

植株高 6—12 厘米。根状茎短而斜升，直径 3—6 毫米，顶端密被棕色、狭披针形、近全缘的小鳞片。叶多数簇生；叶柄深禾秆色或浅棕色，长 2—6 厘米，直径 0.5—1 毫米，上面有浅沟槽，基部被质地较厚、全缘或有疏齿的披针形小鳞片，向上至叶轴密被细长的棕色节毛，并混生少数狭披针形的棕色小鳞片；叶片矩圆披针形，长 2.5—8.5 厘米，宽 1.5—2.2 厘米，顶端短，羽裂钝头，基部略缩狭或不缩狭，一回羽状；羽片 4—11 对，互生，有狭间距或密接，平展或略斜向上，具短柄，矩圆形或斜卵状矩圆形，长 5—11 毫米，宽 3—7 毫米，基部不对称，上侧有明显的三角形耳状凸起，其顶端急尖或钝，外侧与叶轴平行或略覆盖叶轴，下侧圆楔形，基部以上两侧近等宽，边缘波状；叶脉上面不明显，下面略可见，羽状，侧脉单一或二叉状，不达边缘。叶厚纸质，干后浅绿色，上面色略深；叶轴深禾秆色或浅棕色，上面有浅沟槽；羽片两面密被棕色长节毛。孢子囊群小，圆形，生于小脉顶端，较接近羽片边缘，无囊群盖。

