Cousinia Subpectinata (Asteraceae: Plathyacanthae), a New Species from W of Kerman Province

S. M. Mirtadzadini, F. Attar & M. Assadi


Cousinia subpectinata is described and illustrated as a new species from Iran. This species is compared with its closest relative "C. rechingerorum". Also description of section Plathyacanthae is completed with morphological characters of this species.

Seied Mansour Mirtadzadini, Department of Biology, Faculty of Science, Shahid Bahonar University, Kerman, Iran. -Farideh Attar, Central Herbarium of Tehran University, Department of Botany, Faculty of Science, Tehran, Iran. -Mostafa Assadi, Research Institute of Forests and Rangelands, P. O. Box. 13185-116, Tehran, Iran.

Key words: Cousinia, Plathyacanthae, new species, Iran, endemic plants

گونه جدید Cousinia subpectinata از غرب کرمان Platyacanthae از بخش

سید منصور میرنژاد الیاسی، فریده گلی و مصطفی اسدی

به عنوان گونه جدیدی از ایران شرح داده می‌شود. این گونه با Cousinia subpectinata مقایسه شده، می‌تواند از نظر بیولوژی و پراکنش جغرافیایی آن ارائه می‌شود. همچنین شرح با ارتباط با این گونه تکمیل می‌شود.
Introduction
Recent field work at high mountains of Kerman province has added a new species to the genus of *Cousinia* Cass. one of the largest Irano-Turanian genera in Iran. This new species belongs to the section *Platyacanthae*. Some morphological characters of this species does not fit to the characters of section. With study of other species description of section is completed. This section has seven species which six of them are endemic to Iran. Former distribution of Iranian species has been in Khorasan province (Hezar-Masjed, Binalou and Bezgh mountains, Kopet–Dagh in N. of Quchan and Bojnurd cities), but now extends to Kerman province as well.

*Sect. Platyacanthae* Rech. f. (Description completed)
Suffruticose-caespitose, with dried petioles at the base. Stem long, few-branched above, lateral branches exceeding the central. Leaves coriaceous, spinose-lobed, often crisped; basal leaves rosette; stem leaves not decurrent, reduced. Heads major, 80-100-flowered or more (in new species 40); bracts thick, rigid, coriaceous, wide, slightly constricted above the base into appendage (except *C. rechingerorum* Bornm. and new species); appendage wide, entire, with rigid long terminal spine. Corolla tube longer than the limb (up to twice).

*Cousinia subpectinata* Mirtadzadini, Attar & Assadi, sp. nov.
Perennis, pluricaulis, suffruticosa, collo squarroso basibus petiolorum persistentibus. Caulis 50-65 cm altus, albidus, substratiatus, glabrescens, inferne floccosus, superne pauciramosus. Folia omnia coriacea, arachnoidea, concoloria vel vix discoloria, lamina lanceolata usque oblonga pinnatifida vel pinnatifida, lobis triangularibus spinosis. Folia basalia petiolata, spinis inclusis c. 7x30cm, petiolo floccoso; folia caulina non decurrentia, sessilia, basi semicordata, superiora sensim decrescentia. Capitula singula, terminalia, subcorymbosa, c. 40 flora, spinis inclus usque 4cm diametro; involucrum sine spinis 1.5x2cm., parce araneosum; phylla 35-55, exteriora crasse coriacea, rigida, triangularia lanceolata, supra basin leviter constricta, patentia, 24-27mm longa, prope basin 8mm. lata; intermedia usque ad 14cm longa, 5mm lata, ad basin constricta et ciliato-pectinata, ± concava, subhorizontala vel erecto-patentia, in spinam terminalem abrupte vel subsensim attenuata; phylla inferiora herbacea, in parte superiore membranaceo-pallide brunnea, oblonga, apice epicipulata, glaberrima; phylla intima linearia, tota membranacea. Receptaculi setae laevae, usque 16mm longae. Corolla rosea, c. 15mm. longa, tubo c. 7.5mm, limbo 5mm, lacininis 2.7mm longis. Antherarum tubus roseus, glaber, Achaenia 6.6mm longa, ovata vel oblonga, grisea, fusco-maculata, compressa, ecostata. *Typus.* Kerman: Shahr-e Babak, Meimand, 2800m, M. Mirtadzadini 33501-TUH (Holotypus TUH).

Perennial, multistemmed, suffrutescent, covering with the remnants of petioles at the base. Stem 50-65cm, white, substrate, becoming glabrous, floccose in lower part, few branched above. All leaves leathery, arachnoid, colored or slightly discolored, blade lanceolate to oblong, pinnatifolobed to pinnatifid; lobes triangular, spiny; basal leaves petiolate, including spines 7x30cm; stem leaves not decurrent, sessile, subcordate; upper leaves gradually reduced. Heads solitary, nearly corymbose, ± 40-flowered, including spines up to 4cm in diam.; involucrum without spines 1.5x2cm, sparsely cob webby; bracts 35-55; outliers thick leathery, rigid, triangular-lanceolate, above base slightly constricted, spreading, 24-27mm long, near the base 8mm
Table 1. Comparison between *Cousinia subpectinata* and its related species.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th><em>Cousinia subpectinata</em></th>
<th><em>C. rechingerorum</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of flowers</td>
<td>± 40</td>
<td>± 80</td>
</tr>
<tr>
<td>Number of bracts</td>
<td>35-55</td>
<td>25-30</td>
</tr>
<tr>
<td>Margin of outer bracts</td>
<td>Ciliate-pectinate</td>
<td>± entire</td>
</tr>
<tr>
<td>Involucre</td>
<td>1.5x2cm</td>
<td>3x3cm</td>
</tr>
<tr>
<td>Basal leaves</td>
<td>30x7cm</td>
<td>14x4cm</td>
</tr>
</tbody>
</table>

wide; median bracts up to 14cm long, 5cm wide, constricted and ciliate-pectinate, ± concave, almost horizontal or erect-spreading, abruptly terminating in spine above or gradually attenuate; inner bracts oblong, herbaceous, membranaceous-pale brown in upper part, apiculate, glabrous; innermost bracts linear, all membranaceous. Bristles of receptacle smooth, up to 16mm long. Corolla pink, ± 14mm long; tube 7.5, limb 5mm long, lobes 2.7mm long. Anther tube pink, glabrous. Achene 6.6mm long, ovate or oblong, dark brown, dark-spotted, compressed, not ribbed.

This species is endemic to Iran and found in steppe of *Artemisia aucheri* at 2800m altitude. It is compared with its close relative *C. rechingerorum* in Table 1.

Reference
Fig. 1. *Cousinia subpectinata* (× 0.63).