

ICONES FILICUM SINICARUM

BY

REN-CHANG CHING, B. S.

FASCICLE 4

中國蕨類植物圖譜 第四卷

靜生生物調查所
江西省農業院
廬山森林植物園主任秦仁昌編纂

靜生生物調查所印行

TO
PROF. WOON-YOUNG CHUN, M. S.

DIRECTOR OF BOTANICAL INSTITUTE
NATIONAL SUN YATSEN UNIVERSITY, CANTON
AND
MY FORMER TEACHER

IN RECOGNITION OF
HIS EXEMPLARY WORK IN BOTANY OF CHINA
AND
HIS UPLIFTING INFLUENCE UPON THE
YOUNGER GENERATION OF CHINESE BOTANISTS

THIS FOURTH FASCICLE OF ICONES FILICUM SINICARUM
IS RESPECTFULLY DEDICATED

TABLE

PLATES OF FASCICLE 4

Arranged in Numerical Order

Plate No.

151. *Gleichenia cantonensis*, 廣東裏白
152. *Gleichenia laevissima*, 光裏白
153. *Gleichenia splendida*, 碩裏白
154. *Dipteris chinensis*, 雙扇蕨
155. *Plagiogyria assurgens*, 麒麟竭足蕨
156. *Lindsaya Lobbiana*, 洛氏林蕨
157. *Lindsaya decomposita*, 網脈林蕨
158. *Adiantum Gravesii*, 粵鐵線蕨
159. *Adiantum Chienii*, 錢氏鐵線蕨
160. *Adiantum Roborowskii*, 羅鐵線蕨
161. *Onychium contiguum*, 高山烏蕨
162. *Onychium moupinense*, 木坪烏蕨
163. *Onychium tenuifrons*, 狹葉烏蕨
164. *Onychium Ipii*, 葉氏烏蕨
165. *Pleurosoriopsis Makinoi*, 隄毛蕨
166. *Coniogramme fraxinea*, 全緣鳳了蕨
167. *Coniogramme caudata*, 毛葉鳳了蕨
168. *Coniogramme procera*, 高山鳳了蕨
169. *Oleandra Cumingii*, 華南蕨
170. *Oleandra Whangii*, 獐山蕨
171. *Oleandra undulata*, 長柄蕨
172. *Gymnocarpium remoti-pinnatum*, 肢節蕨
173. *Asplenium fugax*, 陰地鐵角蕨
174. *Asplenium exiguum*, 低頭鐵角蕨
175. *Asplenium loriceum*, 南海鐵角蕨

Plate No.

176. *Asplenium interjectum*, 黔鐵角蕨
177. *Acrophorus stipellatus*, 擬鱗毛蕨
178. *Dryopteris serrato-dentata*, 高山鱗毛蕨
179. *Dryopteris Scottii*, 史氏鱗毛蕨
180. *Dryopteris liankwangensis*, 兩廣鱗毛蕨
181. *Dryopteris Championi*, 張氏鱗毛蕨
182. *Polystichum Chingæ*, 滇耳蕨
183. *Cyrtomium æquibasis*, 滇貫衆
184. *Cyrtomium muticum*, 大葉貫衆
185. *Hemigramma decurrens*, 擬叉蕨
186. *Leucostegia immersa*, 膜蓋蕨
187. *Leucostegia Hookeri*, 霍氏膜蓋蕨
188. *Leucostegia multidentata*, 毛膜蓋蕨
189. *Loxogramme grammitoides*, 小葉劍蕨
190. *Loxogramme salicifolia*, 柳葉劍蕨
191. *Loxogramme ensiformis*, 闊葉劍蕨
192. *Drynaria Fortunei*, 槲蕨
193. *Drynaria sinica*, 華槲蕨
194. *Colysis Wui*, 吳氏線蕨
195. *Colysis hemionitidea*, 斷線蕨
196. *Colysis Wrightii*, 萊氏線蕨
197. *Colysis hemitoma*, 胃葉線蕨
198. *Colysis digitata*, 掌葉線蕨
199. *Colysis pentaphylla*, 滇線蕨
200. *Colysis Morsei*, 馬氏線蕨

