

Helianthemum assadii (Cistaceae), a new species from Iran

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Helianthemum assadii F. Ghahremani. & Gholamian *sp. nova* (Cistaceae) is described and illustrated from Iran. It is related to *H. salicifolium* but differs from it mainly in the pedicels, capsules, and stigma characteristics.

Key words: *Helianthemum*, new species, taxonomy

The genus *Helianthemum* includes nearly 110 species in the world (Mabberley 1997). In Iran it has six annual or perennial species (Rechinger 1967, Assadi 1984). Here we describe a new annual species from the country.

Helianthemum assadii F. Ghahremani. & Gholamian, *sp. nova* (Fig. 1)

Helianthemum assadii proximo est *H. salicifolio*, sed pedicelli 3–4.5 mm longi, nec 10–15 mm, omnino erecti, capsula ovoidea-trigona (nec ovoidea-globulosa), margine ciliato (nec glabro), stigma comosum.

TYPE: Iran. Prov. Sistan & Baluchestan, 20 km from Khash to Iranshahr, deviation of Irandegan road, 1420 m, 12.IV.1983 V. Mozaffarian 42819 (holotype TARI).

Plant annual, covered with white stellate indumentum, canescent, 17–18 cm tall. Stems many, erect to ascending, branched from base, densely

tomentose. Leaves 9–19 mm long, 2–6 mm wide, oblong-elliptical, green, densely tomentose; petioles 2–3 mm long, densely tomentose. Flowers solitary in axils, 5–8 on each branch. Pedicel 3–4.5 mm long, always shorter than calyx and capsule, erect, thick. Bract exstipulate, ovate-lanceolate, green, densely tomentose. Sepals abaxially densely tomentose, adaxially glabrous; outer sepals elliptic, 6–7 mm long, 1–1.5 mm wide; inner sepals ovate-lanceolate, acute, hyaline in margin, 9–9.5 mm long, 4.5–5 mm wide, about 3/2 as long as outer ones. Petals yellow, deciduous, obovate, glabrous, 9–9.5 mm long, 4–4.5 mm wide. Stamens 15, free. Stigma comose, furnished with long papilles. Capsule 6–7 mm long, ca. 4.5 mm diameter, ovoid-trigonus, 2/3 as long as fruiting calyx, marginal-ciliate only in upper parts of valves. Seeds 76–84, ovoid-polyhedral, roughly papillose, brown. Flowering and fruiting in March–May.

The specific epithet is in honor of the Iranian plant taxonomist, Dr. Mostafa Assadi.

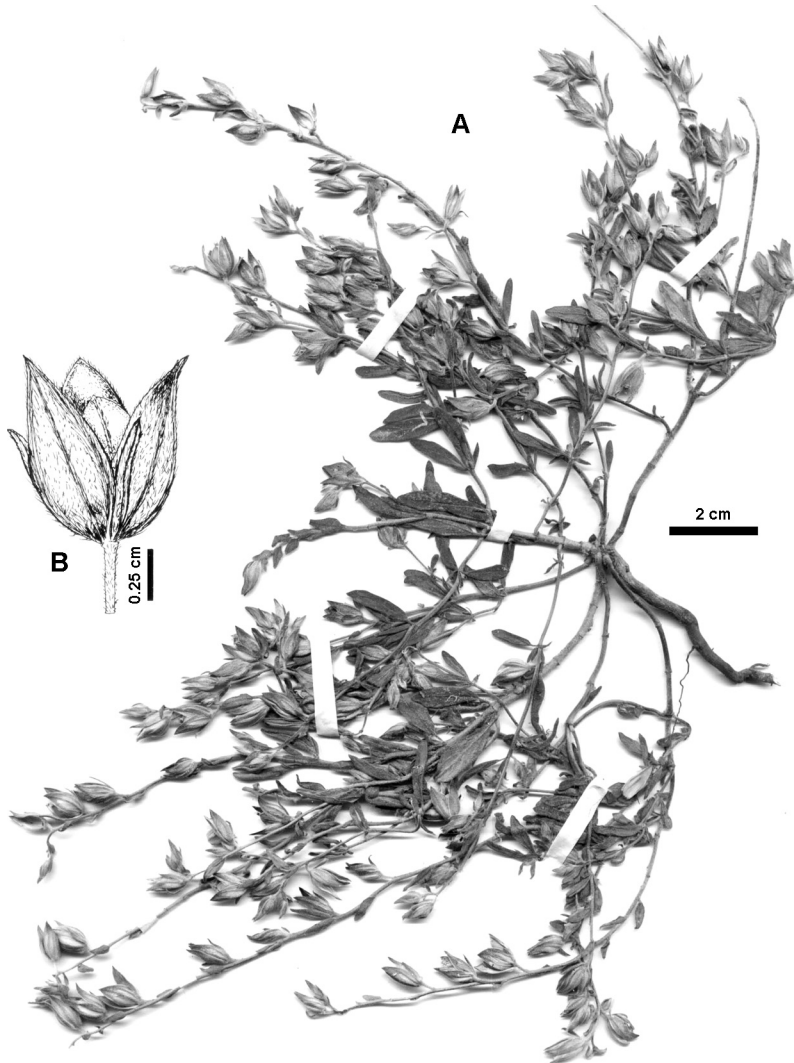


Fig. 1. — A: Holotype of *Helianthemum assadii*. — B: *Helianthemum assadii*. Calyx including fruit.

ADDITIONAL SPECIMENS EXAMINED (paratypes): — **Iran.** Bushehr province: Tangestan, Ahrām, Konari village, 100 m, 8.III.2001 F. Gholamian & H. Khosravani 42902 (FAR); Genaveh, Gomarun, 130 m, 24.IV.2002 F. Gholamian & M. Amiri 42990 (FAR). Fars province: 19 km from Khonj to Lar, 700–1200 m, 15.IV.1983 M. Assadi & Sardabi 41653 (TARI). Khuzestan province: 18 km from Ramhormoz to Ramshir, 200 m, 7.III.1978 Ronemark & V. Mozaffarian 30999 (TARI).

Helianthemum assadii is endemic to southern Iran and known from five localities in the provinces of Sistan & Baluchestan, Bushehr, Fars, and Khuzestan (Fig. 2).

Morphologically the closest relative of this species is *H. salicifolium*, which is distributed from Europe to Turkmenistan. It also occurs

in all provinces of Iran. The examination of more than 300 specimens (TARI, FAR, and private herbarium of the second author), collected during 31 years (1972–2003) of *H. salicifolium*, has revealed that it is a variable species. In Iran, this species grows from sea level to 2100 m altitude.

Helianthemum assadii differs from *H. salicifolium* in the following characters: pedicel length (3–4.5 mm vs. 10–15 mm), pedicel posture (erect vs. horizontally spreading and later turned upwards at apex), capsule shape (ovoid–trigonus vs. ovoid–globular), capsule indumentum (marginal ciliate vs. glabrous). Furthermore, the stigma is comose.



Fig. 2. Distribution map of *Helianthemum assadii*.

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