

系 15 甲拉系——Ser. *Kialenses* Li, in Proc. Acad. Nat. Sci. Philad. CI (1949) 83.

### 分 种 检 索 表

- 1(2) 花冠盔部下緣有須毛; 叶基出者不成密丛, 羽状全裂, 裂片綫形……………  
 …………… 34. 甲拉馬先蒿 *P. kialensis* Franch.  
 2(1) 花冠盔部下緣无須毛; 叶基出者成密丛, 羽状浅裂, 裂片多少三角状卵形……………  
 …………… 35. 扭喙馬先蒿 *P. streptorhyncha* Tsoong

#### 34. 甲拉馬先蒿 图版 VII, 4—5

***Pedicularis kialensis*** Franch. in Bull. Soc. Bot. France XLVII (1900) 22; Limpr. in Repert. Sp. Nov. XX (1924) 247; Li, in Proc. Acad. Nat. Sci. Philad. CI (1949) 84, f. 147.

多年生草本, 干时多少变黑, 高达 20 厘米。根細长, 单条, 长达 10 厘米, 略作紡錘形。茎单一或数条自基部发出, 上部不分枝, 有排列成行的毛。叶基出者較大, 长 14—20 厘米, 柄长 6 厘米, 茎叶較小而狹, 叶的外形为披針形, 上部者較狹, 均为羽状全裂, 軸有狭翅, 裂片約 8—16 对, 卵状披針形至披針形, 长达 9 毫米, 羽状深裂, 小裂片 3—6 对, 有不整齐的銳鋸齿。花序总状, 总花梗及軸上均有毛, 花多疏远, 下部者尤甚; 苞片叶状有柄, 裂片較狹, 生于花序上部者裂片仅二、三对; 花梗长达 3 毫米; 萼管状而狹, 前方深裂, 因而形状不整, 长 8 毫米, 主脉明显, 上被浅褐色长毛, 齿 5 枚, 后方一枚較小而全緣, 其余四枚基部狭縮, 端膨大多少叶状, 具圓而尖的鋸齿, 齿常反捲; 花冠紅色, 管略长于萼, 无毛, 下唇寬过于长, 网紋显明, 有緣毛, 三裂, 裂片倒卵形而具平鈍微凹之端, 中裂稍小于側裂, 长 4 毫米, 寬 3 毫米, 盔紫紅色, 基部稍前俯, 前端漸狹为喙, 在其与多少膨大的含有雄蕊的部分相接处突然由于向右挫折而指向下方, 因而使长綫形而捲曲的喙形成一个半环状而反指向上, 喙长 10 毫米, 自身在开花后期亦扭旋, 自基部至近端处被有浅褐色短須毛, 先端略作二裂; 雄蕊花絲后方一对被毛, 柱头略从喙端伸出。蒴果三角状披針形, 有短柄, 长 15 毫米, 自萼的裂口中斜伸而出, 两室不等, 先端具小凸尖, 基部圓形, 为宿萼所斜围, 成熟后自腹縫綫开裂。花期 6—7 月, 果熟 9 月。

为我国特有种, 产四川南部。生长于海拔 3,050—4,875 米的河边及林下。

#### 35. 扭喙馬先蒿 图版 VII, 1—3

***Pedicularis streptorhyncha*** Tsoong, sp. nov. in MS. H. Smith: *Plantae Sinenses*, Scrophular., (1950), et in *Addenda*, 397.

中下高低,高15—30厘米,多年生,干时变黑。根茎伸长达30厘米,径达5毫米,亚肉质,圆筒形,顶端常分为数枝,密被鳞片与老叶柄。茎丛生或单出,不分枝,有条纹,被疏毛。叶大部基生,有长柄,柄长达5.5厘米,薄而扁平,基部膜质,稍膨大而作鞘状,缘有毛;叶片长于叶柄,长2.5—18厘米,宽3—20毫米,线状披针形,羽状浅裂,裂片9—28对,三角状卵形,自身有具凸尖的重锯齿,大者长6毫米,宽5毫米,上面沿沟状下陷的中肋有短粗毛,他处无毛,背面中肋凸起,茎叶少数或无。花序疏总状,极似前一种,长达20厘米,花数很少,最多不过12枚,苞片叶状有短柄,柄很膨大;萼圆筒形,长11毫米,有疏毛或几无毛,前方开裂过于中部,具3齿,后方一齿大针形,全缘,长不达1.5毫米,侧齿二裂,裂片亚有柄,端有锯齿,长3—4毫米;花冠之管长13—15毫米,外面略有细毛或几光滑,下唇很大,长达18毫米,宽23毫米,裂片几相等,中裂倒卵形,端截头而微凹,长10毫米,宽13毫米,侧裂稍较狭,缘有不规则的波齿,盔直立部分长5—6毫米,在含有雄蕊的部分突然扭捲,然后渐细为伸长而作S形而且多少捲旋的喙,长达17毫米;花丝着生于花管下部 $\frac{2}{5}$ 处,基部强烈膨大,成为高凸之线而在管内下延,在着生点有毛,前面一对近端处有密毛。蒴果自宿萼裂口中斜伸而出,而基部为其所斜包,三角状披针形,锐尖头,具小凸尖,基部圆形,多少侧扁,长达20毫米,宽7毫米,黑紫色有光泽;种子少数,约6颗,长圆形略作肾脏形弓曲,长约3毫米,宽1.4毫米,有细致的纵行波状条纹。花期7—8月;果8月成熟。

