假脉。叶纸质, 上面黑绿色, 下面绿色, 两面光滑或几光滑。孢子囊羣线形, 长 2.5—3 毫米, 密接, 有孢子囊 20—32 个, 距边缘 1 毫米处着生, 先端不育。

产于云南南部(西双版纳)。

46. 大观音座蓮

Angiopteris magna Ching, sp. nov.

植株高大。叶柄未见; 羽片长圆形, 长 48 厘米, 下部宽 20 厘米, 上部宽 30 厘米, 羽柄长 6 厘米, 褐色, 光滑, 羽轴顶端无翅; 小羽片 7 对, 基部的相距 2.5 厘米, 上部的 4.5 厘米, 近对生, 柄长 1.5—2 毫米, 基部小羽片长 10—12 厘米, 平展, 上部小羽片长 16—22 厘米, 宽 2.6—3 厘米, 闊披针形, 基部圆形, 两侧不对称, 上侧截形, 离羽轴较远, 下侧为圆形, 离羽轴近, 边缘有浅钝锯齿。叶脉开展, 分叉或单一, 平行, 先端几不向上明显弯弓, 下面可见, 上面不明显, 先端膨大, 入于齿牙内, 没有倒行假脉。叶纸质, 上面深绿色, 下面绿色, 两面光滑。孢子囊羣长圆形, 长 2 毫米, 彼此接近, 有孢子囊 14—18 个, 距平伏的边缘 1 毫米处着生, 先端不育。

产于云南南部(西双版纳)。

47. 心脏形观音座蓮

remotis, sporangiis 24—30, sed in soris apicalibus 5—8.

Yunnan austr.-orient., Hokou, Man-chang, leg. *Kiang Shing* No. 149.

43. **Angiopteris grosso-dentata** Ching, sp. nov.

Planta verisimiliter ad 2 m alta, stipite deest; lamina ampla, bipinnata; pinnis oblongo-lanceolatis ad basin non vel vix angustatis, ca. 70 cm longis, 16—20 cm latis, petiolo 2.5 cm longo, supra genticulum nigricantem ca. 5 mm crasso, fusco-brunneo, glabro suffultis, rachillis 4 mm crassis supra non marginatis, ad apicem nec alatis; pinnis ca. 24-jugis, 2—3 cm inter se remotis, oppositis vel sursum suboppositis, breviter petiolulatis, basalibus 9 cm longis, patentibus, vel subdeflexis, supremis ad 11 cm longis, 1.4 cm latis, lanceolatis, obliquis, apice acuminatis, grosse serratis, basi subrotundatis, margine plano profunde dentatis, dentibus, oblongis, ca. 1 mm longis, obtusiusculis, patentibus, vel ad apicem pinnularum acutis, omnibus cartilagineo-incrassatis; venulis subpatentibus, furcatis aut raro simplicibus, mesophyllo concoloratis, ad apicem fere rectis, magis incrassatis et in dentes intransibus, supra notatis, infra prominulis, striis recurrentibus nullis; textura foliis firmiter chartacea, in sicco superne obscure et inferne pallide viridi, utraque praeter costas inferne persparse paleaceas glabra; soris linearibus, ca. 2 mm longis, contiguis, e basi usque ad apicem pinnularum protensis, 1 mm e margine remotis, sporangiis 18—20.

Yunnan austr.-orient., Hokou, No. D2 ex herb. Department of Biology, Yunnan University, under forest along stream side, alt. 150 m.

44. **Angiopteris parvifolia** Ching et Fu, sp. nov.

Planta ad 90 cm alta, stipite 40 cm longo, basi 7 mm crasso, pallide stramineo, glabro; lamina 50 cm longa, 40 cm lata, ovato-oblonga, bipinnata; pinnis 7-8-jugis, alternis, obliquis, lanceolatis, ad 25 cm longis, 7—8 cm latis, jugis basalibus paulo brevioribus, breviter (1—1.6 cm) petiolatis, basin versus vix angustatis; rachillis gracilibus, 1.5 mm crassis, pallide stramineis, primum paleis rufis, filiformibus deciduis sat dense obtectis; pinnulis ad 20-jugis, alternis, ca. 1.5 cm inter se remotis, 3.5—4 cm longis, 7—9 mm latis, fere omnibus similibus, lanceolatis, acuminatis, basi cuneatis, sessilibus, margine minute serrulatis, apice acute serratis, e sicco revolutis; venulis obliquis, densis, mesophyllo concoloribus, furcatis aut simplicibus, apice fere rectis, supra obscuris, infra distinctis, striis recurrentibus nullis; textura herbacea, supra glabra, viridi, infra farinaceo-olivacea, ubique praesertim ad costas paleis rufis, parvis, filiformibus sat dense obtectis; soris parvis ca. 0.7 mm longis, approximatis, ca. 0.8 mm e margine remotis, sporangiis 6—8, statu juvenili subcoalescentibus.

Yunnan occid., without locality, local collector, s. n.

45. **Angiopteris latipinnula** Ching, sp. nov.

Planta ca. 2 m alta, stipite ultra 2 cm diametro, sordide brunneo, glabro; lamina ampla, bipinnata; pinnis alternis, oblongis, 57 cm longis, 27 cm latis, petiolo ad 12 cm longo, 2.5 mm crasso, supra profunde sulcato, glabro suffultis; pinnulis ca. 10-jugis, 3—5 cm inter se remotis, oppositis vel sursum suboppositis, longe petiolulatis (petiolulo ca. 3 mm longo), omnibus conformibus, 11—14 cm longis, 2.5—3 cm latis, late lanceolatis, basi oblique subrotundatis, apice caudato-acuminatis; falcato-incurvatis, marginibus serratis, dentibus deltoideis, acutis, plus minusve cartilagineo-incrassatis; venulis patentibus, plerisque furcatis, utrinque prominulis, ad apicem versus paulo curvatis, supra soros incrassatis,

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 intransibus, 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 concoloribus, striis recurrentibus nullis; textura folii herbacea, in sicco laete viridi, utraque praeter costas subtus paleis parvis rufis linearibus persparsas 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 cm longo, nigrescente, 2.5 cm crasso, glabro suffultis; pinnis 15-24-jugis, 1.5—2 cm inter se remotis, suboppositis, sessilibus, 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-