TABLE

PLATES OF FASCICLE 4

Arranged in Alphabetical Order

Plate No.	Plate No.
Acrophorus stipellatus, 擬鱗毛蕨.....177	Dryopteris Scottii, 史氏鱗毛蕨.....179
Adiantum Chienii, 錢氏鐵線蕨.....159	Dryopteris serrato-dentata, 高山鱗毛蕨.....178
Adiantum Gravesii, 粵鐵線蕨.....158	Gleichenia cantonensis, 廣東裏白.....151
Adiantum Roborowskii, 甌鐵線蕨.....160	Gleichenia laevissima, 光裏白.....152
Asplenium exiguum, 低頭鐵角蕨.....174	Gleichenia splendida, 碩裏白.....153
Asplenium fugax, 陰地鐵角蕨.....173	Gymnocarpium remoti-pinnatum, 肢節蕨.....172
Asplenium interjectum, 黔鐵角蕨.....176	Hemigramma decurrens, 擬叉蕨.....185
Asplenium loriceum, 南海鐵角蕨.....175	Leucostegia Hookeri, 霍氏膜蓋蕨.....187
Colysis digitata, 掌葉線蕨.....198	Leucostegia immersa, 膜蓋蕨.....186
Colysis hemionitidea, 斷線蕨.....195	Leucostegia multidentata, 毛膜蓋蕨.....188
Colysis hemitoma, 胃葉線蕨.....197	Lindsaya decomposita, 網脈林蕨.....157
Colysis Morsei, 馬氏線蕨.....200	Lindsaya Lobbiana, 洛氏林蕨.....156
Colysis pentaphylla, 滙線蕨.....199	Loxogramme ensiformis, 闊葉劍蕨.....191
Colysis Wrightii, 萊氏線蕨.....196	Loxogramme grammitoides, 小葉劍蕨.....189
Colysis Wui, 吳氏線蕨.....194	Loxogramme salicifolia, 柳葉劍蕨.....190
Coniogramme caudata, 毛葉鳳了蕨.....167	Oleandra Cumingii, 華南蔴蕨.....169
Coniogramme fraxinea, 全緣鳳了蕨.....166	Oleandra undulata, 長柄蔴蕨.....171
Coniogramme procera, 高山鳳了蕨.....168	Oleandra Whangii, 猴山蔴蕨.....170
Cyrtomium æquibasis, 瀝貫衆.....183	Onychium contiguum, 高山烏蕨.....161
Cyrtomium muticum, 大葉貫衆.....184	Onychium Ipii, 葉氏烏蕨.....164
Dipteris chinensis, 雙扇蕨.....154	Onychium moupinense, 木坪烏蕨.....162
Drynaria Fortunei, 槲蕨.....192	Onychium tenuifrons, 狹葉烏蕨.....163
Drynaria sinica, 華槲蕨.....193	Plagiogyria assurgens, 蛾蚶船足蕨.....155
Dryopteris Championi, 張氏鱗毛蕨.....181	Pleurosoriopsis Makinoi, 隄毛蕨.....165
Dryopteris liankwangensis, 兩廣鱗毛蕨.....180	Polystichum Chingæ, 瀝耳蕨.....182

PLATE 151

GLEICHENIA CANTONENSIS Ching

GLEICHENIACEÆ

GLEICHENIA CANTONENSIS Ching, Lingnan Sci. Journ. **15**: 391 (1936).

A large straggling fern to several meters tall; *rhizome* creeping, *stipe* up to 2 meters long, stout, thick as a finger near base, wine-colored, subnitid, glabrous, forked; *primary pinnae* opposite, to 80 cm long, 40 cm or broader, axillary bud large, densely clothed in imbricate, lanceolate, atro-castaneous *scales* about 4 mm long, with densely fimbriate margin; *secondary pinnae* numerous, alternate, 3-3.5 cm apart, patent, shortly petiolate, up to 30 cm long, 4 cm broad, linear-lanceolate, base equally truncato-cuneate, gradually narrowed towards acuminate apex, pinnatifid nearly down to rachilet; *segments* 60-70-jugate, linear, suboblique, to 2 cm long (sometimes longer), 2 mm broad, margin entire but strongly revolute, apex obtuse, often subemarginate, separated from each other by somewhat broader sinuses; *veinlets* 20-jugate, regularly forked above base, rachis subnitid, wine-colored, with a few broad-lanceolate, deciduous, appressed, castaneous scales; *texture* herbaceous, glabrous and light green above, glaucescent and sparingly stellate hairy beneath; *sori* medial on anterior veinlets, consisting of 2-4 (generally 3) large, globular, pale lemon-yellow sporangia, *receptacle* elongate, naked.

Kwangtung: Suni, Y. K. Wang 30967 (type), roadside, July 17, 1931; Whampoa, one specimen without collector's name in Herb. Rigmuseum at Stockholm.

This distinct and pretty fern is closely related to *G. glauca* Hk., from which it differs in enormously larger size, wine-red stipe and rachis, the petiolate secondary pinnae up to 30 cm long, 4 cm broad, and the longer and narrower oblique segments with strongly revoluted margin and broader sinuses. The scales covering the axillary bud are only half as long as those in its relative.

Plate 151. Fig. 1. Habit sketch (natural size). 2. Segments, showing venation and position of sori ($\times 5$). 3. Sporangium ($\times 50$). 4. Scale from axillary bud ($\times 50$). 5. Stellate hairs on the underside of leaf ($\times 50$).

第 一 百 五 十 一 圖

廣 東 裏 白 (裏 白 科)