为我国特有种,产四川西北部,生于海拔3,950—4,000米的有苔藓的杜鹃灌丛林中,或高山櫟的丛林中。

羣2 新旌节羣——*Grex NEOSCEPTRUM* Tsoong, *grex nov.*——*Sect. APOCLADUS* Li, in *Proc. Acad. Nat. Sci. Philad.* CI (1949) 10, *pro parte, quoad Ser. Striatae.*——*Sect. LASIOGLOSSAE* Li, l. c. 53, *pro parte, quoad Ser. Recurvae.*——*Sect. HAPLOPHYLLUM* Li, l. c. 38, *pro parte.*

亚羣2 新旌节亚羣——*Subgrex NEOSCEPTRUM*

系16 红纹系——*Ser. Striatae* Maxim. in *Bull. Acad. St. Pétersb.* XXIV (1877) 81, et in *Mél. Biol.* X (1877) 123.——*Ser. Comosae* Maxim. in *Bull. Acad. St. Pétersb.* XXIV (1877) 77, et in *Mél. Biol.* X (1877), 116, *pro parte.*

### 分 种 检 索 表

1(2) 植株高常在30厘米以上,最高可达1米,粗壮;花序紧密而长,苞片小而不显著,几全缘;

萼齿卵状三角形,几全缘;花有明显的红色条纹,盔端除双齿外几不向前凸出……………

…………… 36. 红纹马先蒿 *P. striata* Pall.

2(1) 植株高常不达 30 厘米,最多不超过 40 厘米,细弱;花序疏散而短,苞片叶状而发达,十分明显;萼齿很长而为叶状,缘有深刻的齿;花冠无条纹,端向前方伸出略作喙状……………

…………… 37. 鸡冠子花 *P. mandshurica* Maxim.

### 36. 红纹马先蒿

*Pedicularis striata* Pall. Reise III (1776) 737, t. R, f. 2c; Maxim. in Bull. Acad. St. Pétersb. XXIV (1877) 82, et XXXII (1888) 613, f. 159, et in Mém. Biol. X (1877) 123, et XII (1888) 910, f. 159; Limpr. in Repert. Sp. Nov. XX (1924) 215; Pai, in Contr. Inst. Bot., Nat. Acad. Peiping II (1934) 220; Vved. in Floia URSS XXII (1955) 743.

红纹马先蒿红纹亚种 图版 VIII, 9—12

*Pedicularis striata* Pall. subsp. *striata* — *P. striata* Pall. var. *typica* Li, in Proc. Acad. Nat. Sci. Philad. CI (1949) 12, et in C (1948) f. 89.

多年生草本,高达 1 米,直立,干时不变黑;根粗壮,有分枝。茎单出,或在下部分枝,老时木质化,壮实,密被短卷毛,老时近于无毛。叶互生,基生者成丛,至开花时常已枯败,茎叶很多,渐上渐小,至花序中变为苞片,叶片均为披针形,长达 10 厘米,宽 3—4 厘米,羽状深裂至全裂,中肋两旁常有翅,裂片平展,线形,边缘有浅锯齿,齿有胼胝,叶柄在基叶中与叶片等长或稍短,长达 8—10 厘米,茎生叶柄较短。花序穗状,伸长,稠密,偶然下部的花疏远,或在结果时稍疏,长 6—22 厘米,轴被密毛;苞片三角形,或披针形,下部者多少叶状而有齿,上部者全缘,短于花,无毛或被卷曲缘毛;萼钟形,长 10—13 毫米,薄革质,被疏毛,齿 5 枚,不相等,后方一枚较短,三角形,侧生者两两结合成端有 2 裂的大齿,缘有卷曲之毛;花冠黄色,具绛红色的脉纹,长 25—33 毫米,管在喉部以下向右扭旋,使花冠稍偏向右方,其长约等于盔,盔强大,向端作镰形弯曲,端部下缘具 2 齿,下唇不很张开,稍短于盔,3 浅裂,侧裂斜肾脏形,中裂宽过于长,迭置于侧裂片之下;花丝有一对被毛。蒴果卵圆形,两室相等,稍稍扁平,有短凸尖,长 9—16 毫米,宽 3—6 毫米,约含种子 16 颗;种子极小,近扁平,长圆形,或卵圆形,黑色。花期 6—7 月;果期 7—8 月。

