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

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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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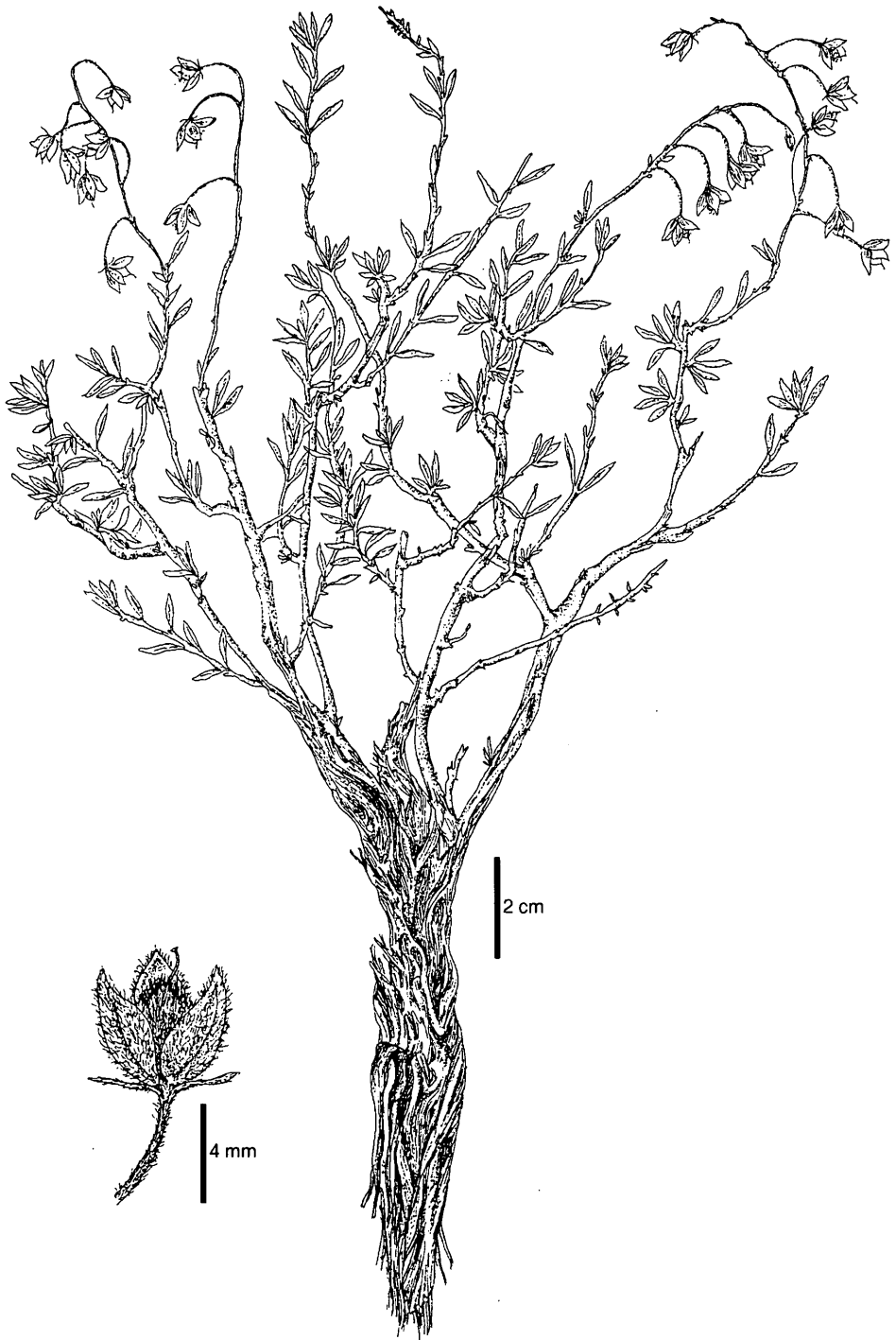


Fig. 1: *Helianthemum sinuspersicum* - From the holotype: Fatemeh Gholamian 807 (FAR). Drawing Rahele Jomepour.

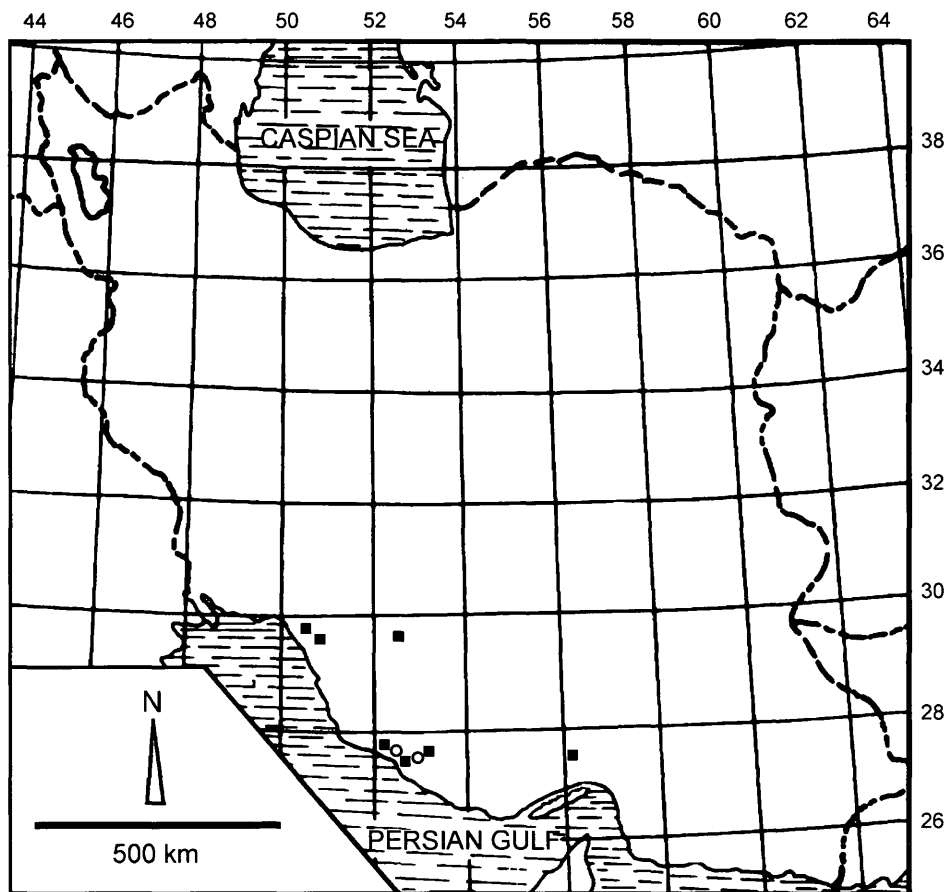


Fig. 2: Distributions of *Helianthemum sinuspersicum* ● and *Helianthemum kahiricum* ■.

***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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