

microsorium v. d. B. in Ned. Kr. Arch. V (1863) 155; C. Chr. Ind. Fil. (1905) 364; Cop. in Philip. Journ. Sci. LXVII (1938) 97.—*H. polyanthos* Bedd. Ferns Brit. Ind. (1863) t. 306; Clarke in Trans. Linn. Soc. II, Bot. I (1883) 437, pro parte.

植株高 15—20 厘米。根状茎纤细，丝状，褐色，长而横走，几光滑，下面疏生纤维状的根。叶远生，相距 2—3 厘米；叶柄长 5—10 厘米，细长，粗 0.5—0.8 毫米，褐色，无毛，全部无翅；叶片卵形至椭圆形，长 6—12 厘米，宽 4—6 厘米，中部最宽，两端均稍狭而钝，四回羽裂；羽片 10—12 对，互生，几无柄，开展，三角状披针形，先端稍向上弯，长 2—6 厘米，宽 1—2 厘米，先端渐尖，基部不对称，其下侧极偏斜，密接；一回小羽片 5—8 对，无柄，开展，三角状卵形至斜卵形，长 0.8—2 厘米，宽 4—10 毫米，先端钝，基部斜楔形，密接，基部下侧一个常复盖叶轴；二回小羽片 3—5 对，互生，无柄，斜向上，阔楔形至近于扇形，长 3—5 毫米，宽 2—3 毫米，先端钝或截形，基部下侧下延，密接；末回裂片 2—4 个，互生，极斜向上，长圆状线形，长 1—3 毫米，宽不到 0.5 毫米，先端钝头或截形，常有浅缺刻，全缘，单一或分叉，平直，密接。叶脉叉状分枝，两面隆起，深褐色，无毛，末回裂片有小脉 1 条。叶为薄膜质，干后暗褐色，光滑无毛。叶轴深褐色，无毛，全部均有平直的翅，其下部的翅甚狭，向顶部渐宽，连叶轴宽约 1 毫米；羽轴及小羽轴曲折，全部均有翅。孢子囊群细小，多数，位于叶片上半部，着生于各个裂片的顶端；囊苞为等边三角状卵形，长约 1 毫米，圆头，全缘，深裂几达基部，其下的裂片不收缩。

本种在我国东部、南部及西南部分布较广，产于安徽(黄山)、台湾、江西(牯岭)、广东(翁沅)、四川(汶川、宝兴)、贵州(印江、都匀)、云南(德钦、贡山、维西、依江、大理、中甸、蒙自)等地。生长于山地密林下潮湿的岩石上，海拔 600—3600 米。除我国上述地区外，越南及缅甸也有分布，向北达到日本。

14. 庐山落蕨

Mecodium lushanense Ching et Chiu, sp. nov.

植株矮小，高仅 2—2.5 厘米。根状茎纤细，丝状，褐色，长而横走，疏被短节状毛，下面疏生短的纤维状的根。叶远生，相距 1—2 厘米；叶柄很短，长仅 2—10 毫米，丝状，褐色，几光滑，顶部有下延的狭翅；叶片卵形，长 1—1.5 厘米，宽约 1 厘米，先端钝，基部近心脏形，二回羽裂；羽片 3—4 对，互生，无柄，开展，斜卵形，长 3—4 毫米，宽 2—3 毫米，先端钝，基部下侧下延，密接；裂片 2—5 个，互生，斜向上，长圆形，长 1—2 毫米，宽约 1 毫米，先端钝圆或有浅缺刻，全缘，单一或分叉，平直，密接。叶脉叉状分

枝,两面隆起,深褐色,无毛,末回裂片有小脉1条。叶为薄膜质,干后暗褐色,光滑无毛。叶轴及羽轴深褐色,无毛,稍曲折,全部均有平直的翅,翅连轴宽约1毫米。孢子囊群生于叶片顶部的各个裂片顶端;囊苞卵形,长约1毫米,圆头,上缘略呈浅波状,唇瓣深裂达到基部,其下的裂片不缩狭,几与囊苞等宽。

产于江西(庐山,牯岭)及福建。生于阴湿的岩石上。

15. 王氏蹄蕨

Mecodium wangii Ching et Chiu, sp. nov.

