

## *Helianthemum sinuspersicum* (Cistaceae), a new woody species from Iran

F. Gholamian\* & F. Ghahremaninejad\*\*

### Zusammenfassung

Eine neue Art in der Gattung *Helianthemum* (Cistaceae) wird beschrieben. Sie ist verholzt, die Stipel fallen ab, die Blütenstiele sind lang und dünn, und sie besitzt 34 - 36 Staubblätter: *Helianthemum sinuspersicum*. Diese Art ist endemisch im südlichen Iran in der Provinz Bushehr. Sie ist am ähnlichsten und möglicherweise nahe verwandt mit *H. kahiricum* DEL., unterscheidet sich aber im generellen Habitus und bei den Blütenstielen.

### Abstract

A new *Helianthemum* species (Cistaceae), with a woody habit, deciduous stipules, long and thin pedicels, and 34 - 36 stamens is described and illustrated: *Helianthemum sinuspersicum*. It is endemic to the Bushehr province of southern Iran. The species appears to be most closely related to *H. kahiricum* DEL., but differs from it especially in pedicel and habit characteristics.

**Key words:** Cistaceae, *Helianthemum sinuspersicum*, Iran, new species, taxonomy.

### Introduction

The family Cistaceae JUSS., with eight genera and nearly 175 species is distributed in temperate and warm climates (MABBERLEY 1997), includes only 9 species in the Flora Iranica region (RECHINGER 1967). These nine species belong to three genera *Helianthemum*, *Fumana*, and *Cistus*.

Six non-endemic species of *Helianthemum*, *H. stipulatum* (FORSSK.) C.CHRIST., *H. lippii* (L.) PERS., *H. nummularium* (L.) MILLER, *H. ledifolium* (L.) MILLER, *H. salicifolium* (L.) MILLER, and *H. aegyptiacum* (L.) MILLER, were included in the account of the genus in Flora Iranica (RECHINGER 1967). Five of these species, i.e. all of them except *H. stipulatum*, were recorded from Iran. ASSADI (1984) recorded an additional species, *H. kahiricum* DEL., for the flora of Iran. Recently a new species, *H. assadii* F. GHAHREMANI. & GHOLAMIAN (GHAHREMANINEJAD & GHOLAMIAN 2005) was described from southern Iran.

During field work in southern Iran a new perennial species of *Helianthemum* has been found by the authors in Bushehr province. This new species is described below.

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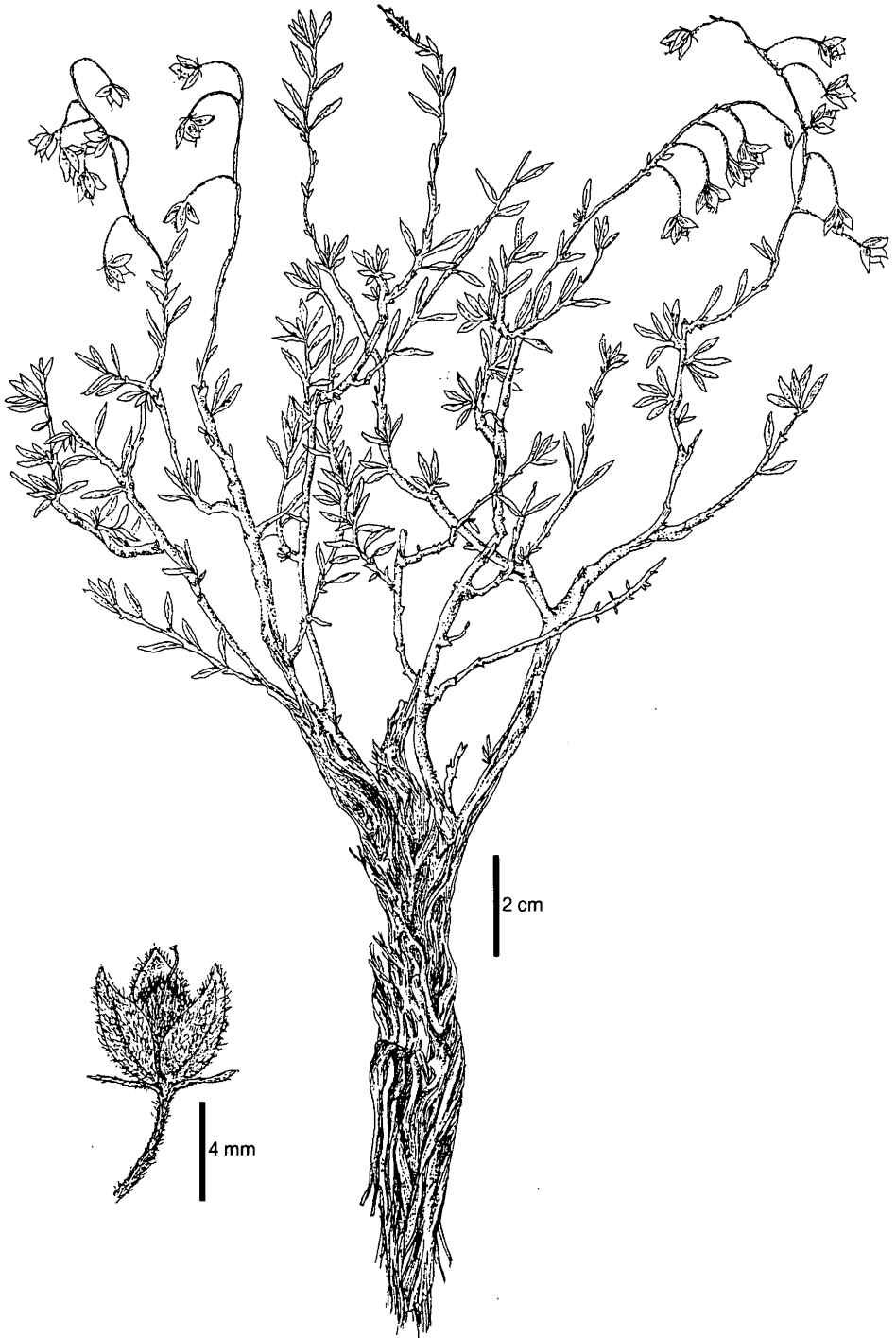


