## **48. TRIPHYSARIA** Fischer & C. A. Meyer, Index Hort. Petrop. 2: 52. 1836.

直果草属 zhi guo cao shu

Herbs, annual, hemiparasitic. Leaves alternate. Spikes terminal; bracts often broader than leaves. Calyx subequally 4-lobed. Corolla elongated, conspicuously 2-lipped; lower lip 3-lobed, base of lobes  $\pm$  saccate; upper lip slightly longer than lower lip, rostrate, entire. Stamens 4, didynamous; anthers 1-loculed. Stigma entire. Capsule compressed, 2-sulcate, loculicidal. Seeds numerous.

Six species: W North America, particularly California; one species in China.

1. Triphysaria chinensis (D. Y. Hong) D. Y. Hong, Novon 6: 374. 1996.

直果草 zhi guo cao

*Orthocarpus chinensis* D. Y. Hong, Fl. Reipubl. Popularis Sin. 67(2): 405. 1979.

Annuals, diffuse, ca. 15 cm tall, white hirsute. Stems much branched basally. Leaves several, sessile, broadly linear, 1–2 cm, parted into several narrow segments. Spikes elongated, almost from base of stems, lax; bracts deltoid-orbicular, longer than flowers and fruit, palmatisect, segments parted. Calyx tubular, 5–7 mm, parted to middle; lobes subulate-triangular, lower 2 slightly shorter than others. Corolla 5–6 mm; limb purple;

tube yellow when dry; lower lip shallowly saccate, obscurely toothed; upper lip apex hooklike. Anthers narrowly ellipsoid. Capsule oblong, glabrous, ca.  $3.5 \times 2.5$  mm. Seeds dark brown, ca. 1 mm, curved; seed coat transparent, reticulate. Fl. Sep–Oct.

• W Hubei (Xingshan Xian).

Triphysaria chinensis in similar to the North American species T. pusilla (Bentham) Chuang & Heckard, from which it differs in having palmatisect rather than pinnatisect bracts and transparent and reticulate seed coat. The great disjunction and close relationship between these two species is unexplained. Tryphysaria chinensis is only known from the type specimen collected in 1926.

Flora of China 18: 89–90. 1998.