

縮小,側裂斜橢圓形;雄蕊着生于花管的中部,2对花絲上部均被毛;子房卵圓形,長約2毫米,柱头稍伸出于盔外。蒴果为歪斜的圓卵形,扁平,長約5毫米,端有鈎状小凸尖。

为我国特有种,产于四川西部。

217. 河南馬先蒿 图版 LVIII, 4—6

Pedicularis honanensis Tsoong, sp. nov., in Addenda 413.

多年生草本,干时多少变为黑色,高約20—26厘米,近于无毛;主根圓錐形,垂直向下,粗壮,肉質,長約7厘米,直径約5—6毫米,近下端有分枝,須根少,多束生于根頸,根頸有少数寬三角形厚膜質鱗片。茎单出,或自根頸部发出3—4条,中空,基部不木質化,圓柱形,上部稍具稜角,被短毛,无毛綫,下部近于无毛;茎上下部均有分枝,下部的分枝較長,上部者短,有时枝上再次分枝,第二級分枝則仅長3厘米,纤细,柔弱,被短毛。叶基生者常早落,具长柄,柄長約2厘米,扁平,沿中肋有狭翅,基部及边缘有短纤毛,茎生者互生,柄似基生叶者而較短,長約6—10毫米;叶片长卵形或卵状长圓形,長約3—5厘米,寬約15—17毫米,膜質,两面皆无毛,下面有极疏的白色肤屑状物,碎冰紋的网脉清晰,在网眼中的叶面凸起,緣羽状全裂,裂片每边7—9片,疏稀,披針状长圓形,至綫状披針形,寬約2—3毫米,边有羽状疏锯齿,齿端漸尖,有胼胝質小刺尖。总状花序生于枝或分枝的頂端,伸长,約占枝或分枝的1/3以上,极疏稀,頂端稍較紧密;苞片叶状而裂片較少;花梗長可达14毫米;萼管卵圓形,膜質,長約4—5毫米,外面密被短絨毛,前方开裂至管的1/2处,3条主脉較明显,側脉約7条,清楚,在靠近萼管上端处有疏网紋串連;萼齿3枚,草質而較厚,几与萼管等長,后方的一枚稍短,均呈叶状,並掌状3深裂,裂片上有疏而端尖的大锯齿;花冠紫紅色,長約10毫米,花管長約4—5毫米,与萼管等長,盔的直立部分短而寬,長約5毫米,頂端約以60°角轉折为含有雄蕊部分,在轉角处的前緣生有小耳状凸起一对,含雄蕊的部分稍膨大,前方漸狭成为短而粗的喙部,后者作简单的半环状弓曲,長約5—6毫米,近端处寬达0.6毫米,頂端微缺,自其近基部开始直达尖端,沿上縫綫生有一条极寬的鸡冠状凸起,下唇長約7毫米,寬約9毫米,3裂,有緣毛,中裂較小,一半凸出于側裂之前,前部为橫的橢圓状长方形,長約2毫米,寬約3毫米,基部狹縮为長約1毫米的短柄,側裂为纵置的肾脏形,大于中裂約3—4倍;雄蕊花絲全部被长柔毛。蒴果

图版 LVIII 1—3. 伯氏馬先蒿 *Pedicularis petitmenginii* Bonati, 1. 植株×1; 2. 花×3; 3. 花萼×3。4—6. 河南馬先蒿 *P. honanensis* Tsoong, 4. 植株×1; 5. 花×3; 6. 花萼×3。7—8. 全裂馬先蒿 *P. dissecta* (Bonati) Pennell et Li, 7. 花×3; 8. 花萼×3。(繪图人吳彰樺)



未成熟,斜卵圓形,長約 5 毫米,寬約 3.5 毫米,端有小凸尖。 花期 7—8 月;果期 8 月。

为我国特有种,仅見于河南卢氏县,生于海拔 1,420 米的灌木林緣。

218. 全裂馬先蒿 图版 LVIII, 7—8

Pedicularis dissecta (Bonati) Pennell et Li, in Proc. Acad. Nat. Sci. Philad. CI (1949) 142, f. 191.——*P. petitmenginii* Bonati var. *dissecta* Bonati, in Bull. Soc. Bot. France LV (1908) 245; Limpr. in Repert. Sp. Nov. XX (1924) 246.——*P. davidii* Franch. var. *flaccida* Diels ex Bonati, in Bull. Soc. Bot. France LV (1908) 245, nom. nud., in syn.