Fig. 1: *Helianthemum sinuspersicum* - From the holotype: Fatemeh Gholamian 807 (FAR). Drawing Rahele Jomepour.

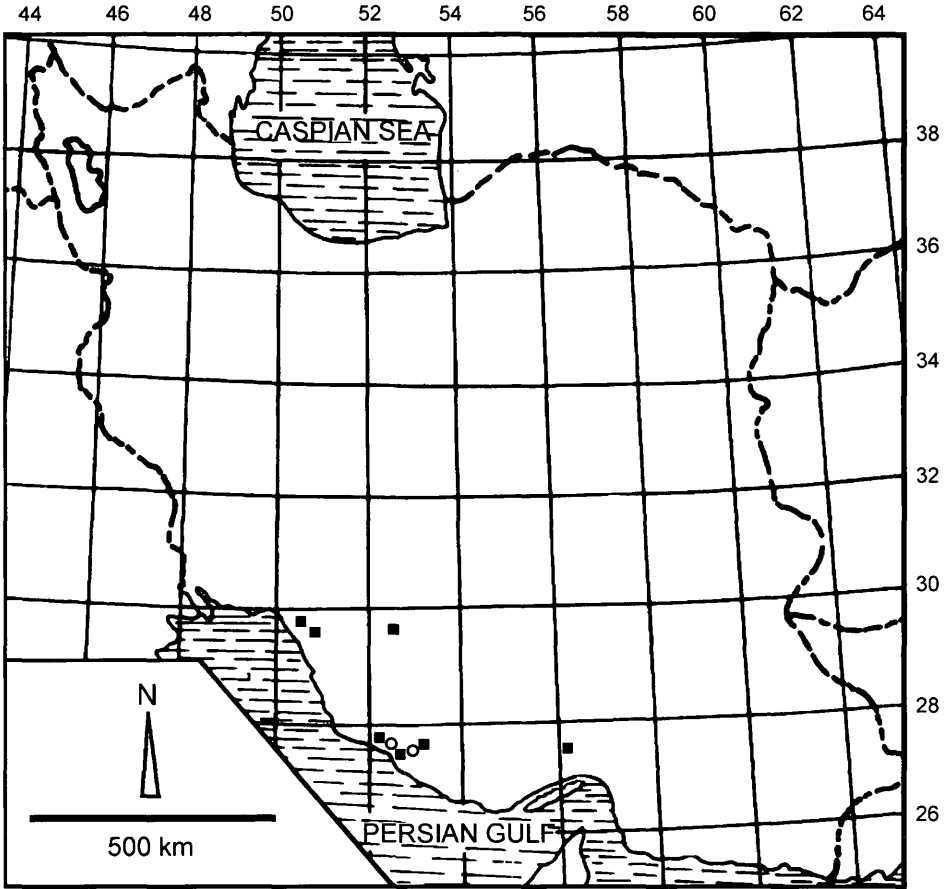


Fig. 2: Distributions of *Helianthemum sinuspersicum* ● and *Helianthemum kahiricum* ■.

