

原、草甸或林下。

本种广布于温带或亚热带高山山地,自欧洲到亚洲西部、北部、喜马拉雅、北美洲、日本、澳洲、新西兰。

本种的形体,特别是不育叶片的大小和羽片的形状变化较大,有一种的变型(forma *subincisum* Roeper in Bot. Zeitschr. (1859) 9),其羽片外缘为扇状深裂,也产我国东北及陕西秦岭等地。

2. 长白山阴地蕨 多枝阴地蕨(东北草本植物志,第一卷)

Botrychium manshuricum Ching, sp. nov.*——*Botrychium ramosum* 王薇等,东北草本植物志,第一卷(1958) 21 页, 23 图, non Aschers. 1864.

根状茎短小,直立,有一簇较细长的疏根,基部有淡棕色的托叶紧包。总叶柄长 16 厘米,宽 4—5 毫米。营养叶片无柄,长 5 厘米,宽约 6 厘米,三角形,钝头,基部二回深羽裂,上部一回羽裂,基部一对羽片最大,近于对生,长 3 厘米,宽 2.4 厘米,卵状三角形,无柄,钝头,羽状深裂;裂片 2—3 对,基部一对稍大,长 1.2 厘米,宽 1 厘米,近斜方形,基部楔形,合生,边缘具圆缺刻或波状或全缘;第二对羽片和其上的各对羽片为单羽片,形同基部羽片上的小羽片,合生,边缘有缺刻,小裂片圆头,全缘;叶轴两侧有狭翅。叶为草质,干后绿色,无毛,表面平滑,叶脉明显。孢子叶自营养叶基部生出,全长 10 厘米,宽 5 毫米,粗壮,高超过营养叶片,孢子囊穗长 6—7 厘米,宽 5 厘米,三回分枝,无毛。

特产于东北(长白山区,梯子河温泉附近)。生山地针阔叶混交林下或桦木林下。海拔 1000—1700 米。

3. 劲直阴地蕨(东北草本植物志,第一卷)

Botrychium strictum Underw. in Bull. Torr. Bot. Club XX (1902) 52; C. Chr. Ind. Fil. (1905) 163; Nakai in Bot. Mag. Tokyo XL (1926) 380; Kitag. in Rep. Inst. Sci. Res. Manch. IV (1942) 130; H. Ito, Fil. Jap. Illustr. (1944) t. 509; 王薇等,东北草本植物志,第一卷(1958) 23 页, 25 图——*Osmundopteris stricta* Nishida in Journ. Jap. Bot. XXVII (1952) 276.

根状茎短,直立,具粗健肉质的长根。总叶柄长 25—32 厘米,淡绿色,多汁草质,干后扁平,宽约 4—5 毫米,几光滑无毛,惟向顶端分枝处有疏毛。营养叶片为广三角形,长约 18 厘米,基部宽 25—30 厘米,三回羽状深裂或近于三回羽状;侧生羽片 7—9

* 本卷所有新种的拉丁文记载见附录内有关种的相应的编号。

Botrychium Sw.

2. *Botrychium manshuricum* Ching, sp. nov.

Botrychium ramosum Wang Wei et al. in N. T. Liou, Fl. Pl. Herb. Chinae Bor.-Orient. I (1958) 21, f. 23, non Aschers. 1864.

Tota planta ad 28 cm alta, glaberrima, rhizomate breve, erecto, radicoso, stipite ad 17 cm longo, carnosio-herbaceo, sicco compresso, 4 mm lato; lamina sterili ambitu cordato-late-triangulari, bipinnatifiditate, 6 cm longa et lata; pinnis circa 6-jugis, infimis maximis, 3 cm longis, fere aequilatis, late deltoideis, sessilibus, fere ad costam in segmenta ambitu subrhomboides, 1.5 cm longa, 1 cm lata, basi sensim cuneata, contigua pinnatifidis; pinnis sequentibus segmentis pinnarum infimorum similibus, basi ad rachin connatis, sursum gradatim decrescentibus; textura tenuiter herbacea, in sicco viridi, glabra, margine segmentorum plus minusve remote crenata aut leviter crenato-incisa; nervis in segmentis furcatis, tenuibus, infra prominulis, supra obscuris. Panicula fertili ad 10 cm longa, obdeltoidea, e basi laminae sterili oriunda, petiolo ad 5 cm longo et infra medium 3 furcato suffulta, tripinnatisecta, ramulis laxis, patentibus, sporangiis sessilibus, brunneis, sparsis.

North-eastern China (Manchuria), Chang-pei Shan, Fu-soong Hsien, Tie-tsze Ho, in the vicinity of the hot spring, alt. 1710 m, under forest, leg. N. T. Liou No. 1663, VII, 24, 1950.

5. *Botrychium yunnanense* Ching, sp. nov.

Species inter *B. virginianum* (L.) Sw. et *B. lanuginosum* Wall. a prima differt panicula fertili e basi aut paulo supra basin rhachidis oriunda, dentibus segmentorum acutis, brevioribus paucioribusque, a secunda panicula nec a medio vel infra medium rhachidis egressa, dentibus segmentorum acutis, brevioribus; ab duobus foliis sterilibus minoribus, tenuioribus, in sicco flavescentibus aut flavescenti-viridibus recedente.

Yunnan, Tali, haut Tchang Chan, leg. Ducloux No. 55 (typus), XI, 22, 1905; Kunming, Gion-tso-sze, leg. R. C. Ching, VI, 1952; Mengtze, leg. Hancock, 1892—95; Soong-ming Hsien, Ko-tung, leg. K. M. Feng No. 50275, XI, 9, 1953; Kong-shan Hsien, Chiu-kiang, west of Champutung, leg. C. W. Wang No. 67157, XI, 1935, alt. 1700 m. Kwangsi, Ling-yin Hsien, Miao Shan, leg. R. C. Ching No. 7241, VI, 1928.

6. *Botrychium decurrens* Ching, sp. nov.

Species *B. virginiano* (L.) Sw. proxime affine, differt majore, subglabra, pinnis et pinnulisque sessilibus, basibus ad rachim rachillamque late decurrentibus, pinnulis basalibus primi ordinis valde catadromis et late labato-pinnatifidis, segmentis ultimis paucioribus, majoribusque, dentibus majoribus et magis patentibus.

Szechuan, without locality, West China Academy of Science No. 4729.

8. *Botrychium modestum* Ching, sp. nov.

Species *B. lanuginoso* Wall. valde affine, sed multo minor, pinnis lateralibus supra pinnam basalem magis angustioribus, lanceolatis, a se spatio lato separatis, solum simpliciter