

Cousinia (sect. Spinuliferae) hazarensis (Compositae, Cardueae), a new species from SE Iran

Authors: Mirtadzadini, Mansour, and Attar, Farideh

Source: Willdenowia, 34(1) : 191-194

Published By: Botanic Garden and Botanical Museum Berlin (BGBM)

URL: <https://doi.org/10.3372/wi.34.34117>

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MANSOUR MIRTADZADINI & FARIDEH ATTAR

Cousinia (sect. *Spinuliferae*) *hazarensis* (*Compositae*, *Cardueae*), a new species from SE Iran

Abstract

Mirtadzadini, M. & Attar, F.: *Cousinia* (sect. *Spinuliferae*) *hazarensis* (*Compositae*, *Cardueae*), a new species from SE Iran. – Willdenowia 34: 191–194. – ISSN 0511-9618; © 2004 BGBM Berlin-Dahlem.

Cousinia hazarensis, a distinctive species endemic to Hazar Mt in the Kerman province in southeastern Iran is described as new to science and illustrated. A key to all six species of *C. sect. Spinuliferae* is provided.

Cousinia sect. *Spinuliferae* Rech. f., which is diagnosed by pink corollae and involucral bracts with ciliate or spinose margins and a sub-basal constriction, comprises five species, of which three (*C. longifolia* C. Winkl. & Bornm., *C. sicigera* C. Winkl. & Bornm., *C. fragilis* C. Winkl. & Bornm.) are distributed in central and eastern Iran and two (*C. shahrestanica* Rech. f. and *C. qaisarensis* Rech. f.) in Afghanistan. A sixth species is here described as new.

Cousinia hazarensis Mirtadzadini & Attar, sp. nova – Fig. 1

Holotypus: Iran, Kerman, NE slope of Hazaran (Hazar) mountain, fall of Rayen, 2900 m, 6.7.1997, Mirtadzadini (TUH 29790).

Perennis, pluricaulis. *Caulis* 45–66 cm altus, striatus, albidus, erectus, ramosus, foliosus, laxe pilosus, glandulosus, cum pilis glanduliferis. *Folia* 27–32 × 7–8.5 cm, coriacea, viridia, glaberrima, utrinque glandulosa, pilis flavis glanduliferis; nervatura pinnato-reticulata, albida, prominentia, costa mediana crassa; folia basalia pinnatilobata, lobis plus minusve 20-jugis, acuta vel acuminate, in spinam terminalem et lateralem usque 6–7 mm longam vulnerantem excurrentia; folia caulina breviter decurrentia (plus minusve 5 mm longa), auriculata; superiora basi semi-cordata, parva. *Capitula* terminalia, subglobosa, plus minusve 165-flora, spinis inclusis 7.5 cm diametro. *Phylla* plus minusve 80, in spinam terminalem attenuata, lateraliter utrinque plurispinosa (spinis usque 10 mm longis), flavo-glandulifera; phylla exteriora plus minusve 24 × 6 mm, supra basin leviter constricta, superne viridia, patentia vel reflexa; phylla intermedia usque 30 × 5 mm; supra basin leviter constricta, interiora breviter spinosa, 25 × 5 mm, acuminata; phylla intima prominentia, erecta, apice lanceolato-acuminata, ciliata, arachnoidea, papillosa, brunneo-glan-