***Helianthemum sinuspersicum* GHOLAMIAN & F. GHahremani, sp.n. (Fig. 1)**

Ex affinitate *H. kahirico* DEL. sed differt: caudex altior (ad 50 cm, nec 20 - 30 cm), frutex (nec suffrutex), stipulae deciduae (nec persistentes), pedicelli longiores (12 - 15 nec 2 - 5 mm longi), tenuiores (ad 0.25 mm nec 0.40 mm lati), stamina numerosa (34 - 36, nec 16 - 24), bractee breviores.

**Typus:** Iran, Prov. Bushehr, Kangan, Bandar Taheri bifurcation to Jam, 30 m s.m., 24. 3. 1999, Fatemeh Gholamian 807 (Holotype: FAR; Isotypes: FAR, TARI, W).

Perennial, woody shrublet, caespitose, up to 50 cm tall or more. Stems many, erect, branched from the base and above; young stems covered by a densely silvery indumentum of subappressed-tomentose to tomentose hairs; older stems glabrescent, grayish-brown. Leaves stipulate, small, alternate, 3 - 11 mm long, 0.5 - 2.5 mm wide, oblong, acute, revolute-margined, densely tomentose on both surfaces, sessile to short petiolate; petioles up to 1.5 mm long. Stipules deciduous, triangular to triangular-lanceolate, 0.5 - 2 mm long, ca. 0.4 - 0.6 mm wide. Inflorescence 2.5 - 3 cm long, 5 - 8-flowered in axils.

Bracts exstipulate, subulate, 1 (- 1.5) mm long, 0.5 mm wide, much shorter than the pedicels, densely tomentose. Pedicels slender, filiform, at first erect, becoming deflexed in fruit and at least 3 times as long as the capsules. Sepals abaxially densely tomentose, adaxially glabrous; the 2 outer sepals 2 - 2.5 mm long, 0.25 - 0.5 mm wide, linear; the 3 inner sepals 4 - 6 mm long, 2 - 3 mm wide, ovate-elliptic much longer than the outer ones. Petals 5, yellow, glabrous, 4 - 5.5 mm long, 2.5 - 3 mm wide, obovate. Stamens 34 - 36, glabrous, free; filaments 1.6 - 2 mm long; anthers ca. 0.3 mm long. Capsules ovate, slightly shorter than the calyx, 3.5 - 4 mm long, ca. 2 mm diameter, densely sericeous, 11 - 15-seeded. Seeds tetragonal-flattened, yellow.

Paratype: Iran, Prov. Bushehr, Kangan, Bidkhun altitudes, 295 m s.m., 16 April 2000, Fatemeh Gholamian 842 [FAR].

The new species grows near the Persian Gulf; thus the epithet is chosen to reflect its known area of distribution.

*Helianthemum sinuspersicum* is endemic to south Iran and known only from the two mentioned localities in Bushehr province, Iran (Fig. 2).

Morphologically the closest relative of this species is *H. kahiricum* DEL., which is distributed in S and SSW Iran based on 65 specimens collected by the authors. These specimens are distributed in Hormozgan, Fars, Sistan & Baluchestan, and Bushehr provinces between 5 to 210 m altitudes. The new species differs from *H. kahiricum* in the following characters: taller habit (up to 50 cm vs. 20 - 30 cm tall), wholly woody habit (vs. only woody at the base), alternate leaves (vs. opposite to alternate), deciduous stipules (vs. persistent), bract length (much shorter than the pedicel vs.  $\frac{1}{2}$  of the pedicel), more flowers in the inflorescence (5 - 12 vs. 5 - 8-flowered), longer pedicels (12 - 15 vs. 2 - 5 mm long), thinner pedicels (up to 0.25 vs. 0.40 mm wide), more stamens (34 - 36 vs. 16 - 24), and fruit calyx open (vs. erect and enclosing the capsule).

#### Acknowledgments

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