植株高7—15厘米。根状茎细长,线状,粗约0.5毫米,褐色,长而横走,几光滑,下面疏生纤维状的根。叶远生,相距2—3厘米;叶柄长4—6厘米,细长,粗0.5—0.8毫米,褐色,光滑无毛,全部无翅;叶片卵状披针形,长5—8厘米,宽2.5—5厘米,先端渐尖,基部近心脏形,四回羽裂;羽片8—10对,互生,有短柄,开展,三角状披针形,长1—3厘米,宽5—15毫米,先端渐尖,基部偏斜,密接;一回小羽片4—6对,互生,有短柄或几无柄,开展,斜卵形,长6—10毫米,宽3—5毫米,先端钝,基部斜楔形,间隙宽1—2毫米,基部下侧一个常复盖叶轴;二回小羽片3—4对,互生,无柄,斜向上,阔楔形至近于扇形,长3—4毫米,宽2—3毫米,先端钝或截形,基部下侧下延,密接;末回裂片2—4个,互生,极斜向上,长圆状线形,长1—3毫米,宽约0.5毫米,先端钝头或截形,常有浅缺刻,全缘,单一或分叉,平直,密接。叶脉叉状分枝,两面稍隆起,深褐色,无毛,末回裂片有小脉1条。叶为薄膜质,干后暗绿褐色,光滑无毛,细胞壁厚而均匀一致。叶轴深褐色,无毛,全部均有平直的翅,其下部的翅甚狭,向顶部渐宽,连叶轴宽约0.8毫米,叶轴的上部很曲折;羽轴及小羽轴曲折,全部均有翅。孢子囊群细小,多数,分布于叶片全部或上部2/3,着生于各部裂片的顶端;囊苞圆形或扁圆形,直径约1毫米,上缘有浅钝齿,深裂达到基部,其下的裂片缩狭如柄。

本种为云南西北部(维西)特产。生长在林下溪边树干上,海拔2800—3600米。

本种与我国东部、南部及西南部常见的小果蹄蕨 *M. microsorum* (v. d. B.) Ching 很相似,但其囊苞为圆形,上缘有浅钝齿,其下的裂片狭缩如柄,故易分别。

16. 丽江蹄蕨

Mecodium likiangense Ching et Chiu, sp. nov.

植株高4—7厘米。根状茎纤细,丝状,褐色,长而横走,几光滑,下面疏生纤维状的根。叶远生,相距1.5—2厘米;叶柄长2—5厘米,丝状,褐色,光滑无毛,两侧有易脱落的狭翅,下延至叶柄中部以下或有时接近基部;叶片三角状卵形,长2.5—3.5厘米,宽2.5—4厘米,基部最宽,先端钝圆,基部为心脏形,三回羽裂;羽片4—6对,互

Rhizomate filiformi, late repente, subglabro; frondibus distantibus, stipite 6 cm longo, tereti, uti tota planta glaberrimo, per totam longitudinem exalato, olivaceo; lamina 6—8 cm longa, 5—6 cm basi lata, ovato-delloidea, acuminata, tri-quadrinatifida, rachi flexuosa, exalata; pinnis ca. 10-jugis, alternis, contiguis, basalibus maximis, deltoideis, 3—3.5 cm longis, 2—2.4 cm latis, subacuminatis, breviter petiolatis; pinnulis 4—6-jugis, anadromice divisio, basali anteriori racheos tegente, omnibus flabellatim furcatis, rachillis anguste alatis; segmentis ultimis 3 mm longis, 1 mm latis, linearibus, apice truncatis, colore in sicco obscure viridi, nervis fere concoloribus; omnibus segmentis soriferis, indusiis suborbicularibus, sat magnis, quam laciniis soriferis duplo vel triplo latioribus, basi brevi-cuneatis, extus subtruncatis vel rotundatis, usque ad basin divisio, viridibus.