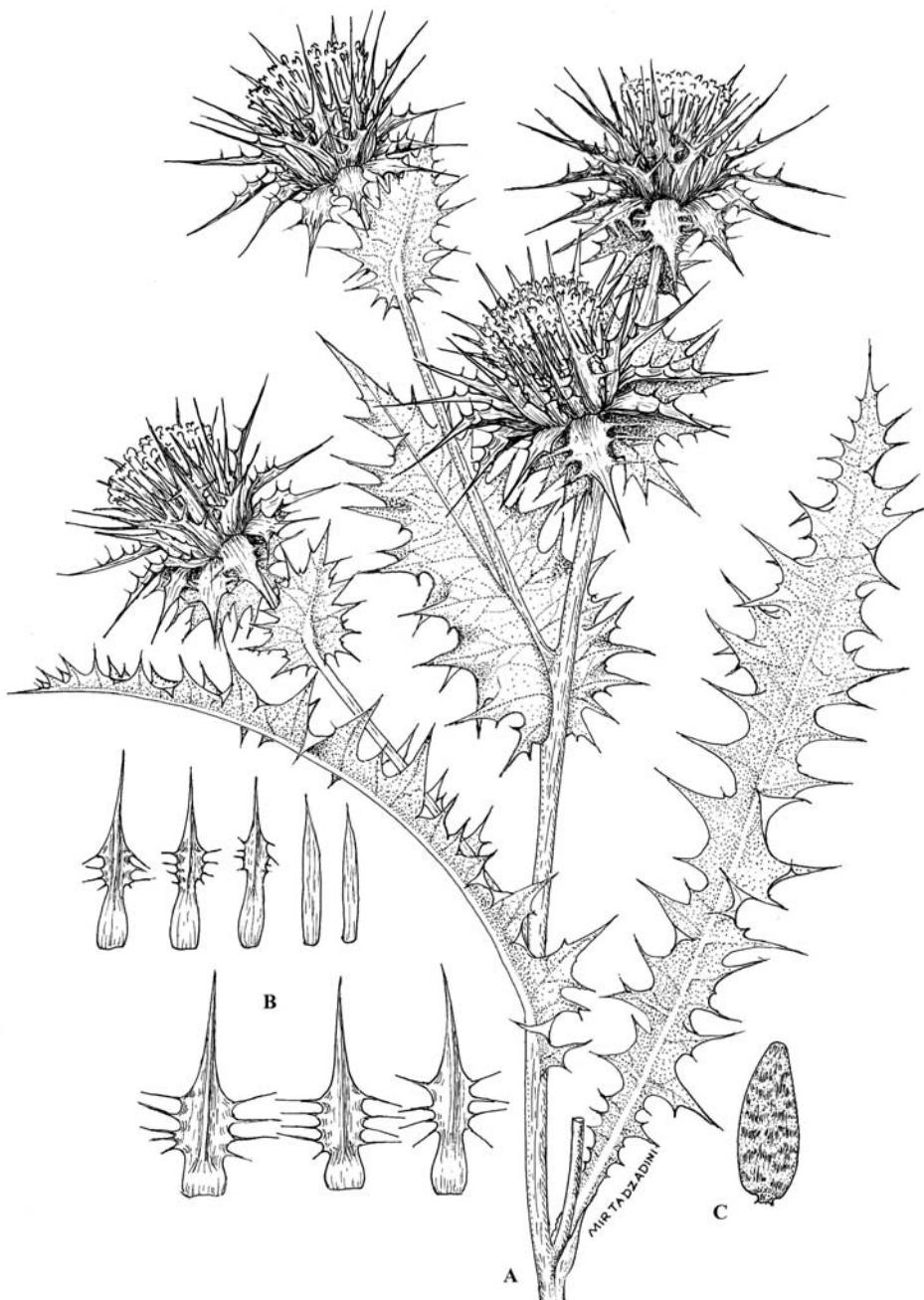


Fig. 1. *Cousinia hazarensis* – A: habit; B: involucral bracts; C: achene. – Drawn from the holotype by M. Mirtadzadini.

dulifera, dorso carinata. *Receptaculi setae* laeves, usque 25 mm longae. *Corolla* 20 mm longa, rosea, tubus limbum circiter aequans; laciniae 3-5 mm longae. *Antherarum* tubus roseus. *Achaenia* compressa, basi attenuata, superne rotundata, denticulata, cinerascenti-brunnescentia, irregulatim atrimaculata, 5 mm longa, 2 mm in diam. *Pappus* setis 3-7 mm longis, scabris, valde caducis.

Multistemmed perennial. Stems 45-66 cm high, striate, white, erect, branched, leafy, loosely covered by glandular or eglandular hairs. Leaves 27-32 × 7-8.5 cm, leathery, bright green, glabrous or with yellow stipitate or sessile glands on both surfaces; nervation pinnate-reticulate, whitish, prominent; midrib thickened; basal leaves lanceolate, pinnatifoliated, acute or acuminate; lobes 20, terminal and lateral spines 6-7 mm long; caudine leaves decurrent on stems and branches for c. 5 mm and auriculate; uppermost leaves smaller, semicordate. Capitula solitary, subglobose, ± 165-flowered, 7.5 cm in diam. (including spines). Involucral bracts ± 80, attenuate into an apical spine up to 10 mm long, laterally multispinose (spines up to 10 mm long), slightly constricted above base, sometimes incised (lobes terminating in a long spine), dorsal and ventral surface with yellow stipitate or sessile glands, midrib distinct, prominent, dorsally keeled; outer involucral bracts ± 24 × 6 mm, distal half green, spreading or reflexed; middle involucral bracts up to 30 × 5 mm; inner involucral bracts with shorter spines on the margin, 25 × 5 mm, acuminate; innermost involucral bracts prominent, erect, acuminate, ciliate at the margin, dorsally brown in distal half, arachnoid, covered by papillae and brown glands, exserted. Receptacle bristles smooth, up to 25 mm long. Corolla dark pink, 20 mm long, limb almost as long as tube; laciniae of limb 3-5 mm long. Anther tube pink, glabrous. Achenes compressed, attenuate towards base, rounded and denticulate above, dark greyish brown, irregularly spotted, 5 mm long and 2 mm in diam. Pappus of caducous, scabrous bristles 3-7 mm long.

