

花期等的相似,也为杂交提供了良好的机会。

罗氏馬先蒿大花亚种

Pedicularis roylei Maxim. subsp. **megalantha** Tsoong, subsp. nov., in Adenda, 402.

本亚种由于花序轴、苞片与萼均密布长而有深紫色細胞間隔障的多細胞长毛而变为紫紅色;花較大很多,长达 25 毫米,盔部长达 8 毫米,下唇中裂小于側裂很多。花期 8 月。

仅見于我国西藏昌都专区东部的加刁拉山海拔 4,820 米的高山草原中。

罗氏馬先蒿蕭氏亚种

Pedicularis roylei Maxim. subsp. **shawii** (Tsoong) Tsoong, comb. nov.——*P. shawii* Tsoong, in Acta Phytotax. Sin. III (1954) 309, 331 et in Bull. Brit. Mus. (Nat. Hist.) Bot. II, i (1955) 29.——*P. roylei* Maxim. var. *cinerascens* Marq. et Shaw, ex Marq. in Journ. Linn. Soc. Bot. XLVIII (1929) 213.

本亚种之区别,在于全体多灰色之毛,其根肉质而极粗,长达 10 厘米,粗达 8 毫米;茎基多卵状披針形鱗片;基出叶长 20 毫米,寬 8 毫米,裂片卵形至长圓形,多少复瓦状排列。

产我国西藏昌都专区西部,生于海拔 4,260—4,500 米的低矮杜鹃林中高山草坡上。

經過比較与考虑之后,觉得这一植物还是作为一个亚种最为合适,可以与上面两个亚种相对称,所以做了以上的新合并。事实上这一亚种要比罗氏亚种更近于岩居馬先蒿。

126. 丽江馬先蒿 图版 XXXII, 1—5

Pedicularis likiangensis Franch. ex Maxim. in Bull. Acad. St. Pétersb. XXXII (1888) 597, f. 119 et in Mém. Biol. XII (1888) 887, f. 119; Limpr. in Repert. Sp. Nov. XX (1924) 206; Li, in Proc. Acad. Nat. Sci. Philad. C (1948) 306, f. 34.——*P. lineata* Franch. var. *dissecta* Bonati, in Notes Bot. Gard. Edinb. XV (1926) 148; Limpr. in Repert. Sp. Nov. XXIII (1927) 333.

丽江馬先蒿丽江亚种

Pedicularis likiangensis Franch. subsp. **likiangensis**

多年生草本,高 9—18 厘米,偶有极低的植株仅高 4 厘米,干后多少变黑,无主根,从根頸上发出多数須状側根,有时在大植株中成径达 3 厘米的大丛,长达 7 厘米,根



126. **Pedicularis likiangensis** Franch. subsp. **pulchra** Tsoong, subsp. nov.

Valde humilis, minora cum floribus tantum 3 cm. alta, caule 1.5 cm. alto, majora vix 6 cm. alta; folia subtus prominenter albo-furfuracea; floribus magnis, usque 25 mm. longis, parte inferiore tubi corollae 5 mm. longa, parte superiore 9 mm. longa, labio infero 10 mm. longo, 13.5 mm. lato, galea 5.5 mm. longa.

Yunnan: Do-ka-er-la, Salween-Mekong Divide, Teh-Ching District, 3800—4100 m. (K. M. Feng 6125), VIII, 1, 1940 (subsp. type).

132. **Pedicularis kansuensis** Maxim. subsp. **kokonorica** Tsoong, subsp. nov.
—*P. violascens* auct. non Schrenk: Maxim. in Bull. Acad. St. Pétersb. XXXII (1888) 594, et in Mém. Biol. XII (1888) 883, pro parte, quoad plant. Przewalskii e Tibet bor.

Differt a subsp. *kansuense* planta habitu humilior, vix 20 cm. alta, foliis basilibus densioribus, inflorescentia densiore et saepe continua, geniculo tubi corollae altiore, lobis labii inferioris prominentius incisis.

Chinghai "(Tibet bor.): ad fl. Ladronum, 13500 p.s.m. (Przewalskii s. n.), VI, 14—16, 1884" (subsp. type).

135. **Pedicularis minima** Tsoong, et Cheng, f., sp. nov. (Ser. Verticillatae)

Habitu humillimo *P. pygmaeae* Maxim. aemulans, sed radice elongatissima, partem aeream saepe plus quam duplo superante, calyceque antice vix fisso etc. jam primo aspectu distinguenda. Vero affinis *P. daucifoliae* Bonati eacumque foliorum forma dentibusque calycis etc. congruit, quae autem habitu multo elatiore radiceque magis brevior distat.

Annua, humillima, floribus inclusa vix 2.6 cm. alta. Radix simplex, elongata, ad 5 cm. longa. Caules 2—3, vel saepe singuli, basi squamis sursum elongatis ovatis usque lanceolatis 3—4 paribus muniti. Folia basalia valde reducta; petioli ad 3 mm. longi, 0.5 mm. lati, apice laminas eo paulo latiores, rotundatas, margine utrinsecus irregulariter 2—3 dentatas gerenti, folia caulinarum in verticillastres 2—3 illa basalia valde approximatos disposita, petiolis ad 6 mm. longis, anguste alatis, laminae ovatae usque ovato-oblongae, pinnatipartitae usque pinnatisectae, laciniis circ. 5 paribus, ovatis, incisis, margine saepe revolutis, supra glabrae, subtus albo-furfuraceae, folia media saepe in bracteas transformantia. Inflorescentia longiora ad 2 cm. longa; calyx breve campanulatus, antice paulo fissus, membranaceus, circ. 3 mm. longus, dentibus 5, postico plus minus subulato, reliquis circ. 0.5 mm. stipitatis, apice dilatatis trilobatis, iis antero-lateralibus maioribus, ad 1.5 mm. longis; corolla 11 mm. longa, tubus circ. 6 mm. longus, sursum sensim dilatatus, supra basin sub angulo 45° geniculatus, galea leviter falcata, parte inferiora latiora, ad 2 mm. lata, medium versus gradatim angustiora, fronte rotundata, marginem secus angustissime cristata, labium inferum 3.5 mm. longum, 5 mm. latum, lobis lateralibus oblique obovatis, quam lobo medio rotundato leviter stipitato paulo latioribus; staminum filamentis omnibus glabris.

Szechuan: Ma-erh-kang, Tse-ku Shan (C. L. Wu 32982), (type) .

137. **Pedicularis altifrontalis** Tsoong, sp. nov. (Ser. praeced.)—*Pedicularis dif-*