

开,长圆形,长 60—60 厘米,寬 18 厘米,基部不变狭,羽柄长约 2 厘米,粗壮,羽轴向顶端无翅;小羽片 25—27 对,张开,彼此略接近,近对生,相距 2 厘米,闊披针形,中部的长 10—11 厘米,寬 1.7—2 厘米,短渐尖头,基部为圓截形,有明显的短柄,顶部的和基部的几同大,边缘有鈍锯齿。叶为薄纸质,干后为褐綠色,下面光滑,或向中肋基部略有綫状鱗片疏生。叶脉张开,大都分叉,下面明显,上面較差,向顶部稍弯弓,倒行假脉少而不明显。孢子囊羣长圆形或綫形,密接,由 12—18 个孢子囊組成,近边缘生,不育边缘狭,干后反捲。

产于云南东南部(河口市和麻栗坡)。生林下山溪边,海拔 100—300 米。

35. 紙質觀音座蓮

Angiopteris crassa Ching, sp. nov.

植株高約 1.8 米。叶柄未見;羽片长 60 厘米,寬 18 厘米,狭长圆形,羽柄长 2 厘米,羽軸紫棕色,光滑,不具狭翅;小羽片 17 对,相距 2—2.5 厘米,在基部的为对生,上部的近对生,柄极短,基部小羽片长 7—8 厘米,平展,中部的长 9 厘米,寬 1.5 厘米,上部的长 12 厘米,寬 1.8 厘米,披针形,基部圓形,先端渐尖,边缘有鈍齿牙。叶脉开展,分叉或单一,上面可見,下面明显,倒行假脉短而不明显,与孢子囊羣同长。叶厚纸质,干后上面黑綠色,下面褐綠色,两面均光滑。孢子囊羣綫形,密接,长约 2 毫米,有孢子囊 18—22 个,距平伏不育的边缘 1 毫米处着生,先端不育。

产于云南东南部(河口,曼坝)。海拔 280 米。

36. 食用觀音座蓮

Angiopteris esculenta Ching in Bull. Fan Mem. Inst. Biol., Bot. Ser. X (1940) 1.

根状莖肥大,头状。叶柄长达 1 米,淡綠色,光滑;叶片长 1—1.5 米,广卵形,尾头,二回羽状;羽片 4—6 对,互生,中部的羽片长达 60 厘米,寬約 20 厘米,羽柄长 1—1.5 厘米,略有鱗片,干后变黑色;小羽片达 30 对,相距約 1 厘米,中部以下的互生,上部的对生,都有短柄,基部的小羽片长约 7 厘米,并略下向,中部的长达 11 厘米,寬 1.2—1.4 厘米,向上渐短,顶部的长仅 7 厘米,开展,狭披针形,基部近截形,先端为长渐尖头,边缘自基部向上有向前弯的銳锯齿,先端的锯齿更大,高达 2.5 毫米,渐尖头,斜向上。叶为草質,綠色,两面光滑,仅中肋和叶脉下面有棕色狭綫形的鱗片疏生。向小羽軸先端兩側有翅,翅寬达 1 毫米。叶脉开展,单一或分叉,两面都明显,沒有倒行假脉(或几不可見)。孢子囊羣为卵圆形或短长圆形,仅由 8 或 6 个孢子囊組成,位于每个锯齿內,向先端为不育。

margine remotis, sporangiis 16—22.

Yunnan austr., Se-song-ban-nan, Yunnan Complex Expedition No. 5172.

33. **Angiopteris fengii** Ching, sp. nov.

Planta ad 2—3 m alta, stipite 2 cm vel ultra crasso, nigricante, glabro; lamina ampla, bipinnata; pinnis alternis, oblongis ad basin versus parum angustatis, 83 cm longis, basi 12 cm latis, medio 20 cm latis, petiolo 3 cm longo, 3 mm crasso, nigricante, glabro suffultis, rachillis ad apicem alatis; pinnulis 24-jugis, breviter petiolulatis, inferioribus, 6 cm longis, 1.8 cm latis, suboppositis, 2 cm inter se remotis, sequentibus majoribus, mediis 9—11 cm longis, ca. 2 cm latis, late lanceolatis, acuminatis, basi rotundatis, supremis similibus, margine plano minute crenato-dentatis; venulis fere patentibus, plerisque furcatis aut rarius simplicibus, ad apicem parum curvatis, utraque pagine latere prominulis, striis recurrentibus obsoletis, brevissimis; textura tenuiter chartacea, supra viridi, infra pallidiore, glabra, ad costas paleis minutis rufis perspersis excepta; soris linearibus, 2 mm longis, contiguis, 2 mm e margine remotis, sporangiis 20—24.

Yunnan austr.-orient., Mar-li-po (Lao-chun Shan), alt. 1200—1300 m, leg. K. M. Feng No. 13876, in mixed forest along the river bank, XII, 15, 1947.

34. **Angiopteris wangii** Ching, sp. nov.

Planta ad 2 m alta, stipite basi 3 cm vel ultra crasso, nigricante, glabro; lamina ampla, bipinnata; pinnis ultra 60 cm longis, 20 cm latis, oblongis, basin versus non angustatis, petiolo 2—3 cm longo, 5 mm crasso, brunneo-stramineo, glabro suffultis, rachillis crassis, infra teretibus, supra marginatis, ad apicem anguste alatis; pinnulis 20-24-jugis, 2.5—3 cm inter se remotis, inferioribus oppositis, patentibus, vix vel parum abbreviatis, superioribus subalternis, 10 cm longis, 2 cm latis, lineari-lanceolatis, breviter acuminatis, basi rotundatis, breviter petiolulatis, margine serrulatis, in sicco subrevolutis; venulis subpatentibus, furcatis, ad apicem subfalcatum incurvatis, supra notatis, infra prominulis, striis recurrentibus sparsis, obsoletis, brevissimis; textura folii tenuiter chartacea, brunneo-viridi, utraque pagine glabra; soris linearibus, 1.8 mm longis, contiguis vel approximatis, ca. 0.8 mm e margine remotis, sporangiis 12—14.

Yunnan austr.-orient., Hokou, Mar-wang-pa, leg. C. W. Wang No. C1.

35. **Angiopteris crassa** Ching, sp. nov.

Planta ad 1.8 m alta; lamina ampla, bipinnata; pinnis 60 cm longis, 18 cm latis, anguste oblongis, petiolo 2 cm longo, 3 mm crasso, nigrescente, nudo suffultis, rachillis ad apicem exalatis; pinnulis 17-jugis, 2—2.5 a se remotis, inferioribus suboppositis, sequentibus alternis, brevissime petiolulatis, basi rotundatis, basalibus 7—8 cm longis, mediis longioribus, 1.5 cm latis, supremis ad 12 cm longis, 1.8 cm latis, lanceolatis, rectis, acuminatis, marginibus crenulato-denticulatis; venulis patentibus, furcatis vel raro simplicibus, apice vix vel leviter incurvatis, infra distinctis, supra notatis, striis recurrentibus usque ad soros progredientibus; textura folii crasso-chartacea, utrinque fere glabra; soris contiguis, linearibus, 2 mm longis, ca. 1 mm a margine plano remotis, sporangiis 18—22, apicibus pinnularum sterilibus.

Yunnan austr.-orient., Hokou, Man-pa, alt. 280 m, leg. Tsai Ke-hwa No. 855.

40. **Angiopteris brevicaudata** Ching, sp. nov.