

米,羽状浅裂,裂片每边 6—8 枚,前方的与后方的小得很多,中间的较大,卵形钝头,基部很扩大,缘有波状浅裂,有牙齿,茎叶 1—2 枚,互生,疏距,与基生者相似而较小。花序顶生,短总状,长不达 3 厘米,有绒毛,多花,上部稠密,下部疏散;苞片叶状,有柄,卵形,羽状浅裂,短于花;花梗长 3 毫米,直立,有绒毛;萼圆筒形,长约 7 毫米,有疏毛,上部有疏网纹,前方稍稍开裂,齿 5 枚,不等,后方 1 枚较小,三角形锐头,其余宽卵形,基部微细缩,上部多少具 3 齿,后方之齿常较小;花冠玫瑰色,长不及 1.2 厘米,管伸直,稍长于萼,上方扩大,盔瓣状弓曲,伸长为长喙,喙纤细,线形,长达 5 毫米,平伸而略弯向下方,下唇约与盔相等,缘有毛,3 裂,裂片圆形亚相等,中裂稍向前伸出;雄蕊着生于花管中部,前方 1 对花丝端有长毛;花柱伸出;蒴果未见。花期 7 月。

为我国特有种,产云南怒江傈僳江分水岭,生于海拔 3,100 米的灌木林缘。

这一种我们也尚未见标本,文中所说的“后方之齿较小”中的齿字,系用多数,想系指后侧方的两齿,此两齿较小,不但与规律不合,而且也与李氏自己的图矛盾,故“较小”(minoribus)想系“较大”(maioribus)之误。

276. 福氏马先蒿

Pedicularis forrestiana Bonati, in Notes Bot. Gard. Edinb. V (1911) 86, pl. 73, et VII (1912) 155, et XV (1926) 159; Limpr. in Repert. Sp. Nov. XX (1924) 236, et XXIII (1927) 336; Li, in Proc. Acad. Nat. Sci. Philad. CI (1949) 107, f. 167.

福氏马先蒿福氏亚种

Pedicularis forrestiana Bonati subsp. *forrestiana*

多年生草本,干时变黑,高 15—20 厘米。根肉质,有伸长线形的支根。茎多数,弯曲上升或直立,基部圆柱形,上部有稜角,不分枝,有细毛。基生叶多数,有长柄,柄长 5—6 厘米,有翅,缘有带红色或白色之毛,叶片长 3—5 厘米,宽 1—2 厘米,延下于叶柄,为线状长圆形,羽状浅裂至半裂,裂片 8—10 对,长 4—6 毫米,宽 2—4 毫米,钝头,多少有缺刻状齿,齿锐或钝,茎生叶和苞片与基生叶相似,但柄较短而较小。花腋生,疏距;花梗细而直立,无毛,长 5—8 毫米;萼管圆筒形,无毛,长 7—8 毫米,齿 5 枚,无柄,扇形而有锐齿,长 1—2 毫米;花冠玫瑰色,长于萼 1 倍,端扩大,盔直立部分前缘高约 4 毫米,几以直角向前转折成为地平部分,其中膨大的部分约长 5—6 毫米,常有细毛,缘光滑,喙瓣状弓曲,渐渐狭细,端全缘,长 5 毫米,下唇约与盔等长,长 7—10 毫米,宽 10—14 毫米,浅 3 裂,中裂极短而宽,长 0.8—2 毫米,宽 2—4.5 毫米,端凹头而微作兜状,侧裂极大,基部广楔形,端耳形,与中裂组成明显之缺;花丝两对均

termixtis vestita, pinnatisecta, segmentis utrinsecus 5—6, late ovatis, contiguis, margine minute dentatis dentibus reflexis. Inflorescentia terminalis, subcapitata; floribus 3—5, dense congestis; bracteae circiter dentibus calycis aequilongae, petiolis brevibus dilatatis suffultae, sursum alte trilobatae, lobis plus minus pinnatifidis; pedicellis brevibus, circ. 2—3 mm. longis, pilosis; calyx cylindrico-campanulatus, crasse membranaceus, circ. 7 mm. longus, antice non fissus, longe pilosus, nervis irregularibus circiter 5, sat latis sed vix elevatis, nervis secundariis 6—7, paulo tenuioribus, venis laxe reticulatis, calicis dentibus 5, inaequalibus, longitudine circ. dimidium tubi aequantibus, inferne triangularibus, medio angustatis stipiformibus, apice herbaceo-incrassatis viridibus saepe trilobatis, denticulatis, dentibus reflexis; corolla purpureo-rubra, galea intensius colorata, 12—15 mm. longa, tubus rectus, calycem paulo excedens, apice leviter dilatatus, galea margine antica circ. 4 mm. alta, apice fere angulo recto in partem antherigeram circ. 5 mm. longam subfalcato-geniculata, antice in rostrum cylindricum fere 5 mm. longum rectum apice oblique truncatum leviter denticulatum subito producta, fronte plus minus elevata, labium inferum circ. 10 mm. longum, longe ciliatum, lobis lateralibus oblique ellipticis, lobo medio eis dimidio minore, late ovato, valde producto; stamina ad medium tubi inserta, filamentis anticis sparse pilosis; ovarium anguste ovoideum, circ. 4 mm. longum, stylo ex apice rostri exserto.

Tibet: Chamdo Region, "Chianang, Langong, 14,500' (Ludlow, Sherriff et Taylor 3959), June 4, 1938", (type).

269. **Pedicularis yui** Li var. **ciliata** Tsoong, var. nov.

A var. *yui* recedit labio infero ciliato, filamentis anticis pilosis.

Yunnan: Upper Kiukiang Valley, Clulung, S. of Lungtsahmuru, alt. 4,000 m., alpine grassland (T. T. Yu 19863), Aug. 10 1938 (var. type).

276. **Pedicularis forrestiana** Bonati subsp. **flabellifera** Tsoong, subsp. nov.

A subsp. *forrestiana* differt multo elatior, racemis usque ad 20 cm. elongatis, floribus sparsis, bracteis longe petiolatis flabelliformibus.

Yunnan: "Kari Pass, Mekong-Yangtze Divide, open situation amongst heavy grass and scrub (G. Forrest 13130)." (subsp. type).

285. **Pedicularis tapaoensis** Tsoong, in MS. H. Smith: *Plantae Sinenses*, Scrophular. (1950). (Ser. Albiflorae)

Evidenter *P. taylorianae* m. valde accedens, galea imo apicem partis verticalis versus biauriculata, rostroque apice oblique truncato quasi eroso-denticulato differt.

Perennis, ad 6 cm. alta, siccitate nunquam nigrescens. Rhizoma breve, radices cylindricas graciles 5 cm. longas emittens, collo caulibus petiolisque vetustioribus et squamis ovatis usque lanceolatis membranaceis nonnullis praedito. Caules caespitosi, brevissimi, 1 cm. alti vel vix evoluti. Folia basalia et caulinarum dense caespitosa, petiolis 8—22 mm. longis, tenuibus et complanatis, utrinsecus late membranaceo-alatis, glabris; lamina elliptico-ovata usque oblonga, circ. 1 cm. longa, 4.5—7 mm. lata, pinnatisecta, rhachide anguste alata, lobis 4—6-jugatis, ovatis, basi angustatis, iterum pinnatilobatis vel grosse serratis, serratulis longe cuspidatis, utrinque glabra,