多年生草本,干时变为黑色,高約 20—35 厘米,被短毛或无毛;根圓錐形,垂直向下,長約 5—6 厘米,老时肉質增粗,直径可达 5—7 毫米,无側根,根頸稍有須根,其端生有少数卵形膜質鱗片。茎常自基部发出多条,多 4—10 数,有时亦有单条而在基部分枝者,上部有时也有分枝,茎枝側出者常弯曲上升,中央者直立,都多少纤细,但老时較坚挺,中空,基部不木質化,稍具稜角,被短毛,有不清楚的毛綫。叶互生,基出者早落,其膜質叶柄常宿存,柄長約 3—3.5 厘米,扁平,纤细,沿中肋有狭翅,基部及边沿被长纤毛,茎生叶之柄較短,長約 1.5—2 厘米;叶片卵状長圓形,膜質,長約 3—3.5 厘米,寬約 1.2—1.6 厘米,两面无毛,下面有清晰的碎冰紋网脉,网眼中的叶面凸起,邊緣羽状全裂,裂片每边 6—9 枚,疏距,卵形至綫状披針形,寬約 1—2 毫米,基部下延沿中肋成狭翅,邊緣羽状浅裂或有缺刻状重鋸齿,齿端有胼胝質小刺尖。总状花序頂生,伸长,长可达枝的 1/2,花疏稀;苞片叶状,有柄;花具长梗,长可达 2.5 厘米,纤细,开花时向上伸直,花后伸长而作种种弯曲,密被短毛;萼为不整齐的卵圓形,長約 4—6 毫米,膜質,被短毛或近于无毛,前方开裂至管的中部,裂口多少向前膨脹,主脉 3 条稍凸出,明显,側脉多条不整齐,近管部頂端有疏稀网紋,萼齿 3 枚,長約与萼管相等或稍短,草質,綠色而較厚,不等,后方的一枚較小,綫形或大針形,端急尖,全緣,或上部有一对鋸齿,側齿寬大,在基部上作掌状 3 深裂,裂片上有 1—2 对疏齿,基部狭成短柄;花冠黃色,長約 10—12 毫米,花管伸直,比萼稍长,外微被短毛,盔直立部分短,頂端前緣无耳状凸起,以直角轉折成为稍稍膨大的含雄蕊部分,并向右扭折,因此使盔頂向下,含有雄蕊部分的前端逐漸变狭,为長約 6 毫米的喙,端微缺,近端处寬約 0.3 毫米,亦反指向上并作半环状捲曲,自盔額向前至近喙端处有很狭的鸡冠状凸起一条;下唇寬大,基部心脏形,3 裂,有緣毛,中裂較小,約凸出一半,前方圓形,基部狭縮成明显的柄,側裂甚大,斜橢圓形;雄蕊着生于花管的近基处,2 对花絲全被长柔

215. *Pedicularis davidii* Maxim. var. *pentodon* Tsoong, var. nov.

A var. *davidii* differt calycis dentibus 5, inaequalibus.

Szechuan: Ma-cr-h-kang, alt. 3280 m. (H. Li 71604), VI, 20, 1957 (subsp. type).

Pedicularis davidii Maxim. var. *platyodon* Tsoong, var. nov.

A var. praecedente differt calycis dentibus lateralibus majoribus, latioribus quam longioribus, distincte serratis, textura crasioribus.

Szechuan: Wu-hsieh, Shan-keng-shu, alt. 2300 m. (K. L. Chu 2061), VIII, 27, 1935 (subsp. type).

217. *Pedicularis honanensis* Tsoong, sp. nov. (Ser. Dissectae)

P. dissecta (Bonati) Pennell et Li nostrae proxima, recedit galea apice partis verticalis utrinque non auriculata, rostro multo minus validiore, apicem versus 0.3 mm. tantum lato (nec 0.6), brevius angustiusque cristato, dente postico calycis subulato (nec dentibus omnibus subpalmate divisus), radiceque validiore, ultra 5 mm. diam. etc.

Perennis, siccitate plus minus nigrescens, 20–26 cm. alta, fere glabra. Radix perpendicularis, valida, carnosa, conica, circ. 7 cm. longa, 5–6 mm. diam., inferne ramosa, radículas fibrosas paucas gerens; collo squamis paucis late deltoideis membranaceis ornato. Caules singuli, vel 3–4, fistulosi, basi haud lignosi, cylindrici, superne plus minus angulati, breve pilosi, inferne fere laeves, undique ramosi, ramis inferioribus longioribus, eisque haud raro iterum ramosis, ramulis tantum 3 cm. longis, gracilibus, breve pubescentibus. Folia basalia evanida, longe petiolata, petiolis ad 2 cm. longis, complanatis, secus costam anguste alatis, margine breve ciliatis; folia caulinarum alterna, brevius petiolata; lamina anguste ovata vel ovato-oblonga, 3–5 cm. longa, 15–17 mm. lata, membranacea, utrinque glabra, subtus sparsissime albo-furfuracea, distincte reticulata, areolis convexis, margine pinnatisecta, segmentis utrinsecus 7–9, remotis, lanceolato-oblongis usque lineari-lanceolatis, circ. 2–3 mm. latis, margine remote serratis, dentibus acuminatis, cartilagineo-cuspidatis. Inflorescentia racemosa, elongata, laxissima, apicem versus solum densior; bracteae foliiformes sed segmentis paucioribus; pedicellis ad 14 mm. longis; calyx ovoideus, membranaceus, circ. 4–5 mm. longus, externe pilis brevibus submentellis obtectus, antice ad 1/2 fissus, costis 3 prominentioribus, nervis 7, distinctis, apicem tubi versus laxe reticulatus, dentibus 3, herbaceis, tubo semiaequilongis, postico brevioribus, omnibus foliiformibus, subpalmato 3-lobatis, lobis laxe apiculato-serratis; corolla purpureo-rubra, circ. 10 mm. longa, tubus 4–5 mm. longus, galea parte verticali brevis, circ. 5 mm. longa, apice sub angulo 60° inflecta, margine antice leviter auriculata, parte antherigera leviter inflata, antice sensim in rostrum breve, latum, semicirculariter curvatum, circ. 5–6 mm. longum, apice ad 0.6 mm. latum, leviter emarginatum, e basi ad apicem secus suturam dorsalem late cristatum attenuata, labium inferum 7 mm. longum, 9 mm. latum, trilobum, ciliatum, lobo medio minore, valde porrecto, antice horizontaliter elliptico-rectangulare, 2 mm. longo, 3 mm. lato, basi subito in stipitem 1 mm. longum contracto, lobis lateralibus reniformibus, 3–4 plo longioribus quam lobo medio; filamentis staminum omnibus longe barbatis. Capsula vix matura

