## **14. CERATOCARPUS** Linnaeus, Sp. Pl. 2: 969. 1753.

角果藜属 jiao guo li shu

Herbs annual, densely covered throughout with stellate hairs. Stem erect, dichasially branched from base to apex. Leaves alternate, sessile, flattened, linear-lanceolate to acicular, base attenuate, margin entire, apex acuminate; midvein prominent. Flowers unisexual (plants monoecious). Male flowers sessile or shortly pedicellate, usually 2 or 3 borne together on a short peduncle in leaf axils and forks of upper branches; bracts and bractlets absent; perianth tubular, 2-lobed, membranous; stamen 1, included, but slightly exserted at anthesis. Female flowers axillary, solitary; bractlets 2, united into a narrowly obovoid to trigonous tube, compressed, with an acicular appendage at apex of each side, densely stellate pubescent; perianth absent; ovary globose, hairy; style short; stigmas 2. Utricle obovoid or conic, compressed, midline prominent, densely stellate hairy, acicular appendages stiff, straight or slightly curved, apex truncate or concave. Seed vertical, brown, of same shape as utricle; embryo semi-annular; radicle inferior; perisperm scant.

One species: C and SW Asia, E Europe.

## 1. Ceratocarpus arenarius Linnaeus, Sp. Pl. 2: 989. 1753.

角果藜 jiao guo li

Ceratocarpus caput-medusae Bluket; C. turkestanicus Savicz-Ryczegorski ex Iljin; C. utriculosus Bluket.

Plants 5–30 cm tall. Leaves 0.5–4  $\times$  0.1–0.5 cm. Male flowers: perianth yellow, ca. 1.5 mm, membranous; filaments short, filiform; anthers subglobose. Utricle 5–10  $\times$  2–5 mm. Fl. and fr. Apr–Jul.

Gobi desert, arid slopes, sands, wastelands. N Xinjiang [Afghanistan, Mongolia, Pakistan, SE Russia; C and SW Asia, SE Europe (S Ukraine, rarely introduced elsewhere)].

This is a polymorphic but clearly outlined species. Attempts to segregate eastern forms as a separate species, *Ceratocarpus turkestanicus* (*C. utriculosus*), were based on minor, variable, and non-correlated characters, such as branching habit, broader vs. narrower leaves, obovoid vs. trigonous fruiting bractlets, etc.

The plant is a common ephemeral in deserts.

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