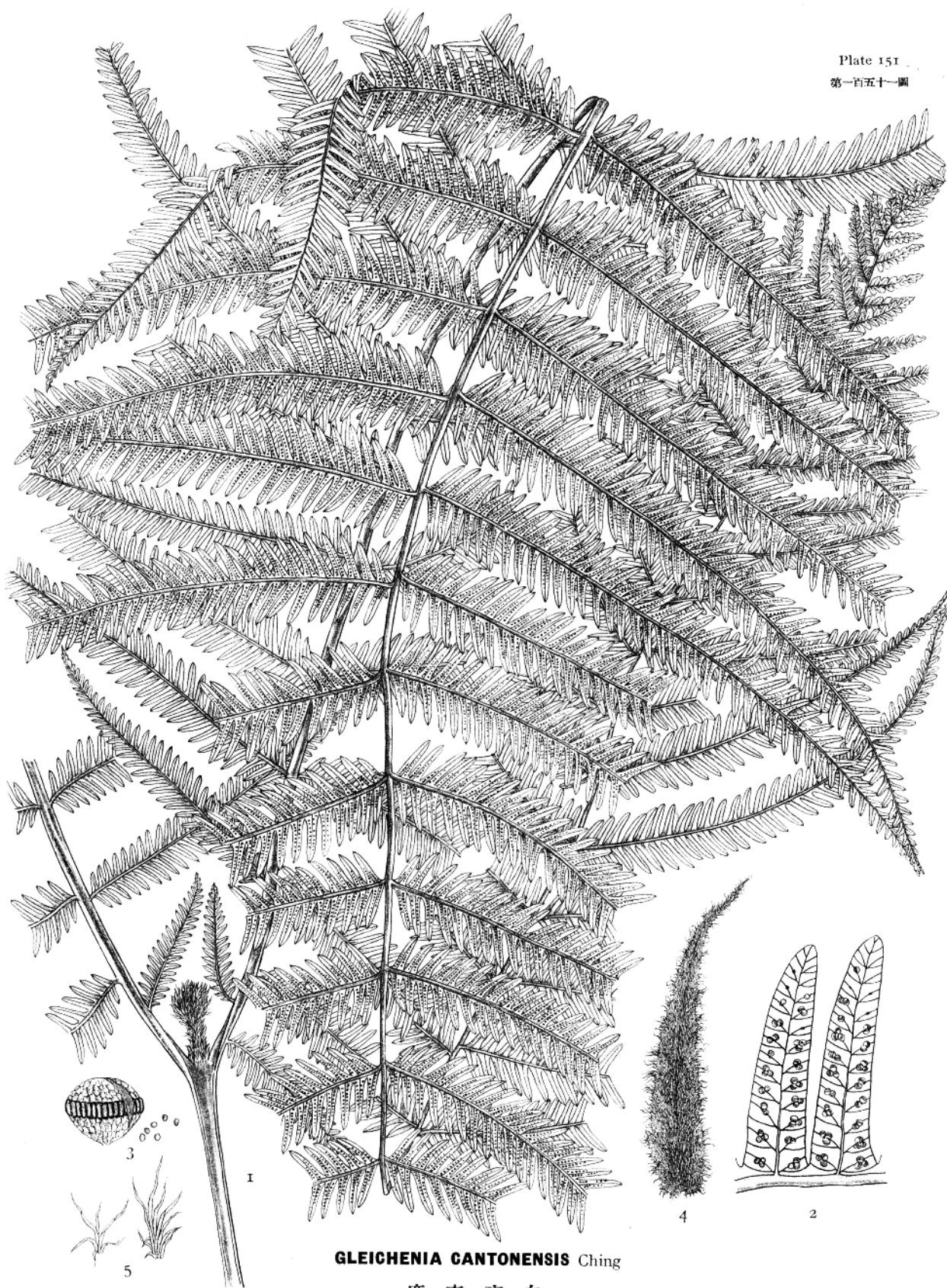
GLEICHENIA CANTONENSIS Ching

地下莖橫行；葉柄高達二呎，酒紅色，光滑無毛，葉分叉；一回羽葉對生，長達八十粉，寬四十粉或過之，腋間具一被栗黑色鱗片之大芽；二回羽葉多數，互生，開展，具短柄，長達三十粉，寬四粉，線狀披針形，基部為截楔形，等寬，向頂漸尖，羽狀深裂至中肋；裂片六十至七十對，線形，亞斜出，長達二粉，寬二釐，全緣，強度反捲，鈍頭，葉脈約二十對，均由基部分叉，上面光滑，下面淡粉白色，且被星狀毛，中軸亦呈酒紅色，稍具闊披針形之深栗色鱗片；子囊羣中生，位於上方小脈，由二至四個子囊組成之。

分佈： 廣東信宜縣及黃埔產之。

此種為廣東特產，其形態極類裏白 (*G. glauca*)，惟形體較大，葉柄及中軸呈酒紅色，二回小葉長達三十粉，寬四粉，且具柄，裂片亞斜出，邊緣強度反捲，葉腋間之芽所被之鱗片之長僅半之耳。

圖註： 1. 本種全形 (自然大)， 2. 裂片，表示葉脈及子囊羣之位置 (放大五倍)， 3. 子囊 (放大五十倍)， 4. 葉腋間之芽之鱗片 (放大五十倍)， 5. 葉下面所被之星狀毛 (放大五十倍)。



GLEICHENIA CANTONENSIS Ching

廣東裏白

PLATE 152

GLEICHENIA LAEVISSIMA Christ

GLEICHENIACEÆ

GLEICHENIA LAEVISSIMA Christ, Bull. Acad. Géogr. Bot. (1902) 268; C. Chr. Ind. Fil. 322 (1905).

Mertensia laevisissima Nakai, Bot. Mag. Tokio 39: 182 (1925).

Gleichenia kiusiiana Makino, Bot. Mag. Tokio 18: 139 (1904); C. Chr. Ind. Fil. Suppl. I. 44 (1906-12); Ogata, Ic. Fil. Jap. 4: pl. 179 (1931).

