

## A NEW SPECIES OF THE GENUS COUSINIA (COMPOSITAE, SECT. STENOCEPHALAE) FROM SW OF IRAN

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*Cousinia nujianensis* from sect. *Stenocephalae* is described as a new species from SW of Iran. Its recognized relationships with the closest species are discussed. Illustration of the new species is presented.

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گونه کوزینیا نوژیاننسیس از بخش استنوسفاله به عنوان گونه ای جدید از جنوب غرب ایران شرح داده شده ارتباطات آن با نزدیکترین گونه‌ها بحث می‌شود و تصویر آن نیز ارائه می‌گردد.

## INTRODUCTION

*Cousinia* Cass. with nearly 240 (Ghahreman., Iranshahr, & Attar 1999; Attar & Ghahreman 2002; Attar 2000; Attar, & Ghahreman 2000; Attar, Ghahreman & Assadi 2000 and 2001; Mehregan, Assadi & Attar 2003) species in Iran is the second large genus after *Astragalus* (Ghahreman & Attar 1999). Also sect. *Stenocephalae* Bunge is the second large section after sect. *Cynaroideae* Bunge in the genus *Cousinia* in Iran. Sect. *Stenocephalae* Bunge has 33 species of which 29 are distributed in Iran (Rechinger 1972 and 1979). From these, 23 species are endemic in Iran. This section is distinguished from the other sections by a combination of characters (Rechinger 1972): small heads with maximum 20 flowers, leaves decurrent (short or long), bracts exappendiculate, lanceolate, or subulate, erect, spreading or reflexed.

Distribution of the species of sect. *Stenocephalae* Bunge are in the eastern and central Elburz mountains, central part of Iran (semidesert region), central part of Zagros mountains and southeastern mountains of Kerman province.

***Cousinia nujianensis* Attar, Ghahreman, Saber & Zarre (sect. *Stenocephalae*), sp. nov.**

Differt ab *Cousinia cylindrocephala* Jaub. & Spach, floribus 6 (nec 7-10); phyllis 32 (nec 40-45); corollis 12 mm. longis (nec 12-15 mm.); phyllis interioribus papilloso-glandulosis (nec laevibus).

Differt ab *Cousinia thamnoides* Boiss. & Hausskn., floribus 6 (nec 8-13); capitulis oblongo-campanulatis (nec cylindratis); phyllis 32 (nec 35-40) acuminatis, squarrosis (nec breviter apiculatis, imbricatis).

Suffrutex caespitosa, multicaulis, collo fibroso. Caulis 25-30 cm. altus, parce flavo-glandulosus, arachnoideus, demum glabrescens, superne breviter pauciramosus.

Folia coriacea, viridia, discoloria, subtus dense araneoso-tomentosa, nervatura utrinque prominente, lobato-spinosa; folia basalia 6-9x2.5-3.5 cm., petiolis 7-8 mm longis; folia caulina media 5-6x1-1.2 cm. longa, lanceolata, cuneata, sessilia, decurrentia (1.5-2.5 mm. longa); folia superiora 3-5x2-6 cm., lanceolata, cuneata, sessilia, decurrentia; summa decrescentia. Capitula 6-flora, breviter pedunculata (2-3 mm longa), 2-3-na congesta, raro singulares; involucrium 9-10x4-5 mm., cylindricum, basi rotundatum, pallide viride, parce albido-araneosum; phylla 32, coriacea, imbricato-squarrosa, acuminata, in spinulam patulam rarius rectam excurrentia, margine ciliata, glanduloso-papillosa; exteriora et intermedia obtusculum carinata; exteriora 4.5-5.5x1 mm., lanceolato-subulata, spinis terminalibus 15 mm. longis; phylla intermedia 6-7 mm longa, subulata; phylla interiora 12.5-13 mm. longa, apice lata, apiculata, dense glanduloso-papillosa; phylla intima linearia, sursum apicem latiora, 11.5 mm. longa, margine ciliata. Receptaculi setae laeves. Corolla flava, 10-12 mm longa (limbo 6-7, tubo 4-5, laciniis 2 mm. longis), flavo-glandulosa, antherarum tubus purpurea, glaber. Achaenia ignota.

Perennial, suffruticose, 2.5-30 cm. tall. Stem at first covered by loose arachnoid hairs, then glabrescent, along with small yellow sessile glands, branched above, with short branches. Leaves coriaceous, bright green, discolored, lower surface covered by appressed arachnoid hairs, gradually glabrescent, upper surface glabrescent, with scattered yellow small glands, nervation reticulate-pinnate, prominent on both surfaces, lobed-spinose; basal leaves 6-9x2.5-3.5 cm, narrow to broad elliptic, with 2-3.5 mm. long petioles and 4.5-5 mm. long spines; lower leaves 8-9x2.5-3 cm., narrow elliptic, attenuate at base into 7-8 mm. long petioles; median leaves 5-6x1-1.2 cm. long,



Fig. 1 *Cousinia nujianensis* (x 0.5); bracts (x 1.5).

Table 1: Comparison of *Cousinia nujianensis* and the related species.

Characters	<i>C. thamnodes</i>	<i>C. cylindrocephala</i>	<i>C. nujianensis</i>
Flowers	8-13	7-10	6
Bracts	35-47, imbricate	37-45, squarrose	32, squarrose
Length of corolla	12-13 mm	8-10 mm.	12 mm
Outside of inner bracts	Papillose	Smooth	Papillose-glandular

lanceolate, cuneate, decurrent (1.5-2.5 cm. long); upper leaves 3-5x2-6 cm., lanceolate, cuneate, decurrent; uppermost leaves smaller. Capitulum 6-flowered, loosely arachnoid, with dense yellow glands, with 2-3 mm. long peduncle, 2-3 approximate, rarely solitary; involucre cylindrical, without spines 9-10x4-5 mm., rounded at base; bracts 32, imbricate, longly acuminate, slightly spreading at the tip, ciliate along the margin, outside with dense yellow glands and papillas; outer and median bracts obtusely keeled; outers 4.5-5.5x1 mm., lanceolate-subulate, with terminal 0.5 mm. long spines; medians 6-7 mm. long, subulate; inner bracts 12.5-13 mm. long, broader toward the apex, apiculate, with dense glands and papillas; innermost bracts linear, 11.5 mm. long, ciliate at margin. Receptacle bristles smooth. Corolla yellow, with yellow glands on the outside, 10-12 mm. long, (limb 6-7, tube 4-5 and lobes 2-2.5 mm. long); anther tube glabrous, purple. Achene unknown.

*Typus*: Lorestan: Keshvar road, Nujian pass, 1750 m., 18.6.1998, Ghahreman & Attar, 21830 (holotypus TUH).

*Habitat*: Margin of *Quercus* forests.

*Cousinia nujianensis* is very close to *C. cylindrocephala* from central semidesert parts of Iran and also *C. thamnodes* from SW of Iran. They are compared in table 1.

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