

柄，柄长1—1.5厘米，叶片椭圆形，长1—1.5厘米，宽5—6毫米，微有波状浅裂，裂片圆钝或亚截头，多少有细圆齿或亚全缘。花腋生于从茎上，有花梗，梗长1—1.5厘米；萼长圆筒形，管长1.2厘米，宽4毫米，前方开裂，齿2枚，长5毫米，叶状；花冠伸出的部分约与萼等长，长1.2—1.5厘米，有疏毛，盔紫色，直立部分长8毫米，向下弯曲之喙作S形，较直立部分为短，长4—5毫米，下唇黄色，很大，无毛，宽15毫米，侧裂宽1.2厘米，较短而凹头的中裂大得很多，后者长5—6毫米，宽5毫米；花丝有毛。花期7月。

为我国特有种类，产陕西秦岭中。

本种我们尚未采得标本，记载主要依据第尔斯氏的原文，其中花丝有毛一点，依李惠林氏指出，模式标本的解剖，只看到前面1对有毛而后方1对无毛。

系101 新粗管系——Ser. *Neolatitubae* Tsoong, ser. nov.

288. 新粗管马先蒿 图版 LXXII, 1—3

Pedicularis neolatituba Tsoong, in MS. H. Smith: Plantae Sinenses, Scrophular. (1950) ined. ?; et in Addenda 418.

多年生草本，低矮，高很少超过10厘米，干时多少变黑，体态极似菌生马先蒿，根茎短，发出多少肉质的支根。茎常几不存在，或有时多少伸长达2—4厘米，软弱弯曲，黑色无毛或几光滑。叶多基生，有长柄，柄长达23毫米，与叶片的中脉都被有长而伸展的多细胞毛，至后脱落；叶片披针状长圆形至狭披针形，长10—20毫米，宽3.5—7毫米，羽状全裂，裂片每边6—8枚，卵形至长圆形，其间距小于裂片自身，缘有重锯齿，齿常反捲，茎叶常假对生，稍较小，柄基常稍膜质膨大，长达15毫米，有毛。花单生叶腋，而形成假对，或以长梗直接自基叶腋中发出，梗长者可达4厘米，色暗黑，有腺毛；萼长7—9毫米，管前方开裂至3/4，裂口强烈膨大，主脉3条，不发达，次脉多条，在上部形成网纹，齿3枚，后方1枚小而针形，其余很发达，中部狭缩成柄状，上部三角形，几为相等的三裂，裂片有裂片状齿，缘强烈反捲；花冠红紫色，管伸长达5厘米，径达0.7毫米，外面被有浅紫色的伸展短毛；盔直立部分很短，在2毫米处作强烈拳状扭捲，使其上部转向后方，前缘有耳状凸起，含有雄蕊部分长约4毫米，宽2.5毫米，喙长达6—7毫米，端微微2裂，作半环形捲曲；下唇很大，宽过于长，缘微有波状齿，长20毫米，宽24毫米，裂片几相等，中裂稍较小，两边基部多少耳形突出，而后渐渐狭而为极宽之柄，侧裂为纵置的肾脏形，两端均为耳形，前方的耳与中裂基部之耳组成小孔；雄蕊花丝前方1对有密毛，后方1对有疏毛。

为我国特有种类，产四川北部，生于海拔4,700米的高山草地中。

亚羣 21 根叶亚羣——Subgrex RHIZOPHYLLUM——Sect. *PHANERANTHA*, Li, l. c. 143.—Sect. *DOLICHOMISCUS* Li, l. c. 157, pro parte.—Sect. *SCHIZOCALYX* Li, l. c. 177, pro parte.

系 102 火焰系——Ser. *Flammeae* Prain, in Ann. Bot. Gard. Calc. III (1890) 100.

分 种 检 索 表

- 1(2) 苞片綫状披針形至綫形, 端有时叶状; 莖齿披針形至綫形, 极少狭长三角形.....
.....289. 欧氏馬先蒿 *P. oederi* Vahl
- 2(1) 苞片菱状卵形, 上部具鈍齿而下部楔形全緣; 莖齿三角形.....
.....290. 直蕊馬先蒿 *P. orthocoryne* Li

289. 欧氏馬先蒿

Pedicularis oederi Vahl, in Hornem. Dansk. Plantel. ed. 2 (1806) 380; Prain, in Ann. Bot. Gard. Calc. III (1890) 181; Limpr. in Repert. Sp. Nov. XX (1924) 202; Li, in Proc. Acad. Nat. Sci. Philad. CI (1949) 86.—*P. versicolor* Wahlenb. Veg. Helvetic. (1813) 118; Maxim. in Bull. Acad. St. Pétersb. XXIV (1877) 88, et XXXII (1888) 618, et in Mél. Biol. X (1877) 133, et XII (1888) 918.