Rhizome wide-creeping, densely scaly; *scales* lanceolate, long-acuminate, rufo-brown, nitid, thick, entire; *frond* 2-4 cm apart, stipe 30-50 cm long, 3 mm thick near base, green or pale stramineous, smooth, glabrous above base, rounded beneath, lower part flattened with sharp edge above and upper part deeply grooved, lamina ovate, bifurcate at the tip of stipe into two similar pinnae of oblong outline, 30-40 cm long, 13-16 cm broad, acuminate, axillary bud large, densely scaly, scales ovate, entire, with long subulate apices; *pinnules* linear-lanceolate, acuminate, short-petiolate, the lower ones on the exterior side of rachilet much the longest, to 12 cm long, 2 cm broad, gradually shortened upward, the interior basal one or two pairs generally much smaller, pinnatifid down to costa; *segments* numerous, pectinate, oblique, linear with sharp apices, 1-1.5 cm long, 2 mm broad, lower base decurrent, margin revolute, with rounded and as broad sinus; *texture* rigidly herbaceous, pleasing green, naked throughout, bluish beneath; *veins* in segments 10-15-jugate, suboblique, all forked above base, *sori* small, medial, borne on the anterior veinlets above forking, consisting of 3-4 globular brownish sporangia.

Kweichow: Kwei-yang, *Bodinier* 2095 (type), March 18, 1898; Pin-fa, *Cavalerie* 528; Vanchingshan, Yinkiang, Y. *Tsiang* 7677; Kweiting, Y. *Tsiang* 5481; Tu-yun Y. *Tsiang* 5889B, 5889A. Szechwan: without locality, T. *Tang* 22775 (1930). Yunnan: Without locality, *Delavay* 46. Kiangsi: Kiukiang, Lu-shan, Dr. *Shearer* (1887); Three Falls, C. E. *DeVol* 47, August 7; 1933, steep damp hill side. Chekiang: Tientai Shan, R. C. *Ching* 1427 (1923), under forest. Kwangtung: Lokchong, N. K. *Chun* 42513. Kwangsi: Lu-ch'en Hsien, Miu Shan, Dar Siar Ping, R. C. *Ching* 6189; Ling Yen Hsien, Loh Hoh Tsuen, A. N. *Steward* & H. C. *Cheo* 184. Hainan Island: without locality, mountain summit, C. *Wang* 85525.

Also Japan: Kinsin, Oosumi, G. *Koidzumi*, April 14, 1923.

One of the most distinct species of the genus, differing from the previous one in much smaller size, narrower and more oblique segments with revolute margin and sharply pointed apices and in the scales on the axillary bud being entire, light-brown, with hair-pointed apices. By the present distribution, this species is now known from central, southern and eastern Chinese provinces.

Plate 152. Fig. 1. Habit sketch (natural size). 2. Two segments, showing venation and sori ($\times 3$). 3. Sorus ($\times 50$). 4. Scale from rhizome ($\times 16$). 5. Scale from axillary bud ($\times 16$). 6. Cross section of rhizome, showing solenostele ($\times 4$).

第 一 百 五 十 二 圖

光 裏 白 (裏 白 科)