特产于广西南部（凤山）。生海拔 500 米的荫蔽处石灰岩洞内。

1 个石灰岩地区独特的种，其叶柄、叶轴及羽片两面密生棕色长节毛，在耳蕨属中极为罕见。

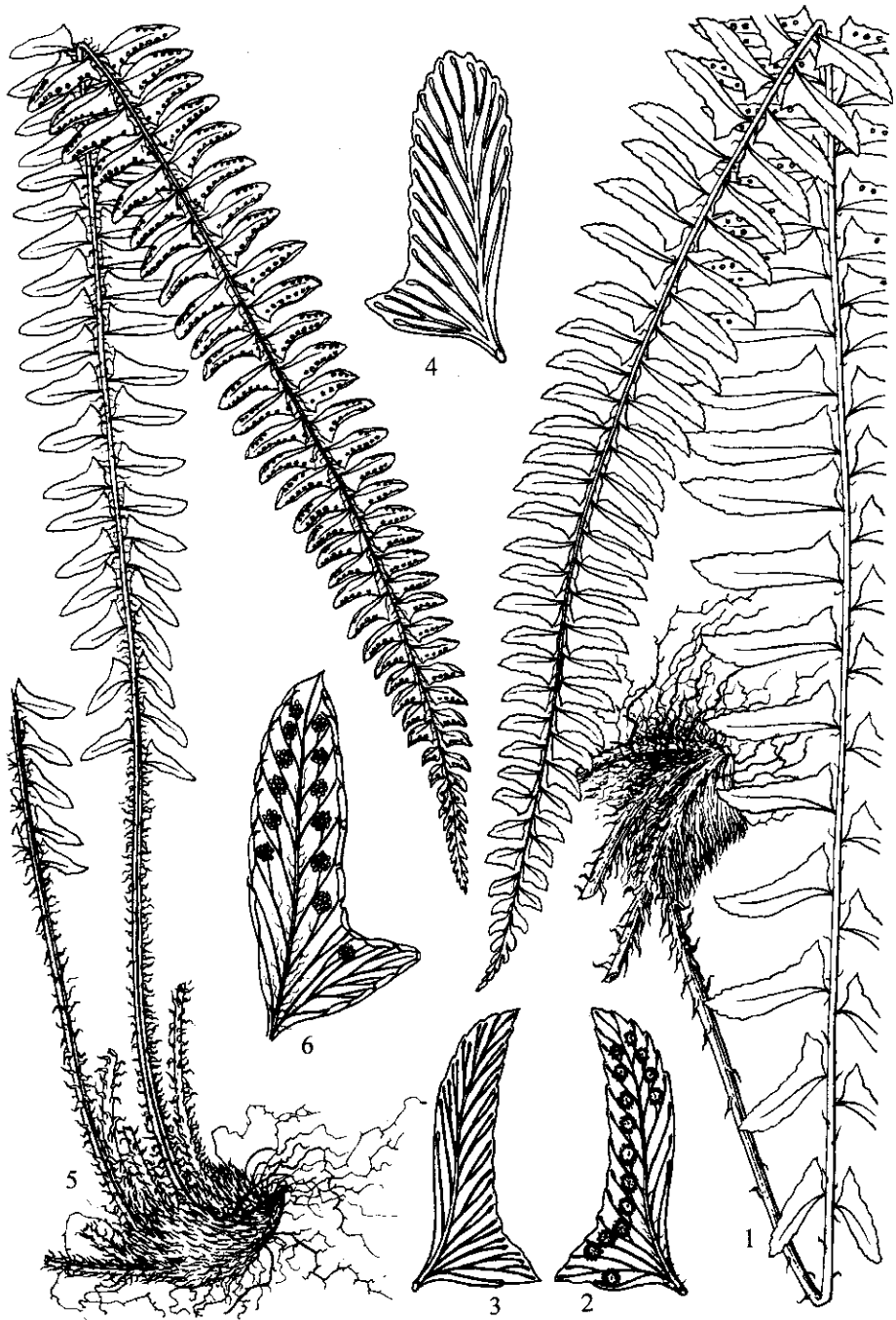
114. 粗脉耳蕨（新拟） 图版 35：1—4

Polystichum crassinervium Ching ex W. M. Chu et Z. R. He, sp. nov. in Addenda.

植株高 25—65 厘米。根状茎斜升，连同叶柄基部直径 1.5—3 厘米，顶端及叶柄基部密被有光泽、披针形或阔披针形、全缘、开展、长约 7 毫米、宽 1—1.5 毫米的厚膜质鳞片。叶少数簇生；叶柄浅绿禾秆色，长 2.5—18 厘米，基部直径 1—2 毫米，上面有沟槽，基部以上疏被较小的披针形、边缘流苏状的膜质棕色鳞片；叶片狭长椭圆披针形，长 15—45 厘米，中部宽 2.5—6 厘米，顶端渐尖或短渐尖，中部以下渐缩狭，基部宽 1—2.5 厘米，一回羽状；羽片 20—50 对，互生或近对生，通常有明显的间距，中部以上的平展，下部的或多或少向下反折，矩圆形或镰刀形，少见镰刀状披针形，中部的长 1.5—3 厘米，中部宽 4—7 毫米，顶端通常钝圆，有时急尖，基部显著不对称，上侧的耳状凸起三角形，其顶端渐尖，边缘有少数波状浅齿，外侧或多或少向内弯，与叶轴平行，下侧的下部狭楔形，与叶轴垂直或近垂直，上部呈向上弯的弧形，羽片基部以上的两侧边缘通常有浅钝齿，少见有急尖头的长齿；叶脉羽状，上面不明显，下面常显著隆起，侧脉粗壮，顶端增粗呈棒状，几达边缘，大多二叉状，在耳状凸起上羽状，少见单一的侧脉。叶纸质或厚纸质；叶轴浅绿禾秆色，上面有沟槽，下面疏被棕色、卵状披针形、顶端尾状长渐尖、边缘流苏状、下部盾状贴生的膜质小鳞片；羽片上面光滑，下面疏被浅棕色的短节毛。孢子囊群小，在羽片主脉两侧各有 1 行，上侧较多，中生或较接近边缘，生于较短的小脉顶端，有时仅羽片顶部能育；圆盾形的囊群盖棕色，边缘浅啮蚀状或有疏钝齿，少见撕裂状。

产湖南南部（新宁）、广东北部（乳源）及广西东部（阳朔、临桂、容县）和北部（罗城）。生海拔 200—400 米的石灰岩丘陵阴处岩隙。模式标本采自广西罗城。

本种的形体外貌初看颇似无盖耳蕨 *Polystichum gymnocarpium* Ching ex W. M. Chu et Z. R. He，但羽片下面有短节毛而无细长纤维状小鳞片，孢子囊群有囊群盖，不难区别。