欧氏馬先蒿欧氏亚种欧氏变种欧氏变型

Pedicularis oederi Vahl subsp. ***oederi*** var. ***oederi*** forma ***oederi***—*P. versicolor* Wahlenb. var. *europaea* Maxim. in Bull. Acad. St. Pétersb. XXXII (1888) f. 177a, et in Mél. Biol. XII (1888) f. 177a.—*P. oederi* Vahl var. *typica* Prain, in Journ. As. Soc. Beng. LVIII (1889) 276, et in Ann. Bot. Gard. Calc. III (1890) 181, t. 34 A; Limpr. in Repert. Sp. Nov. XX (1924) 202; Li, in Proc. Acad. Nat. Sci. Philad. CI (1949) 87.

多年生草本, 体低矮, 高5—10厘米, 极少有达15厘米以上者, 干时变为黑色。根多数, 多少紡錘形, 粗者径可达1厘米左右, 肉质; 根頸粗, 頂端常生有少数卵形至披針状长圓形的宿存膜質鱗片。茎草質多汁, 常为花葶状, 其大部长度均为花序所占, 多少有綿毛, 有时几变光滑, 有时很密。叶多基生, 宿存成丛, 有长柄, 柄长者达5厘米, 一般較短, 毛被亦多变, 叶片长1.5—7厘米, 線状披針形至綫形, 羽状全裂, 在芽中为拳捲, 而其羽片則垂直相迭而作魚鰓状排列, 此种特征有时在叶子舒放后很久尚留存, 裂片多數, 常緊密排列, 其間的距离一般小于羽片本身, 其数每边10—20, 多



subtus manifeste reticulata. Flores pedicellati, pedicellis haud raro basalibus, vel ex axillis foliorum caulinarium, ubi ut illa saepe dissite oppositis, ad 1 cm. longis, nigrescentibus et leviter pubescentibus; calyx cylindrico-campanulatus, fere glaber, margine ciliatus, tubo 5 mm. longo, antice ultra 1/3 fisso, tenuiter membranaceo hyalino, nervis primariis 5, gracilibus sed distinctis, nervis intercostalibus 6—7, prope dentes calycis laxissime reticulatus, dentibus 5, postico-lateralibus maximis, antereo-lateralibus minimis, omnibus e basi deltoidea membranacea sursum attenuatis, postico-lateralibus apice foliaceo-expansis exceptis non dilatatis, serratulis minutis tantum praeditis; corolla purpureo-rubra, tubus 25 mm. longus, extus laxe pubescens, galea margine antica circ. 5 mm. alta, prope apicem utrinsecus auriculis parvis munita, apice circ. angulo 45° in partem antherigeram validam 5 mm. longam 3.5 mm. latam inflexa, fronte oblique attenuata sed leviter elevata, antice plus minus subito in rostrum rectum 4 mm. ca. longum apice truncatum leviter lobatum angustata; staminum filamentis omnibus, anterioribus densius, barbatis.

Szechuan (Sikang): "Kangting Distr., Ta-pao-shan in prato alpino aperto, ca. 4700 m.s.m. (H. Smith 11460), VIII, 22, 1934", (typus).

288. **Pedicularis neolatituba** Tsoong, sp. nov. in MS. H. Smith: Plantae Sinenses, Scrophular. (1950). (Ser. Neolatitubae)

Species habitu proprio *P. mycophilae* Marq. et Shaw aemulens, sed calyce antice profunde fisso valdeque ventricoso *P. franchetiana* Maxim. et *P. mussotii* Franch. simillimo, a utraque tubo corollae multo magis elongato galeaque ad apicem partis verticalis valde contorto excellens. Ab omnibus speciebus longitubis et imprimis contortigaleatis habitu peculiare petiolis elongatissimis primo aspectu distinguenda.