自苏联西伯利亚经蒙古人民共和国至我国北方诸省,自河北至宁夏回族自治区,

图版 VII 1—3. 扭喙马先蒿 *Pedicularis streptorhyncha* Tsoong, 1. 植株×1; 2. 花×1½; 3. 果×1½。4—5. 甲拉马先蒿 *P. khalensis* Franch., 4. 叶×1; 5. 花×1½。(绘图人冯管庸)



## Pedicularis L.

7. **Pedicularis shansiensis** Tsoong, sp. nov. in MS. H. Smith: *Plantae Sinenses*, Scrophular. (1950)<sup>1)</sup>. (Ser. Tristes)<sup>2)</sup>.

Species *P. tristi* Linn. propinquat, sed bracteis flores valde superantibus, et ambitu lobi medii labii inferioris transversaliter elliptico, marginibus loborum igitur sese tegentibus recedit.

Elata, ad 50 cm. alta, undique pubescens, siccitate nigrescens. Caulis singulus, striatus. Folia omnia caulinarum, ambitu lanceolata, apice acuta, basi cuneata usque subamplexicaulia, 5–12 cm. longa, 0.8–4.5 cm. lata, pinnatipartita, lobis 9–15-jugatis ovatis oblongo-ovatisve, 12 mm. longis, 8 mm. latis, iterum pinnatilobatis, lobulis argute cartilagineo-serratis, supra glabra, subtus parce pilosa, costa media elevata prominentissima, folia superiora satis magna, vix in bracteas decrescentia. Inflorescentia e floribus circiter 7–8 brevis racemosa. Flores magni; calyx circiter 14 mm. longus, antice non fissus, 5 dentatus, dente postico minore, deltoideo, vix 2 mm. longo, reliquis triangulari-lanceolatis, circ. 4 mm. longis, argute serratis; corolla undique densissime pilis glandulosis oblecta, tubo 25 mm. longo, ad basin contracto, supra basin subito ampliato, 6.5 mm. diametro, galea erecta, versus apicem leviter arcuata fronte verticali rotundata haud apiculata, margine antice  $\frac{1}{3}$  infra apicem leviter emarginata, haud trichomata, labium inferum ellipticum, 16 mm. longum, 10 mm. latum, antice  $\frac{1}{3}$  trilobum, lobo medio late cordato, latissimo, 4.5 mm. tantum longo, 9 mm. lato, lobis lateralibus illum superpositis, ovato-cordatis, circ. 3 mm. longis ac latis, ad basin interiorem manifeste auriculatis; staminum filamentis omnibus glabris; stylus diu persistens. Capsula oblongo-ovata 2 cm. longa, 9 mm. lata, basi rotundata, apice acuminata, vix asymmetrica; semina trigona, utrinque acuta, 4 mm. longa, 2 mm. lata, crebre foveolata.

Shansi: "Chieh-hsiu Distr., Ch'o-mei-shan, in prato herboso-fruticoso, ca. 1800 m. (H. Smith 5899), VI, 19, 1924", (Typus). "Chiao-ch'eng Distr., Yu-ting-shan, in prato frutico-herboso, ca. 1900 m. (H. Smith 7005), VIII, 19, 1924"; "Yuan-chü Distr., Shui-wang-ping, in silva frondosa, ca. 2000 m. (H. Smith 6656), VII, 27, 1924".

35. **Pedicularis streptorhyncha** Tsoong, sp. nov. in MS. H. Smith: *Plantae Sinenses*, Scrophular. (1950). (Ser. Kialenses).

Species distinctissima. Structura floris *P. kialensi* Fr. haud dissimilis sed mar-

1) The Ms. for Dr. Harry Smith's *Plantae Sinenses* was submitted in 1950, but so far as is known, it has as yet not been published.