Distribution and habitat. – Endemic to southeastern Iran (Kerman province), growing on rocky slopes of Hazar Mt (Fig. 2).

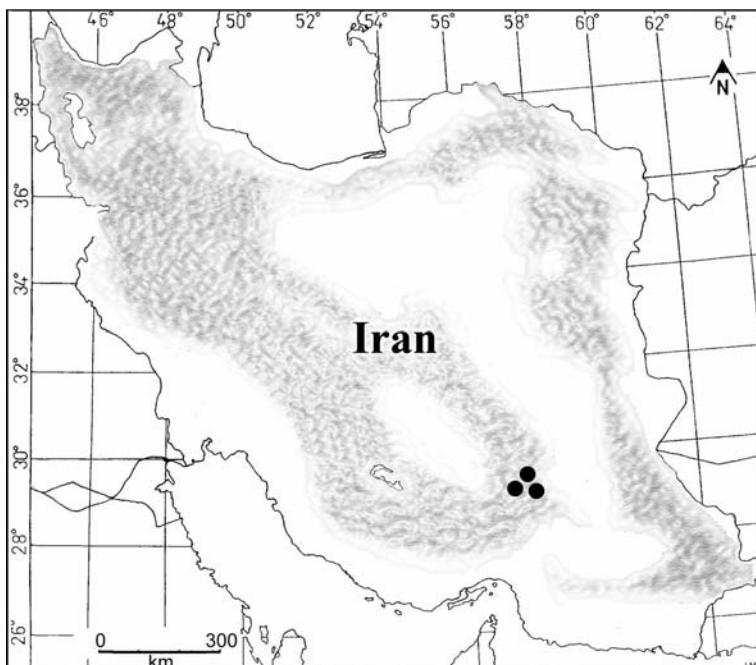


Fig. 2. Distribution of *Cousinia hazarensis*.

Table 1. Comparison between *Cousinia hazarensis* and its closest ally *C. qaisarensis*.

	<i>C. qaisarensis</i>	<i>C. hazarensis</i>
Corolla [length]	25 mm	20 mm
Involutal bracts	> 100	± 80
Leaf lobes	± 7 on each side	c. 20 on each side
Leaf indumentum	loosely arachnoid-floccose	glandular, otherwise glabrous
Stem indumentum	arachnoid-floccose	glandular, otherwise ± glabrous

Additional specimens seen. – IRAN: KERMAN: Rayen to Babzangi, 2820 m, 17.6.2002, Mirtadzadini (TUH 29789); Rayen, Babini, 2750 m, 17.6.2002, Mirtadzadini (TUH 29788).

Relationships. – *Cousinia hazarensis* is closely related to *C. qaisarensis*, which is distributed in N Afghanistan (Maimana), see Table 1.

Key to the species of the *Cousinia* sect. *Spinuliferae*

1. Leaves subherbaceous, margin coarsely crenate *C. shahrestanica*
- Leaves coriaceous, margin different 2
2. Receptacle bristles scabrous; involucral bracts with subserrulate margins . . . *C. sicigera*
- Receptacle bristles smooth; involucral bracts with denticulate or spinulose margins . . . 3
3. Corolla 25 mm long, involucral bracts more than 100 *C. qaisarensis*
- Corolla ≤ 20 mm long, involucral bracts ± 80 or less 4
4. Involucral bracts ± 80, corolla 20 mm long *C. hazarensis*
- Involucral bracts 30-60, corolla ≤ 15 mm long 5
5. Involucral bracts 30-35; capitulum 2.5-3(-4) cm in diam. *C. longifolia*
- Involucral bracts 50-60; capitulum 5-6 cm in diam. *C. fragilis*

Acknowledgement

We wish to thank Dr Iranshahr for editing the Latin diagnose.

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Addresses of the authors:

Mansour Mirtadzadini, Department of Biology, Faculty of Science, Shahid-Bahonar University, Kerman, Iran; e-mail: mirtadz@mail.uk.ac.ir

Farideh Attar, Central Herbarium of Tehran University, Faculty of Science, Tehran University, Tehran, Iran.