图版 35 1—4. 粗脉耳蕨 *Polystichum crassinervium* Ching ex W. M. Chu et Z. R. He : 1. 植株全形, 2. 能育羽片背面, 表示叶脉顶端增粗呈棒状及孢子囊群着生位置 (放大), 3. 不育羽片背面, 表示顶端棒状的粗脉 (放大), 4. 1 个圆钝头的不育羽片背面, 表示顶端棒状的粗脉 (放大)。5—6. 无盖耳蕨 *Polystichum gymnocarpium* Ching ex W. M. Chu et Z. R. He : 5. 植株全形, 6. 羽片背面, 表示向下反卷的锯齿、叶脉、纤维状小鳞片及孢子囊群着生位置。(蔡淑琴绘)

Pinnulis pinnae inferiores basi ad rhachim pinnae plus minusve decurrentibus.

Typus subseriei : *Polystichum chunii* Ching

Subser. **Disjuncta** Ching ex W. M. Chu et Z. R. He, subser. nov.

Pinnulis pinnae basi numquam ad rhachim pinnae decurrentibus.

Typus subseriei : *Polystichum eximium* (Mett. ex Kuhn) C. Chr.

Polystichum assurgentipinnum W. M. Chu et B. Y. Zhang, sp. nov.

Species nova habitu *P. submarginali* (Bak.) Ching ex P. S. Wang approximata, sed basibus anticis auriculatis pinnarum anguste triangularibus utrinque integris, semifaciibus inferioribus pinnarum fere sterilibus, semifaciibus superioribus pinnarum base plerumque fertilibus.

S. Chongqing (重庆南部) : Qijiang (綦江), Lijiaba (李家坝), alt. 1500 m, in ravine, C. W. Zhou (周呈维) 81—1289 (holotypus, PYU; isotypus, Herb. Biol. Depart. Chongqing Teach. Col. *).

* : 重庆师范学院生物系植物标本室。

Polystichum costularisorum Ching ex W. M. Chu et Z. R. He, sp. nov.

P. thomsonii (Hook. f.) Bedd. affinis, differt stipite longitudino laminam fere aequanti, pinnis paucioribus (c. 10 - jugis), pinnatilobatis ad pinnatifidis, lobis auriculatis basalibus anterioribus non subliberis. Soris costas pinnae dispositis.

W. Sichuan (四川西部) : sine loc. W. P. Fang (方文培) 6266 (typus, PE), Luding (泸定), Hailuoguo (海螺沟), alt. c. 2550m, ad rupes humidam; **Q. Q. Wang (王清泉)** et **Z. A. Liu (刘志安)** 22262, 1980 - 06 - 11. Species endemica.

Polystichum crassinervium Ching et W. M. Chu et Z. R. He, sp. nov.

Habitu *P. gymnocarpio* Ching ex W. M. Chu et Z. R. He primo aspectu optime simile, sed pinnis subtus breviter articulatipilosis sine paleis parvis longe fibrosis, soriis indusiatis, facile distinguenda.

S. Hunan (湖南西部) : Xinning (新宁), Ziyun Shan (紫云山), alt. 360 m, L. H. Liu (刘林翰) 15519, 1962 - 11 - 13. **N. Guangdong (广东北部)** : Ruyuan (乳源), Babao Shan (八宝山), in sparse forest, C. Wang (黄志) 44203, 1957 - 11 - 21. **Guangxi (广西)** : Luocheng (罗城), R. C. Ching (秦仁昌) 5593 (typus, PE), 1928 - 01 - 02; Lingui (临桂), Xinming (新明), in fissures of rocks on limestone hills, S. Q. Chen (陈少卿) 93307, 1953 - 01 - 28; ib. Pingle (平乐), on rocks under bushes, C. F. Liang (梁畴芬) 31142, 1953 - 11 - 25; Rong Xian (容县), Changan (长安), on rocks in shady place, Albert N. Steward & H. C. Chao 1173, 1933 - 10 - 23; Yangshuo (阳朔), Baisha (白沙), alt. 200 m, in fissures of limestone, P. S. Chiu (裘佩熹) 4875, 1977 - 07 - 03; ib.

alt. 270 m, in fissures of rocks on limestone hills, W. M. Chu (朱维明) et Z. R. He (和兆荣) 27190, 1993-08-06.