2) Diagnoses of all new taxa above specific rank will be published later on in the systematic treatise entitled "A New System for the Genus *Pedicularis*," of which further instalments are awaiting publication.

gine inferiore galeae numquam trichomato. Habitu ob folia plerumque basalia, laminas magis angustiores lanccolatas pinnatipartitas valde differt.

Perennis, ad 15—30 cm. alta, siccitate nigrescens. Rhizoma usque ad 30 cm. elongatum, 5 mm. diam., subcarnosum, cylindricum, apice saepe ramosum, squamis petiolisque vetustioribus dense vestitum. Caules caespitosi vel singuli, eramosi, striati, sparse pubescentes. Folia plerumque radicalia, longe petiolata, petiolis ad 5.5 cm. longis, complanatis, basi membranaceis leviter dilatatis vaginatisque, ciliatis, lamina petiolo longior, 2.5—18 cm. longa, 3—20 mm. lata, lineari-lanceolata, pinnatilobata, lobis 9—28 paribus, deltoideo-ovatis, duplicato-serratis serratulis cuspidatis, majoribus ad 6 mm. longis, 5 mm. latis, supra secus costam sulcato-immersam pilis brevibus crassis praedita, cetera glabra, subtus costa elevata, folia caulinarum pauca vel nulla. Inflorescentia laxa racemosa, ad 20 cm. longa; bracteae foliaceae breve stipitatae, stipitibus valde dilatatae; flores vix ultra 12; calyx cylindricus, 11 mm. longus, laxa pubescens vel fere laevis, antice ultra medium fissus, tridentatus, dente postico subulato integro, vix 1.5 mm. longo, dentibus lateralibus bilobatis, lobis substipitatis, apice serratis, 3—4 mm. longis; corollae tubus 13—15 mm. longus, externe leviter pubescens vel fere laevis, labium inferum magnum, 18 mm. longum, 23 mm. latum, lobis 3 fere aequalibus, medioobovato, apice truncato, leviter retuso, 10 mm. longo, 13 mm. lato, lobis lateralibus angustioribus, margine irregulariter repandodenticulatis; galea parte erecta 5—6 mm. alta, parte antherigera subito torta, antice deinde in rostrum longum sigmoideo-tortuosum ad 17 mm. longum sensim attenuata; staminum filamenta basi valde dilatata, in lineas elevatas intra tubum corollae decurrentia, insertione pilosa, filamentis anticis apice dense pilosis. Capsula ex fissura calicis persistentis oblique exserta, deltoideo-lanceolata, acuminata et apiculata, basi rotundata, plus minusve complanata, 20 mm. longa, 7 mm. lata, atropurpurea, lucidula; semina pauca, circ. 6, subreniformi-oblonga, 3 mm. longa, 1.4 mm. lata.

Szechuan: "Tsi-pu La, in Rhododendretis muscosis, ca. 4000 m. (H. Smith 2040), VIII, 5, 1922", (typus). Ta-king Distr., Ka-tse, Pam-pien Shan, alt. 4200 m. (H. Li 77856), VI, 23, 1958; same distr., Kung-ka Hsian, alt. 4350 m. (Eighth Forest Survey no. 4942); same distr., Yang-kia Kou, alt. 3950 m. (Eighth Forest Survey no. 3752). Mou Hsian (or Li Hsien), (T. Ho & T. L. Chow s.n.), 1952.

41. **Pedicularis kangtingensis** Tsoong, sp. nov. (Ser. Recurvae)

Certe inter *P. recurvam* Maxim. et *P. angustilabres* Li intercedens, ab hac foliis subtus pilis brevibus flavescentibus dense vestitis, calyce majore fere tubo corollae aequilongo manifeste reticulato abhorret, ab illa, cuius foliis eodemmodo vestitis, recedit lobis labii inferioris omnibus obtusissimis, nec acutis.

Perennis, siccitate non nigrescens. Rhizoma horizontale; collo radices crasse fibrosas emittente. Caules 1—3, erecti, 19—39 cm. alti, exsiccando straminei maculis atropurpureis elongatis instructi, inferne glabri superne minute pubescentes. Folia inferiora longe petiolata, petiolis usque 8 cm. longis, superiora brevius petiolata, lamina lanceolato-oblonga, 2—7 cm. longa, 3 cm. usque lata, dimidio distale pinnatipartita proximaleque pinnatisecta, segmentis sursum gradatim in longitudine decres-