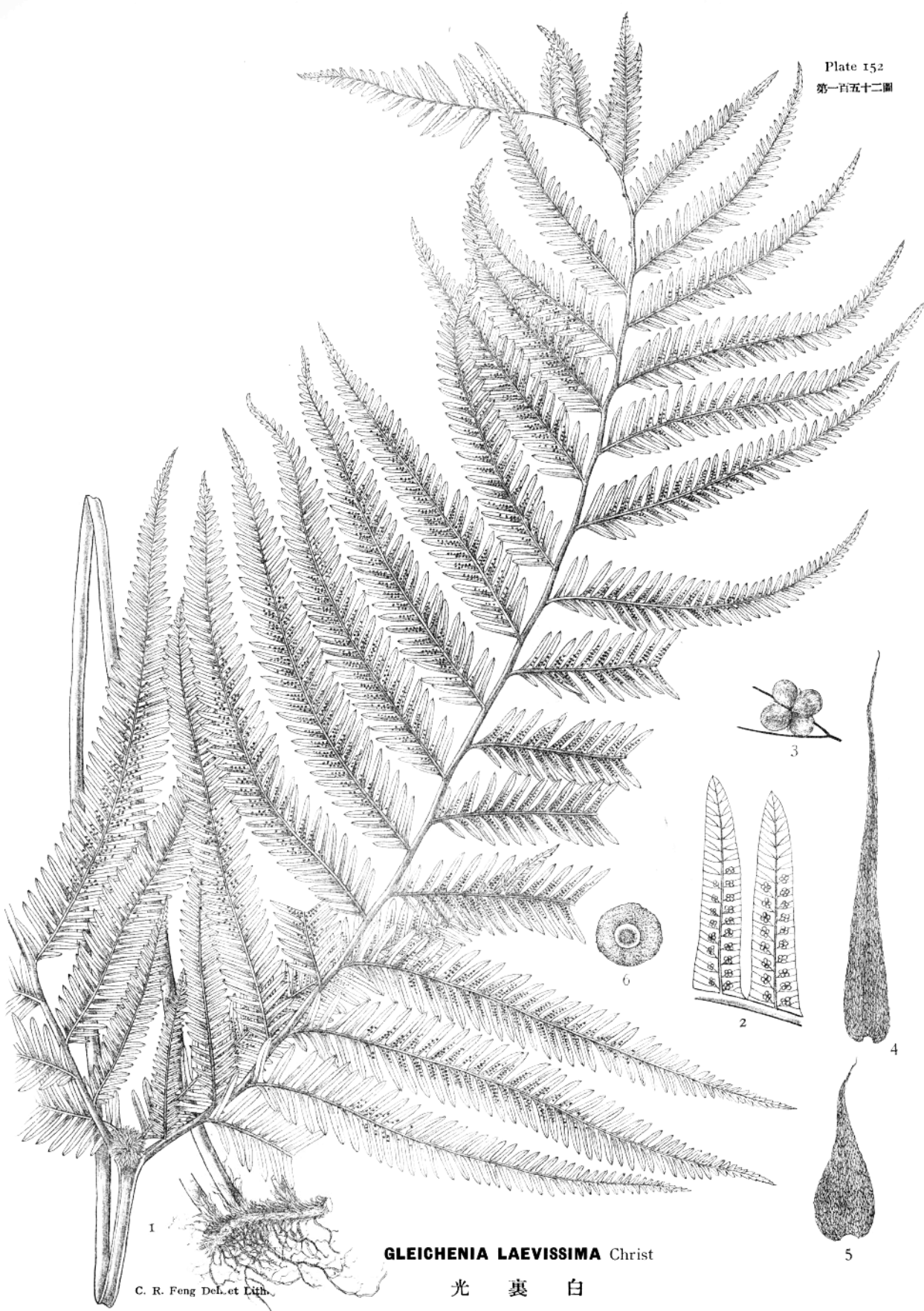
GLEICHENIA LAEVISSIMA Christ

地下莖橫行，密被紅褐色之細長鱗片；葉散生，柄長達五十粉，淡綠色，光亮，葉體卵形，二裂，小葉長達四十粉，寬十六粉，橢圓形，漸尖頭，二回羽狀分裂；葉腋間具一大芽，被淡黃色之密鱗片；二回小葉線狀披針形，漸尖頭，具短柄，基部外側數對最長，長達十二粉，寬二粉，內側一二對最短，漸尖頭，羽狀深裂，裂片櫛篲排列，長一至一·五粉，寬二厘，尖頭，斜出，邊緣強度反捲，厚紙質，兩面光滑，綠色，葉脈分叉；子囊羣小，圓形，生於上方小脈，由三至四個淡黃色之子囊組成之。

分佈：貴州，江西，浙江，廣東，廣西，瓊州島；日本亦產之。

此爲本屬特殊之種，全體光綠，甚易識別。

圖註： 1. 本種全形 (自然大)， 2. 兩裂片，表示葉脈及子囊羣之位置 (放大三倍)， 3. 子囊羣 (放大五十倍)， 4. 地下莖上之鱗片 (放大十六倍)， 5. 腋芽之鱗片 (放大十六倍)， 6. 地下莖之橫切面，表示維管束之佈置 (放大四倍)。



GLEICHENIA LAEVISSIMA Christ

光 裏 白

C. R. Feng Del. et Lüh.

PLATE 153

GLEICHENIA SPLENDIDA Hand-Mzt

GLEICHENIACEÆ

GLEICHENIA SPLENDIDA Hand-Mzt. Akad. Anz. Akad. Wien (1924) 81; Symb. Sin. **6**: 16 (1929); C. Chr. Ind. Fil. Suppl. III. 106 (1934).

Gleichenia linearis C. Chr. (non Clarke, 1880), Contr. U. S. Nat. Herb. **26**: 271 (1931), pro parte.

Rhizome wide-creeping, dull brown, subnitid, muricate, densely scaly; *scales* atrobrown, linear-subulate, rigid, spreading, tufted, deciduous; *frond* 1 to several meters tall, erect or trailing, stipe dark stramineous, shining, glabrous, 4-5 mm across, 30 cm to several meters long, lamina repeatedly di- or trichotomously forked, with a distinct pair of pinnae arising from the base of the primary forking branches and two smaller foliaceous and coriaceous ones at the axil covering the scaly terminal bud; *pinnae* 30-40 cm long, 10-16 cm broad at the middle, gradually acuminate towards apex, base decrescent either on both sides or the upper side only, sessile, pectinately pinnatifid, *segments* 5-10 cm long, up to 1 cm broad above the broadened base, linear-lanceolate, with obtusish apex, and repando-undulate margin; *texture* subcoriaceous, glaucescent beneath; *veinlets* 5-6 in each group, parallel; *sori* irregularly 1-2-rowed, medial on veinlets, consisting of 10-20 sporangia.

Yunnan: Tibet-Burmese border, *H. Handel-Mazzetti* 9351 (type); Tengyueh, *J. F. Rock* 7172; Mengtze, *Hancock* 71. Kwangtung: Sunyi, *Y. K. Wang* 30920. Kwangsi: Lin Yen Hsien, Tsin-lung Shan, *R. C. Ching* 7048; *ibid.*, Yeo Mar Shan, *R. C. Ching* 7256. Hongkong: Victoria Peak, *Lamont* 975.

Burma: *Lace* 4748 ex Herb. Bedd.

Khasia: *Hooker f. et Thomson*.

Tonkin: Laos, *M. Poilane*, November 6, 1921. Also Annam.

A gigantic species of the group of *G. linearis* (Burm.) Clarke and has previously been considered as identical with that common fern, from which it differs in enormously larger size in all parts, the segments being up to 10 cm long and nearly 1 cm broad, with repando-undulate margin, and more sporangia in each sorus, which is, however, rarely found present.

Plate 153. Fig. 1. Habit sketch (natural size). 2. Portion of segment, showing venation and undulate margin ($\times 4$).