oblique ovoidea, circ. 15 mm. longa, 3.5 mm. lata, apiculata.

Honan: Lu-shih Hsien, Lao-chün Shan, alt. 1420 m. (K. M. Liou 5094), VIII, 12, 1935, (type).

225. **Pedicularis urceolata** Tsoong, sp. nov. in H. Smith: *Plantae Sinenses*, Scrophular. (1950). (Ser. Urceolatae).

Species ob habitum, folia stricte opposita, corollae colorem (fauce, parte juxta eam labii inferioris, parteque verticali galeae flavescens, parte reliqua rubram), partem verticalem galeae elongatam affinitatem *P. komarowii* Bonati et *P. binariae* Maxim. proponere videtur, imprimis tubo corollae multo magis elongato eisdemque vix congruit. Quo caractere, ut videtur, inter species cum foliis oppositis verticillatisque, praeter *P. cyathophyllum* Franch. fere solum praedito, haec species imo basibus foliorum bractearumque in cyathos connatis foliis verticillatis valde distincta.

Annua, plus minus nana, herbacea sed basi demum plus minusve lignescens, in sicco nunquam nigrescens. Radix ignota. Caules saepe e rhizomate plures, caespitosi, centralis validior, ad 1.4 mm. diam., erectus, exteriores oblique ascendentes, eramosi, befariam pubescentes. Folia basalia pauca, saepe evanida, longe petiolata, petiolis ad 25 mm. longis, caulinarum uniparia vel nulla, longius vel brevius petiolata, basi saepe membranaceo-dilatatis, 6—15 mm. longis; lamina elliptico-oblonga usque lanceolato-oblonga, pinnatipartita, majora ad 18 mm. longa 8 mm. lata, minora 7 mm. longa 2 mm. lata, lobis circ. 5 paribus, ovatis, incisodentatis, marginibus saepe revolutis, supra atroviridia, fere glabra vel in sulco costae mediae pubescentia, subtus glabra, manifeste reticulata, breviter albo-furfurea. Inflorescentia plus minus elongata pluriflora, longiora floribus inclusis 9 cm. longa, flores 12 circ. ferens, ea rami lateralium saepe pauciflora; bractae foliaceae, petiolis etiam brevioribus et membranaceodilatatis; pedicelli longi, sub flore 6 mm. longi, sub fructu ad 11 mm. elongati, e basi calycis ala membranacea unilaterale decurrenti, fere glabri; calyx membranaceus, urceolato-ovoideus, ore constrictus, 10 mm. longus, 3.5—4 mm. diam., nervis 10, 5 primariis 5 intercostalibusque, omnibus gracilibus, sparse albopilosis, apicem tubi versus venis transversalibus 1—2 laxissime anastomosantibus, calycis dentes 5, circ. dimidium tubi aequantes, postico subulato, 0.6—1 mm. longo, reliquis graciliter stipitatis, apice dilatatis atropurpureis, manifeste trilobatis, lobis serratis saepe reflexis, quorum postico-lateralibus majoribus, 4 mm. longis, 3 mm. latis; corolla rosea, sed apice tubi, parte verticali fauceque manifeste dilute-lutea, tubus 27—30 mm. longus, extus lineatim pubescens, galea parte verticali 5 mm. longa, 1.7 mm. lata, apice sub angulo recto in partem antherigeram dilatatam 5.5 mm. longam 3 mm. latam inflexa, antice in rostrum falcato-curvatum 5—6 mm. longum, apice integrum cito attenuata, labium inferum amplum, 8—9 mm. longum, 14 mm. latum, ciliatum, trilobum, lobo medio quam lateralibus oblique ellipticis basi valde auriculatis ultra suturam dorsalem galeae extensis multo minore, vix porrecto, late ovato, apice leviter cuculato; stamina ad apicem tubi affixa, filamentis omnibus glabris. Capsula calyce persistente accreto ad 13 mm. longo 6.5 mm. lato inclusa, vix matura tantum leviter exserta, 14 mm. longa, 5 mm. lata, loculis inaequalibus, plus minus