

灌丛中。

穗花馬先蒿显苞亚种

Pedicularis spicata Pall. subsp. **bracteata** Tsoong, subsp. nov., in Addenda 405.

这一亚种的不同,在其苞片在花后强烈增大而作扇形,长达10毫米,宽达8毫米;花丝毛较少。

本亚种仅见河北省的小五台山。

这一亚种代表着一种在苞片上与 *P. forrestiana* subsp. *flabellifera* 相同的但互不相关的并行发展。

穗花馬先蒿狭果亚种

Pedicularis spicata Pall. subsp. **stenocarpa** Tsoong, subsp. nov., in Addenda, 405.

本亚种的不同在于蒴果较细瘦而长,长约8—10毫米,披针状卵形,上半部强烈向下弯曲而有长尖。

仅见我国河北省西灵山与东灵山。

143. 四川馬先蒿

Pedicularis szetschuanica Maxim. in Bull. Acad. St. Pétersb. XXXII (1888) 601, pro parte, f. 125, pro parte, quoad calycem sinistrum et galeam dextram et in Mém. Biol. XII (1888) 892, pro parte, f. 125, pro parte, quoad calycem sinistrum et galeam dextram; Limpr. in Repert. Sp. Nov. Beih. XII (1922) 285, et in Repert. Sp. Nov. XX (1924) 205, pro parte; Pai, in Contr. Inst. Bot., Nat. Acad. Peiping II (1934) 221, pro parte.——*P. verticillata* auct. non Linn.: Franch. in Nouv. Arch. Mus. Hist. Nat. Paris. sér. 2, X (1888) 68.

四川馬先蒿四川亚种四川变种 图版 XXXIX, 1—3

Pedicularis szetschuanica Maxim. subsp. **szetschuanica** var. **szetschuanica** ——*P. szetschuanica* Maxim. var. *typica* Li, in Proc. Acad. Nat. Sci. Philad. C (1948) 316, pro parte, f. 42.——*P. szetschuanica* Maxim. var. *angustifolia* Bonati, in Bull. Herb. Boiss. Sér. 2, VII (1907) 545; Li, in Proc. Acad. Nat. Sci. Philad. C (1948) 317.

一年生草本,有中等程度的毛被,干时不变黑色。根单条,垂直而向下渐细,老时木质化,生有少许斜伸的须状侧根,长达3厘米,或有时从中部以上分为数条较粗的

ovato-oblongis, ad 9 mm. longis, illae foliorum superiorum saepe deltoideo-lanceolatae, basi ad 17 mm. latae, supra sparse adpresque pubescentes, subtus dense reticulatae, saepe albo-furfuraceae, secus costam nervosque pilis longis albidis sparse obsitae. Inflorescentiae breviter spicatae, ad 6 cm. longae; bracteae foliaceae, pinnatifidae, lanceolatae, inferiores flore longiores; calyx membranaceus, basi subinflatus apice plus minus contractus, antice ad $2/5$ fissus, 5.5 mm. longus, $2/3$ superne reticulatus, dentibus 3, postico deltoideo, acutiusculo, 1.5 mm. longo, lateralibus multo majoribus, apice breviter bifidis; corolla rubra, tubus validus, basi 2 mm. diam., supra basin valde geniculatus, parte superiore 6 mm. longus, sursum valde dilatatus, ore ad 4–4.5 mm. diam., labium inferum amplum, 7–8 mm. longum, 10–11 mm. latum, lobis lateralibus elliptico-ovatis, circ. 5.4 mm. longis, 4 mm. latis, obtusis, lobo medio breviter stipitato, circ. 3 mm. longo ac lato, galea circ. $2/3$ longitudinem labii inferii aequans, 5 mm. longa, basi 2.6–3 mm. lata, sursum gradatim angustata, parte media 1.8 mm. tantum lata, fronte vix convexa, fere truncata; staminum filamentis omnibus glabris; stylus paulo exsertus.

Szechuan: Nanchuan District, King-fu Shan under bamboo groves, alt. 1730 m. (Hsung Tsi-hua & Chow Tze-lin 90822), V, 17, 1957, (type).

142. **Pedicularis spicata** Pall. subsp. **bracteata** Tsoong, subsp. nov.

A subsp. *spicata* recedit bracteis post anthesin valde auctis flabelliformibus, ad 10 mm. longis, 8 mm. latis; filamentis staminii minus pilosis.

Hopei: Hsiaowutai Shan, north peak (Y. Yabe s.n.), VI, 28, 1960 (subsp. type).

Pedicularis spicata Pall. subsp. **stenocarpa** Tsoong, subsp. nov.

A subsp. *spicata* differt capsulis angustioribus et longioribus, ad 8–10 mm. longis, lanceolato-ovatis, parte superiore valde curvatis longeque apiculatis.

Hopei: Tung-lin Shan (C. K. Yang 1480), IX, 6, 1953 (subsp. type).

143. **Pedicularis szetschuanica** Maxim. subsp. **latifolia** Tsoong, subsp. nov.—*P. szetschuanica* Maxim. subsp. *ovatifolia* Tsoong, MS. H. Smith, *Plantae Sinenses*, Scrophular. (1950), non *P. szetschuanica* var. *ovatifolia* Li, in *Proc. Acad. Nat. Sci. Philad. C* (1948) 317.

Haec subspecies a subsp. *szetschuanica* abhorret fere glabra, foliis oblongis usque ovatis, basi rotundatis usque subcordatis, ad 27 mm. longis, 13 mm. latis, petiolis foliorum basalium ad 67 mm. longis, iis foliorum mediorum ad 4–13 mm. longis, floribus saepe multo majoribus.

Szechuan: reg. bor., Dongrego, in prato herboso-fruticoso, c. 4000 m.s.m. (H. Smith 3868) VII, 22, 1922 (subsp. type).

Pedicularis szetschuanica Maxim. subsp. **anastomosans** Tsoong, subsp. nov.—*P. szetschuanica* Maxim. subsp. *angustifolia* var. *normalis* Tsoong, in *Acta Phytotax. Sin.* III (1954) 311.

Haec subspecies, huius caulibus saepe plus minus lignosis, tantum ad 10 cm. altis, calicibus omnino anastomosantibus, labio infero corollae irregulariter eroso etc., ab omnibus subsp. huius speciei facile distinguenda.

Tibet: Chamdo Region, "Kongbo, Besang Landup, Lechen Chu, 14500' (Lud-