# معرفي Cousinia elymaitica (تيره كاسنيان) به عنوان گونه جديد از غرب ايران

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**چکیده.** گونه Cousinia elymaitica به عنوان گونه جدید از غرب ایران گزارش می شود. این گونه به واسطه شکل رویشی، گلبرگ های ارغوانی و برگهای ساقه آغوش در بخشه Pugioniferae قرار دارد. نزدیک ترین خویشاوند آن، C. macroptera است. نقشه پراکنش به همراه تصاویری از این گونه ارائه شده است.

واژههای کلیدی. آرایه جدید. آسیا، انحصاری، تیره مرکبان، فلور ایران

# Cousinia elymaitica (Cardueae, Asteraceae) a new species from west of Iran

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**Abstract.** Cousinia elymaitica, which has been collected from western Iran, is described in this paper as a new species. This new species has been assigned to the sect. Pugioniferae on the basis of its habit, purple corolla and decurrent leaves. Its closest related species is C. macroptera. A distribution map and an illustration of the related specimens have also been provided.

Keywords. Asia, Compositae, endemic, flora of Iran, new taxon

#### INTRODUCTION

Cousinia Cass. is the third largest genus of the family Compositae with approximately 700 species in the world (Attar & Ghahreman, 2006; Attar & Djavadi, 2010). A large number of Cousinia species are distributed in the Irano-Turanian region. Cousinia is artificially divided into 43 sections (Attar & Djavadi, 2010) in Iran. The largest section is Cynaroides Bunge with 75 species and the smallest sections are Decumbentes Rech.f. and Harazensis Rech.f., each with only one species.

During collections of *Cousinia* specimens in the last 20 years, an interesting specimen was found from the west of Iran, beeing described as new species here. *Cousinia elymaitica* is related to the sect. *Pugioniferae* Bunge by having purple corolla, winged stems, smooth bristles, spreading phyllaries and large basal leaves. Section *Pugioniferae* has 15 species (Rechinger, 1972; Attar & Mirtadzadini 2009; Assadi, 2009) of which 13 taxa are distributed in Iran.

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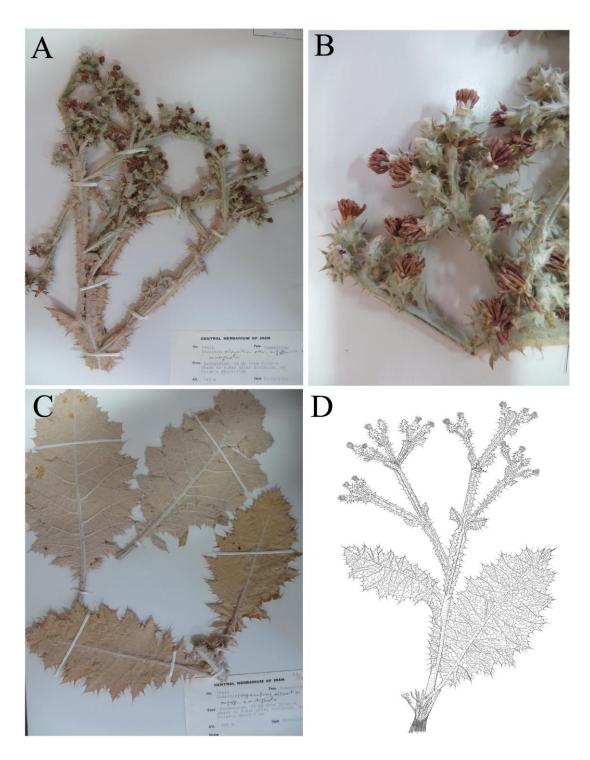


Fig. 1. A-D: Photos and Illustration of *Cousinia elymaitica*, from holotype (Mozaffarian 79524).

The related taxon to the new species is *C. macroptera*, which is distributed in NW Iran, E Turkey, and S Transcaucasus.

## MATERIALS AND METHODS

During the study of about 100 specimens of section *Pugioniferae* collected deposited in TUH and TARI, an interesting specimen was found

which could not be assigned to previously known species of this section in Iran. Therefore, this specimen is introduced as the new species for the science.

### RESULTS AND DISCUSSION

Cousinia elymaitica Attar, Mozaff. & Mirtadz., sp. nova (Fig. 1. A-D).





Fig. 2. E-F: Photos of Cousinia macroptera.

**Holotype:** Kermanshah Province: 32 km from Gilan-e Gharb toward Sumar, after division of Gilan-e Gharb and Ilam, 740 m, 10.6.1999, Mozaffarian 79524 (TARI).

**Description:** Monocarpic, up to 35 cm high, whitearaneose. Stem corymbose above, continuously winged. Leaves more or less discolored, whitish below, broadly lobed, with spines up to 5 mm long; midrib broad, prominent; lower leaves broad elliptic, 18-24×10-12 cm; cauline leaves decurrent, forming decurrent lobed-spinose wings. Capitula 16 mm in diam. (including bracts), more or less 20flowered, densely araneose; involucre ovate, constricted above, more or less with 40 phyllaries; bracts ovate, attenuate toward apex, acute; outer and median bracts spreading; inners erect; bristles smooth. Corolla purple, 11-12 mm long; limb 6-7 mm long; lobes 2-3 mm long; anther tube concolered. Achene brown, obovate, longitudinally memranose-striate, membranous-dentate above, shallowly rugose; pappus caducous

Diagnosis: Differs from C. *macroptera* in following characters: size of capitulum (6-8 mm not 8-10 mm); flower number (15-25 not 50); leaf color (indistinctly discolored not distinctly discolored); bract tip (acute, not spiny), stem wing width (narrow oblong-continue, not wide, attenuate toward base) (Figs. A-D).

**Diagnose:** Differt ab C. *macroptera:* capitulum 6-8 mm (non 8-10 mm), flores 15-25 (non 50), folia indistincte discoloria (non distinct discoloria), apex bracteae acutae (non spinosae), alae caulium continue anguste oblongarum (non basin versus late attenuatarum).

Taxonomic remarks: Cousinia elymaitica belongs to the sect. Pugioniferae by smooth bristles, color of corolla, decurrent leaves and exappendiculate spreading bracts. Cousinia macroptera, by having large oval rosette leaves, capitulum shape and bracts, is the characteristic species among the other members of the section. The new species can be compared with C. macroptera, which is presented in NW Iran. Although the type locality of the new species is far from the distribution area of C. macroptera, it is close to C. macroptera by having large rosette leaves, similar size and shape of bracts and large basal leaves (Figs. E and F). The new species is separated from C. macroptera by the size of capitulum, the number of flowers, the color of basal leaves and stem leaves.

#### **CONCLUSION**

Cousinia, as the second largest genus of Iran flora, consists of several complex species and unidentified taxa. More comprehensive morphological, micromorphological and molecular

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approaches are needed for identification and delimitation of these taxa.

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