

CISTACEAE

半日花科 ban ri hua ke

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Herbs, subshrubs, or shrubs. Leaves usually opposite, rarely alternate, stipulate or estipulate; leaf blade simple. Inflorescence 1-flowered or cymose, sometimes racemelike or paniclelike. Flowers bisexual, actinomorphic. Sepals 5; outer 2 smaller, sometimes absent. Petals (3 or)5, white, pink, yellow, or orange, sometimes with ± black blotches at base, crumpled in bud, caducous. Stamens many; filaments free, unequal in length, inserted in elongated or discoid torus; anthers 2-thecate, longitudinally dehiscent. Gynoecium of 3–5(–10) carpels; ovary superior, 1-loculed or imperfectly 3–5-loculed; placentas parietal; ovules 2 to many, orthotropous, rarely anatropous; style 1; stigmas 3. Capsule leathery or woody, loculicidal. Seeds small, often angled and coarse on surface. Embryo often curved, or circinate; cotyledons narrow; endosperm powdery or cartilaginous.

Eight genera and ca. 170 species: N Africa, SW Asia, and Europe, mostly in the Mediterranean region, extending to E Africa (Somalia) and C Asia, also in North and South America; one species in China.

Zhang Pengyun & Zhang Yaojia. 1990. Cistaceae. *In*: Li Hsiwen, ed., *Fl. Reipubl. Popularis Sin.* 50(2): 178–179.

1. HELIANTHEMUM Miller, *Gard. Dict. Abr.*, ed. 4. 1754.

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Shrubs or subshrubs, rarely perennial or annual herbs. Leaves opposite or upper ones alternate, stipulate or estipulate. Flowers solitary or inflorescences cymose, racemose, corymbose, or headlike, sometimes paniculate, few- to many-flowered. Sepals 5; outer 2 ca. 1/2 size of inner 3; inner 3 subequal, 3–6-veined, accrescent in fruit. Petals 5, yellow, orange-yellow, or pink. Styles filiform; stigmas large, capitate. Capsule 3-angled, 3-valved, 1-loculed or imperfectly 3-loculed. Seeds many.

About 110 species: N Africa, SW Asia, and Europe, mostly in the Mediterranean region, extending to C Asia, also in North and South America; one species in China.

1. *Helianthemum songaricum* Schrenk in Fischer & C. A. Meyer, *Enum. Pl. Nov.* 1: 94. 1841.

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Helianthemum ordosicum Y. Z. Zhao et al.

Shrubs dwarf, densely branched, cushionlike, 5–12 cm tall. Old branches brown; branchlets opposite or nearly opposite, tightly appressed white pubescent when young, glabrescent, apex spinose. Leaves opposite; stipules subulate or linear-lanceolate, ca. 0.8 mm, longer than petiole, apex acute; petiole short to almost absent; leaf blade simple, lanceolate or narrowly ovate, 5–7(–10) × 1–3 mm, leathery, both surfaces white puberulous, margin entire, often revolute; midrib slightly impressed. Flowers solitary at tips of branches, 1–1.2 cm in diam.;

pedicel 0.6–1 cm, white villous. Sepals 5, unequal, abaxially densely white puberulous; outer 2 sepals linear, ca. 2 mm; inner 3 sepals ovate, 5–7 mm, abaxially 3-ridged. Petals yellow or orange-yellow, obovate, ca. 8 mm, base cuneate. Stamens ca. 1/2 as long as petals; anthers yellow. Ovary ca. 1.5 mm, densely puberulous; style ca. 5 mm. Capsule ovoid, 5–8 mm, puberulous. Seeds brown, ovoid, ca. 3 mm, angled, reticulate-striate, sometimes rugose, apex acuminate.

Rocky hills and slopes in steppe-desert regions; 1000–1400 m. Gansu, Nei Mongol, Xinjiang [C Asia].

Helianthemum songaricum is easily distinguished from other C Asian species by the spine-tipped branches and stipulate leaves. It was listed as rare by Zhou (in Fu & Jin, *China Pl. Red Data Book* 1: 218–219. 1992).

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