Yunnan occid., Wei-si Hsien, Yeh-chih, 3500 m alt., leg. C. W. Wang No. 68672, VIII, 1935.

16. **Mecodium likiangense** Ching et Chiu, sp. nov.

Rhizomate filiformi, late repente, subglabro; frondibus distantibus, erectis, stipite 3—4 cm longo, atro-fusco, uti tota planta glabro, tereti, usque ad vel ultra medium angustissime marginato, aetate exalato; lamina 3—4 cm longa et lata, deltoideo-ovata, tripinnatifida, rachi rachilisque valde flexuosis et ubique alatis; pinnis 5—6-jugis, alternis, patentibus, ca. 2 cm longis, 1.5 cm latis, ovatis; lobis ultimis 3—5 mm longis, 1.2 mm latis, lineari-lanceolatis, obtusis, margine planis, integris, colore sicco obscure viridi, costis nervisque prominulis, olivaceis, nudisque; soris apices segmentorum summorum frondis solum occupantibus, majusculis, quam laciniis soriferis paulo latioribus, indusiis suborbicularibus, magnis, basi immersis, extus subtruncatis et irregulariter denticulatis, obscure viridibus.

Yunnan occid., Likiang, Snow Mountain, eastern flank, 2700 m alt., leg. K. M. Feng No. 9148, VIII, 23, 1942, on rocks under forest.

18. **Mecodium ovalifolium** Ching et Chiu, sp. nov.

Epiphyticum ad truncos arborum, rhizomate filiformi, ramosissimo, intertexto, pilis rufis, patentibus dense vestito, stipite setiformi, tereti, atro-fusco, glabro, per totam longitudinem exalato; lamina late ovata, 1—1.5 cm longa et lata, obtusa, basi subcordata, bipinnatifida; pinnis 3—4-jugis, ovatis, basi ad rachidem anguste alatum adnatis, confertis vel imbricatis, flabellatim furcatis; lobis ultimis 2 mm longis, 1 mm latis, obtusis, integris, planis, juvenilibus saepe plus minusve longitudinaliter convolutis, colore flavescente viridi; nervis tenuissimis, parenchymate concoloribus; soris in lobis superioribus apicalibus, latioribus quam lobis soriferis, indusii valvis anguste ovatis, subacutis, integris, ad basin divisio, receptaculo incluso.

Yunnan occid., Likiang, Snow Mountain, 2700 m alt., leg. K. M. Feng No. 9152, VIII, 23, 1942.

20. **Mecodium lushanense** Ching et Chiu, sp. nov.

Rhizomate filiformi, late repente, sed nodoso, sparse rufo-piloso; frondibus distantibus, erectis, stipite 3—5 mm longo, filiformi, subglabro, fere usque ad basin attenuatim alato; lamina ovata aut ovato-oblonga, 1.4—2 cm longa, 1 cm lata, obtusa, basi subcordata, bipinnatifida; pinnis 5—7-jugis, confertis, ovatis, basalibus nec abbreviatis, basi cum rachi flexuosa alata junctis, profunde pinnatifidis; pinnulis utroque 1—2, bipartitis; lobis ca. 2 mm longis, 1 mm latis, linearibus, apice emarginatis, margine planis, integris; colore in sicco obscure brun-

neo, paginis utrisque glabris, nervis rubidis, prominulis; soris in lobis superioribus apicalibus, sparsis, indusiis ovatis, obtusis, integris, basi paulo immersis, quam lobis soriferis non vel vix latioribus, fere usque ad basin divisus, pallide brunneis, receptaculo non exserto.

Kiangsi, Lu-shan, Emerald Pool, on shaded dripping rocks, leg. *C. E. DeVol* No. 525, VII, 23, 1934; ibidem, leg. *H. H. Hu* No. 2079 (1931). Fukien, without locality, leg. *H. H. Chung* No. 3854 (1925).

