

## CYNOMORIACEAE

锁阳科 suo yang ke

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Herbs perennial, parasitic, reddish brown, without chlorophyll, monoecious, rarely polygamous. Root fleshy. Stem simple or branched, cylindric. Leaves spiral, scalelike, caducous. Flowers densely gathered into a terminal, spadix, minute. Perianth lobes (1–)4–6(–8). Stamen 1. Ovary inferior, 1-loculed; ovule 1, pendulous; style simple, reduced to a nectary in male flowers. Fruit a nutlet.

One genus and two species: from the Mediterranean region through SW and C Asia to Mongolia and NC China; one species in China.

Wan Wenhao. 2000. Cynomoriaceae. *In*: Chen Chiajui, ed., *Fl. Reipubl. Popularis Sin.* 53(2): 152–154.

### 1. CYNOMORIUM Linnaeus, *Sp. Pl.* 2: 970. 1753.

锁阳属 suo yang shu

Morphological characters and geographic distribution are the same as those of the family.

**1. *Cynomorium songaricum*** Ruprecht, *Mém. Acad. Imp. Sci. Saint Pétersbourg*, Sér. 7, 14(4): 73. 1869.

锁阳 suo yang

*Cynomorium coccineum* Linnaeus subsp. *songaricum* (Ruprecht) J. Léonard.

Stem subterranean, 15–50(–100) × 0.6–2(–4) cm, ± thickened at base. Leaves scalelike, ovate-deltoid, 0.5–1.5 × 0.5–1.2 cm, apex acute. Spadix clavate, 5–16 × 2–6 cm, fragrant. Male flowers 3–6 mm; perianth lobes often 4, whitish proximally, purplish red distally, oblanceolate or spatulate, 2.5–3.5 × 0.8–1.2 mm; stamen exerted from perianth; filament dark red, thickened, to 6 mm; anther dorsifixed, dark purplish, ca. 1.5

mm; nectary yellow, suborbicular, 2–3 mm, apex 4- or 5-dentate. Female flowers: perianth lobes 5 or 6, linear-lanceolate, 1–2 mm; style purplish red, clavate, ca. 2 mm; stigma flat. Bisexual flowers rare; perianth lobes lanceolate, ca. 0.5 mm; filament minute; pistil as in female flowers. Fruit numerous, whitish, subglobose, ca. 1 mm; style persistent, yellow. Fl. May–Jul, fr. Jun–Jul.

Usually parasitic on the roots of *Nitraria*, *Reaumuria*, *Salsola*, and *Tamarix* shrubs, by lakes, bogs, streams, and rivers in deserts; 500–700 m. Gansu, Nei Mongol, Ningxia, Qinghai, Shaanxi, Xinjiang [Afghanistan, Mongolia; C Asia; SW Asia (Iran)].

The fleshy stems are used medicinally as a tonic, and to treat nocturnal ejaculation and impotence.

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