Polystichum daguanense Ching ex L. L. Xiang var. **huashanicolum** W. M. Chu et Z. R. He, var. nov.

A typo differt margine anteriore pinnae serris saepe irregulariter laciniatis.

N. E. Yunnan (云南东北部): Zhengxiong (镇雄), Huashan (花山), alt. 1950 m, in fissures of limestone under shrub forest, W. M. Chu (朱维明) & G. F. Zhang (张光飞) 24241 (typus, PYU), 1991-08-31.

Polystichum deltodon (Bak.) Diels var. **cultripinnum** W. M. Chu et Z. R. He, var. nov.

A typo differt pinnis plerumque cultratis, margine non nisi supra medium acute vel cuspidate serrulato, infra medium integro vel undulato vel incisoserrulato, latere anteriore pinnae raro margine prope basim auriculatam denticula cuspidata.

Sichuan (四川): Emei (峨眉), alt. 1000 m, by stream, T. H. Tu (杜大华) 224, 1931-06-24; Emei Shan (峨眉山), Jiushijiudaoguai (九十九道拐), alt. 1250 m, in fissures of moist rocks, in mixed forest, W. M. Chu (朱维明) et M. Y. Liu (刘茂云) 7301, 1977-09-04; ib. alt. 1450 m, in fissures of limestone, W. M. Chu et Z. R. He (和兆荣) 28322B, 1993-08-23; ib. Longqiaogou (龙桥沟), alt. 1600 m, on cliff of shale under evergreen broad-leaved forest, W. M. Chu et Z. R. He 28312, 1993-08-23; Daxiangling (大相岭), alt. 1300 m, by brook under bushes, H. S. Kung (孔宪需) 4006, 4013, 1964-08-07; Gulin (古蔺), Maomaogou (毛毛沟), alt. 1100 m, under broad-leaved forest in ravine, H. S. Kung et al. 6934, 1985-09-06; ib. Jiancaogou (笕槽沟), alt. 1000 m, on cliffs under broad-leaved forest in ravine, H. S. Kung et al. 6990, 1985-09-09; Hejiang (合江), Dazhong Shan (大钟山), alt. 900 m, by road, Biol. Depart. Southwest Teach. Col. (西南师范学院生物系) 80145, 1980-07-22. **Chongqing** (重庆): Jinyun Shan (缙云山), F. J. Dai (戴番缙) et S. Chou (周铨) 534, 1956-06; Nantong (南桐), Yanghaping (羊哈坪), alt. 1000 m, by ditches, B. Y. Zhang (张百誉) et al. 81-1163, 1981-07-26; Nanchuan (南川), Banhe (半河) alt. 1250 m, under forest by brook, Z. Y. Liu (刘正宇) 2590, 1982-02-07. **Guizhou** (贵州): Chishui (赤水), Jinshagou (金沙沟), alt. 500-600 m, in fissures under forest, P. S. Wang (王培善) 76839, 1984-09-10 et 77830, 1984-10-22. **Yunnan** (云南): Maguan (马关), Bazhai (八寨), alt. 1750 m, in fissures of limestone under evergreen broad-leaved forest, W. M. Chu 8332 (typus, PYU), 1978-01-24. Pinbian (屏边), Dawei Shan (大围山), alt. 1500 m, in fissures of rocks in shady and moist place under evergreen broad-leaved forest, Y. Jiao (焦瑜) 96-56, 1996-10-06; Gongshan (贡山), Qiunatong (秋那桶 = Chi-na-tung 千那