第 一 百 五 十 三 圖

碩 裏 白 (裏 白 科)

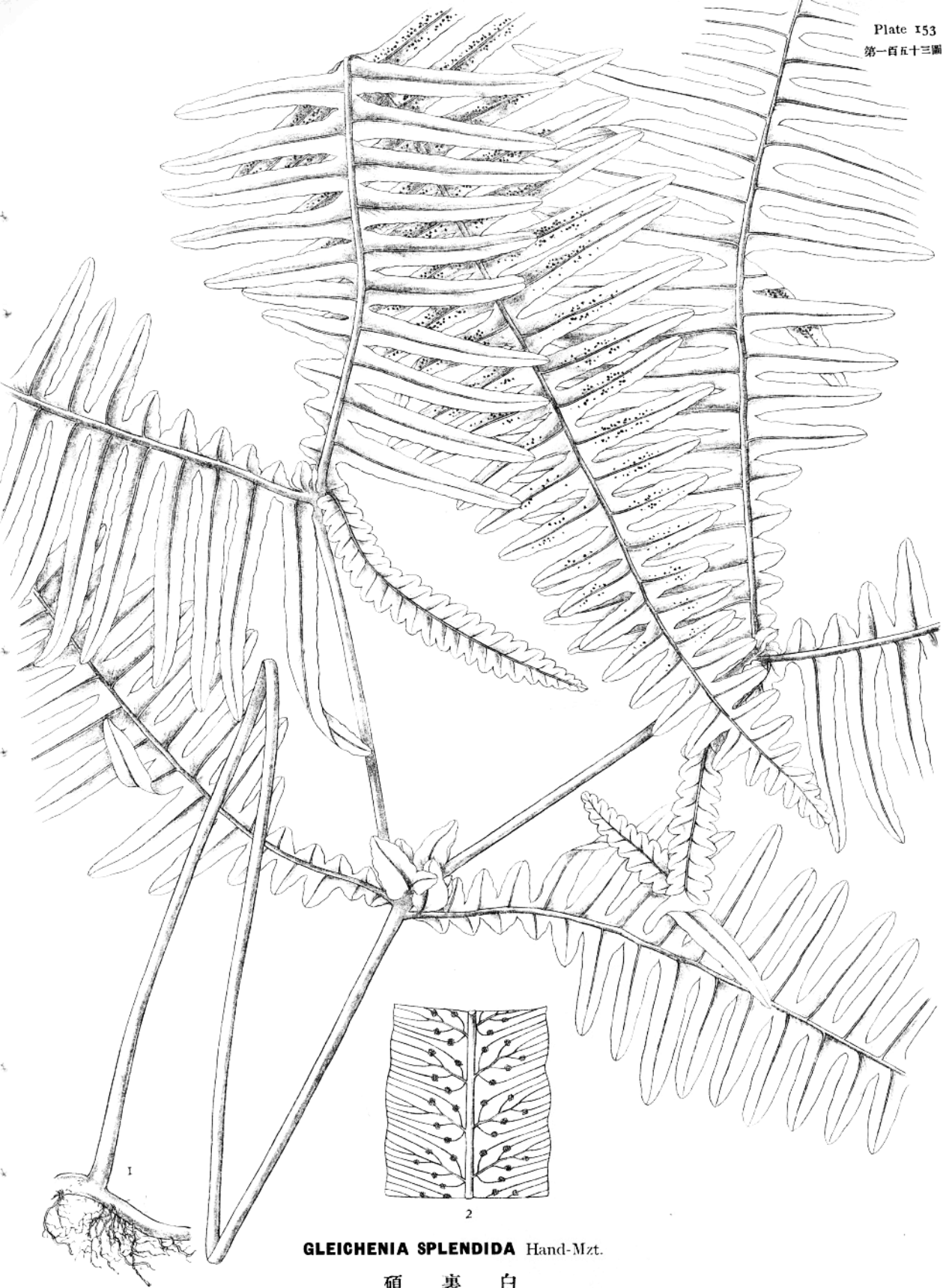
GLEICHENIA SPLENDIDA Hand-Mzt.

地下莖橫行，光亮，粗糙；鱗片深褐色，線形，簇生；葉長一至數呎，直立或爲蔓性，葉柄深稻草色，光亮，無毛，高自三十粉至數呎，葉體數回分叉，每分叉處之基部下方具一對小葉片；一回小葉長三十至四十粉，寬十至十六粉，頂漸尖，基部漸狹，無柄，櫛狀深裂；裂片長五至十粉，基部之寬達一粉，線狀披針形，端略鈍，邊緣呈淺波形，亞革質，下面稍呈白色，葉脈每組具五至六數平行小脈；子囊羣爲不規則之二列，中生，由十至二十個子囊組成之。

分佈：雲南，廣東，廣西，香港，緬甸，交趾均產之。

本種形態極類普通之櫛裏白 (*G. linearis*)，惟其各部形態特大，裂片長達十粉，寬一粉，邊緣呈波形，故易識別。

圖註： 1. 本種全形 (自然大)， 2. 裂片之一部，表示葉脈及邊緣 (放大四倍)。



GLEICHENIA SPLENDIDA Hand-Mzt.

碩 裏 白

PLATE 154

DIPTERIS CHINENSIS Christ

DIPTERIDACEÆ

DIPTERIS CHINENSIS Christ, Bull. Acad. Géogr. Bot. (1904) 104 cum fig. et tab.; C. Chr. Ind. Fil. 242 (1905); Ching, Bull. Dept. Biol. Coll. Sci. Sun Yatsen Univ. No. 6: 23 (1933). *Dipteris Horsfieldii* Christ. (non Bedd. 1869), Bull. Herb. Boiss. 6: 880 (1898). *Dipteris conjugata* Hand.-Mzt. (non Reinw. 1924), Sym. Sin. 6: 28 (1929); Wu, Polyp. Yaoshan, in Bot. Dept. Biol. Coll. Sci. Sun Yatsen Univ. No. 3: 94 t. 38 (1932).