Perennis, humilis, vix ultra 10 cm. alta, siccitate plus minus nigrescens, habitu illo *P. mycophilae* simillima. Rhizoma breve, radiculas paulo carnosas emittens. Caules saepe vix evoluti vel plus minus elongati ad 2—4 cm. longi, debiles, flexuosi, glabri vel fere laeves. Folia plerumque basalia, longe petiolata, petiolis ad 23 mm. longis, ut costa laminae pilis patentibus longis multicellularibus demum deciduis vestitis; lamina lanceolato-oblonga usque anguste lanceolata, 10—20 mm. longa, 3.5—7 mm. lata, pinnatisecta, segmentis utrinsecus 6—8, ovatis usque oblongis, margine duplicato-serrata, serratulis saepe reflexis, folia caulinaria saepe quasi opposita, paulo minora, petiolis basi saepe membranaceo-dilatatis, ad 15 mm. longis, pilosis. Flores singulus axillares vel nonnulli quasi oppositi, vel etiam ob pedicellos elongatos ad 4 cm. longos intense coloratos glandulosos ex axillis foliorum basali; calyx 7—9 mm. longus, tubus antice ad 3/4 fissus, fissura valde dilatata, nervis primariis 3, vix bene evolutis, iis secundariis multis, superne anastomosantibus, calycis dentes 3, postico minore subulato, reliquis medio stipitato-angustatis, superne deltoideis, fere aequaliter trilobatis, lobis lobulato-dentatis, margine valde reflexis; corolla purpureo-rubra, tubus elongatus, 5 cm. longus, 0.7 mm. diam., extus pilis brevibus dilute purpureis patentibus praeditus, galea parte verticali brevis, 2 mm. supra basin circinata incurva margine antica auriculata, parte antherigera circ. 4 mm. longa, 2.5 mm. lata, antice in rostrum tenue 6—7 mm. longum apice leviter bilobum sensim

abeuntia, labium inferius magnum, latius quam longius, margine minute undulato-denticulatum, 20 mm. longum, 24 mm. latum, lobis 3, fere aequalibus, lobo medio paulo minore, basi utrinque plus minusve auriculato, deinde in stipitem latum oblique angustato, lobis lateralibus longitudinaliter reniformibus, utrinque auriculatis; staminum filamentis anticis dense pilosis, posticis sparsius barbatis.

Szechuan: Dongrergo, in prato alpino, terroso, ca. 4700 m.s.m. (H. Smith 3162), VIII, 9, 1922, (typus).

294. **Pedicularis habachanensis** Bonati subsp. **multipinnata** Tsoong, subsp. nov.

A subsp. *habachanensis* differt habitu elatiore, pinnis foliorum multijugatis, utrinsecus circ. 13—23, iisque prope basin folii saepe multo minoribus fere minutis.

Yunnan: without exact loc. (T. T. Yu 11632), (subsp. type).

312. **Pedicularis tricolor** Hand.-Mazz. var. **aquiretusa** Tsoong, var. nov.

Haec subsp. differt lobis lateralibus ut in lobo medio apice retusis.

Yunnan: "Taucheng Distr., Woyung, alt. 3400 m., margin of thickets (T. T. Yu 12947), VIII, 28, 1937; fl. deep lemon yellow, light on margin, common." (var. type).

313. **Pedicularis chinensis** Maxim. forma **erubescens** Tsoong, f. nov.

A forma *chinense* differt floribus nec flavis, sed dilute purpureo-rubris.

Hopei: Hsiaowutai Shan, Nan-tai (Y. W. Tsui 2833), VIII, 28, 1950 (f. type). Shan-ying, Tsao-tu Shan (Y. W. Tsui 2359), VIII, 11, 1950.

50. **Pterygiella** Oliver

3. **Pterygiella cylindrica** Tsoong, sp. nov.

Species *P. nigrescenti* Oliver et *P. duclouxii* Franch. affinis, sed caule ramulisque cylindricis nec alatis, foliis trinervatis facile distinguenda.

Annua, siccitate leviter nigrescens, erecta, circ. 25—60 cm. alta, dense pubescens. Caulis saepe simplex, solidus, basi plus minus lignescens, tota longitudine cylindricus, nec sulcatus nec alatus, diam. 2—2.5 mm., gracilis et strictus, pilis griseo-brunneis patentibus dense vestitus, superne saepius inferne raro ramosus, ramis oppositis, gracilibus, brevibus, superioribus saepe male evolutis folia parva dua tantum gerentibus. Folia opposita, omnia caulinaria, inferiora saepe evanida, reliqua approximata inter se separata, fere sessilia, lanceolato-linearia usque linearia, tenuiter coriacea, circ. 2.5—3.5 cm. longa, 4 mm. lata, utraque pagina pilis griseo-brunneis appressis densissime obtecta, nervis 3, medio venis lateralibus 2—3 laxe sed distincte reticulatis instructo, superne immersis subtus elevatis, margine revoluta, integra vel leviter undulata. Inflorescentia terminalis racemosa, usque ad 12 cm. longa, densiflora; bracteis foliaceis, flores superantibus vel aequantibus, utrinque leviter ferrugineo-pubescentibus; pedicellis brevibus gracilibusque circ. 3 mm. longis, densissime pilis brevibus ferrugineis vestitis, bracteolas 2 subulatas gerentibus; calyx campanulatus, herbaceus, fructifer textura durior, leviter bilabiatus, circ. 13—16 mm. longus, 8 mm. diam., utraque pagina pilis densis extus glandulisque brevibus intermixtis indutus,