21. **Mecodium szechuanense** Ching et Chiu, sp. nov.

Dense caespitosum, rhizomate filiformi, ramosissimo, intertexto; stipitibus 2 cm longis, 2—3 cm a se remotis, filiformibus, erectis, flexuosis, atro-purpureis, uti tota planta glabris, exalatis, vel saepe supra medium angustissime marginatis; lamina 3—4 cm longa, rarius longiore, 2 cm lata, ovata, obtusa, tripinnatida; pinnis 4—7-jugis, oblique patentibus, confertis, alternis, ca. 1.4 cm longis, dimidiato-oblongis, obtusis, basi utrinque inaequalibus, superiore rectis, inferiore cuneatis, pinnatifidis, rachi ubique alata; lobis ultimis 2—3 mm longis, obtusis, brunneis, nervis prominulis, atro-purpureis, margine planis, integris; soris in lobis acroscopicis terminalibus, indusiis angustioribus quam lobis soriferis, basi plus minusve subimmersis, fere ad basin divisus, valvis ovatis, obtusis, integris, receptaculo incluso.

Szechuan sept., without locality, leg. *C. Péi* No. 8267.

22. **Mecodium lofoushanense** Ching et Chiu, sp. nov.

Rhizomate filiformi, pilis rufis sparsis vestito; stipite 3—5 mm longo, usque ad basin cuneatim alato, vetusto exalato, tereti, uti tota planta glaberrimo; lamina 3—5 cm longa, ca. 2 cm basi lata, ovato-oblonga, subacuta, subtripinnatifida, rachi ubique alata; pinnis ca. 5-jugis, basalibus paulo minoribus, usque ad 1 cm longis, 7 mm latis, profunde pinnatifidis; pinnulis 3—4-jugis, bipartitis; lobis ultimis ca. 2—3 mm longis, obtusis, margine planis, integris, sicca obscure brunneis; soris in lobis superioribus apicalibus numerosis, indusiis quam lobis multo latioribus, fere ad basin divisus, valvis ovatis, subacutis, integris, receptaculo incluso.

Kwangtung, Lo-fou Shan, leg. *N. K. Chun* No. 41164, V, 29, 1930.

Hymenophyllum Sm.

3. **Hymenophyllum minuti-denticulatum** Ching et Chiu, sp. nov.

Rhizomate late repente, filiforme, pertenui, uti base stipitis sparse rufo-piloso; frondibus 1—2 cm distantibus, erectis, stipite filiformi, nigro, sparsissime rufo-piloso vel subglabro, per totam longitudinem exalato, tereti; lamina 5—7 cm longa, 3.5—5 cm lata, ovata vel paululum oblongo-ovata, apice obtusiuscula, tripinnatifida; rachi valde flexuosa, supra glabra, infra modeste rufo-pilosa; pinnis 6—8-jugis, alternis, subpatentibus, 1.3—1.5 cm longis, 1—1.3 cm latis, ovatis, imbricatis, e rachi angustissime alata oblique egredientibus, basalibus vix vel parum abbreviatis, sequentibus ambitu similibus, anadromice dispositis; pinnulis 5—6-jugis, ovatis vel sursum oblongo-dimidiatis, basi confluentibus, obliquis, pinnatifidis; segmentis ultimis 2—4 mm longis, vix 1 mm latis, linearibus, apice anguste acutis, margine minutissime et remote denticulatis; textura folii diaphana, pellucida, colore in sicco obscura, supra glabra, infra ad costas, costulasque sparse rufo-pilosa sed nervis nudis; soris in parte superiore frondis positus, in segmentis ultimis acroscopicis terminalibus, singulis vel saepe binis, indusiis oblongis, ca. 2 mm longis, 1 mm latis, apice obtusis vel rotundatis, basi cuneatis, in lobum brevem