Rhizome wide-creeping, woody, densely scaly; *scales* atro-brown, rigid, setaceous, linear-subulate, nitid, appressed; *frond* far apart, stipe 30-60 cm long, dark stramineous, glabrous above base, woody, rounded below, broadly grooved upward on the upper side, lamina 20-30 cm high, 30-60 cm broad, bipartite into nearly equal fan-shaped halves, each again cleft into 4-5 broad acuminate lobes, 5-8 cm broad, the exterior one divided to three-quarters of the way down, the middle one or two, less deep, and the interior one, only one-third way down, each lobe may be once forked with grossly serrated margin; *texture* crass herbaceous or subcoriaceous, turning brownish when dried; underside green or slightly bluish and with some dark brown articulated deciduous hairs along veins; main *veins* prominent, dichotomously branched, connected by finer transversed ones, with intermediate veinlets anastomosing copiously into hexagonal arcolæ with simple or forked included veinlets; *sori* small, punctiform, superficial, campital, scattered, exindusiate, *sporangia* intermixed with atro-brown cup-shaped stalked paraphyses.

Kweichow: Pin-fa *Cavalerie* 7641, 841 (type); Cheug-feng, Y. *Tsiang* 4706; without locality, *Esquirol* 3189, 667. Kwangsi: Yao shan, S. S. *Sin* 647, June 29, 1928; Tseung Hsien, C. *Wang* 39494, June 22, 1936; Lu-chen Hsien, Miu Shan, R. C. *Chiung* 6140. Yunnan: Mengtze, *Hancock* 218; A, *Henry* 9041, 9041A; Tzi-tzo-ti, *Forrest* 27693 (1925); Ping-pien Hsien, H. S. *Tsai* 55420, 60250, in thickets. Tibet-Burmese border; H. *Handel-Mazzetti* 9347.

Upper Burma: Htawgaw, *Forrest* 24613.

This distinct endemic species can be easily distinguished from the tropical Asiatic *D. conjugata* Reinw. by much less divided leaves with fewer and broader ultimate segments, green or slightly bluish under surface and not clavate but cup-shaped paraphyses in sorus.

Plate 154. Fig. 1. Habit sketch (natural size). 2. Portion of lamina, showing venation and sori ($\times 5$). 3. Sporangium ($\times 150$). 4. Spores ($\times 150$). 5. Scale from rhizome ($\times 40$). 6. Cross section of rhizome, showing solenostele ($\times 5$). 7. Hairs from veins on the under side of leaf ($\times 30$). 8. Paraphyses in sorus ($\times 150$).

第 一 百 五 十 四 圖

雙 扇 蕨 (雙 扇 蕨 科)

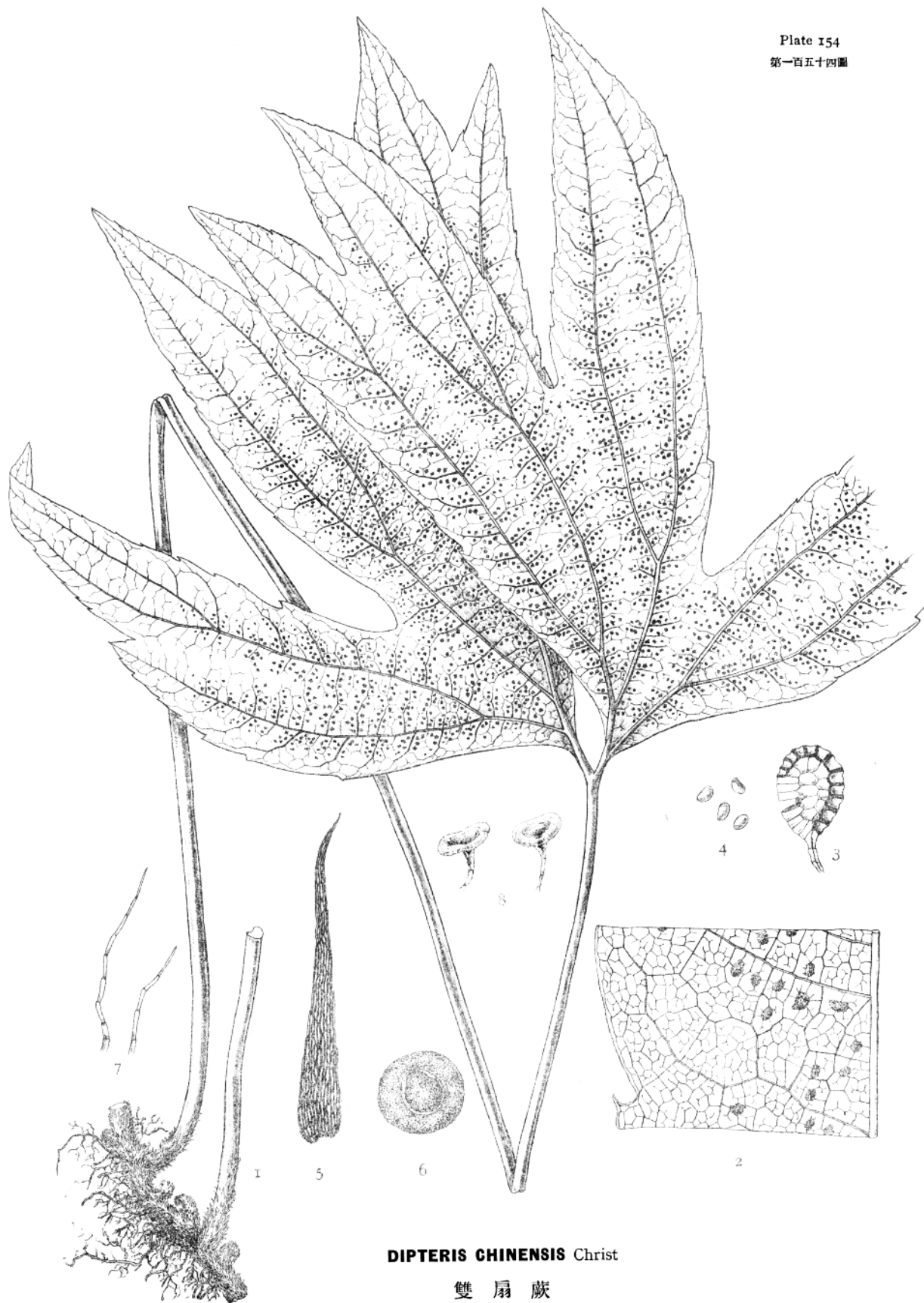
DIPTERIS CHINENSIS Christ

地下莖橫行，粗健，木質，被深褐色之緊覆細長厚鱗片；葉散生，柄長三十至六十粉，木質，葉體二裂，成等大之兩扇形，各扇復四至五深裂，漸尖頭，各裂片一次深裂，具粗鋸齒，乾紙質，上面光滑，下面葉脈略具深褐色之短毛，主脈數回扇狀分叉，連以顯明之橫脈，網脈頗明顯，各網眼其分叉或單小脈；子囊羣形圓而小，散生，不具蓋，線狀體密生，端呈膨大之傘形，深棕色。

分佈：貴州，廣西，雲南，藏邊產之。

此為本屬特殊之一種，為中國特產，其形態略似亞洲熱帶產之 *D. conjugata*，惟較小，葉之分裂較少，下面不呈粉白色，子囊羣中之線狀體不呈球桿形，故易識別。

圖註： 1. 本種全形 (自然大)， 2. 葉片之一部，表示葉脈及子囊羣 (放大五倍)， 3. 子囊 (放大一百五十倍)， 4. 孢子 (放大一百五十倍)， 5. 地下莖上之鱗片 (放大四十倍)， 6. 莖之橫切面，表示維管束之佈置 (放大五倍)， 7. 葉下面脈上之短毛 (放大三倍)。 8. 子囊羣中之線形體 (放大一百五十倍)。



DIPTERIS CHINENSIS Christ

雙 扇 蕨

PLATE 155

PLAGIOGYRIA ASSURGENS Christ

POLYPODIACEÆ

PLAGIOGYRIA ASSURGENS Christ, Bull. Soc. Bot. Ital. (1901) 293; C. Chr. Ind. Fil. 495 (1905); Cop. Phil. Journ. Sci. **38**: 398 (1929).

Lomaria deflexa Baker (non Col. 1844, nec Liebm. 1849), Journ. Bot. (1888) 226.

Blechnum Faberi C. Chr. Ind. Fil. 153 (1905).

Rhizome thick, woody; *fronds* caespitose, dimorphous, *sterile* one with stipe to 20 cm long, rigid, dark stramineous, terete beneath, broadly grooved above, base flattened, carinate, with 3 aerophores on each of exterior sides, lamina oblong-lanceolate, quite narrowed at base, to 30 cm long, 10 cm broad at middle, simple pinnate with pinnatifid acuminate apical part; *pinnae* 30-35-jugate, linear-lanceolate with upper side of base running upward, the lower several pairs gradually shortened and strongly deflexed, the middle ones to 8 cm long, 8 mm broad, horizontally patent, entire except the acuminate apex being with a few obscure teeth, the upper pinnae gradually shortened and oblique; *texture* subcoriaceous, glabrous in all parts, green above, glaucous or bluish-white (or green when young) underneath; *veins* distinct on both sides, oblique, mostly forked; *fertile* frond strongly contracted, on longer stipe (to 40 cm long), lamina linear-lanceolate, 5 cm broad; *pinnae* contracted, linear, to 3 cm long, 2 mm broad, base broadly adnate; *sori* indefinite, completely covering the under surface, except the midrib.

Szechwan: Tien-to-san, *Scallan* (type); Mt. Omei, *Wilson* 5284; *E. Faber* 1023 (type of *Lomaria deflexa*); Tah Liang Shan, *T. T. Yü* 4045, Sept. 22, 1934.

This distinct endemic fern, so far collected only thrice in mountains in the southwestern part of Szechwan, is closely related to *P. adnata* of the same region in general outline, differs in shortened and strongly deflexed lower pinnae and the glaucous underside of lamina, less serrated apice of sterile pinnae and broadly adnate base of fertile pinnae. *Lomaria deflexa* Baker represents only a young state of this species, having thinner leaves, less prominent veins and green color beneath.

Plate. 155. Fig. 1. Habit sketch (natural size). 2. Pinnac, showing venation and serrature ($\times 2$). 3. Portion of fertile pinnae, showing position of sori ($\times 16$). 4—5. Sporangium with spores ($\times 150$).