

## A NEW TAXON AND NEW RECORDS OF THE GENUS PARACARYUM (BORAGINACEAE) FROM IRAN

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*Paracaryum glandulosum* is described as a new species from Iran. *P. cynoglossoides* and *P. polyanthum* are new combinations and new plant records from Iran. Basyonyms are *Mattiastrum cynoglossoides* and *M. polyanthum*.

*P. heratense*, *P. leptophyllum* and *P. papillosum* are reported as new plant records from Iran.

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واحد رده بندی جدید و گزارش گونه های جدیدی از *Paracaryum*  
(Boraginaceae) از ایران

محبوبه خاتم ساز

گونه *Paracaryum glandulosum* به عنوان گونه جدید از ایران نام گذاری و شرح داده می شود. گونه های *P. polyanthum*, *P. cynoglossoides* با ترکیب جدید و برای اولین بار از ایران گزارش می گردند. نام پایه ترکیبهای جدید *Mattiastrum*, *M. polyanthum* *cynoglossoides* است.

گونه های *P. papillosum*, *P. leptophyllum*, *P. heratense* برای اولین بار از ایران گزارش می شوند.

## INTRODUCTION

The genera *Paracaryum* and *Mattiastrum* from *Boraginaceae* family in the project of "Flora of Iran in Farsi" have been subject to studies.

On the basis of studies in the field and on the herbarium specimens, the generic character of the genera *Paracaryum* and *Mattiastrum*, i. e. recurved versus flat wings of nutlets is considered unjustified. Plants with intermediate character have been observed. Therefore, the genus *Mattiastrum* is regarded as a synonym of *Paracaryum* (cf. Mill 1987). In this study one species is described as a new and 5 species are reported as new records from Iran.

## NEW SPECIES

***Paracaryum glandulosum* Khatamsaz, sp. nov.** (Fig.1).

Perenne, 30 cm altum, canescenti-hirsutum, pilis glanduliferis mixtis. Caulis erectus, parce ramosus. Folia basalia petiolata, 50-100 mm longa, 5-10 mm lata, lanceolato-spathulata, plerumque acuta, dense patule hispida; caulina minora, sessilia. Inflorescentiae terminales, ebracteatae, vel in parte infima bracteatae. Pedicelli 2-5 mm longi, erecto-patuli, pilis

patentibus vestitis. Calycis floriferi lacinae 3-5 mm longae, lineari-lanceolatae, acutae, fructiferi accrescentes,  $\pm 8$  mm longae, 1.5-2 mm latae, oblongo-lineares; glandulis longiuscule stipitatis. Corolla  $\pm 7$  mm longa, tubulosa, pilosa, glandulifera, atropurpurea (e sicco), limbo quam tubus dimidio brevior, lobis late rotundatis; fornices ad marginem superiorum faucis insertae, longitudine manifeste latiores. Antherae inclusae. Stylus brevis. Nuculae ambitu ovatae vel suborbiculares,  $\pm 6$  mm longae, in area mediana laeves vel in carina parce glochidiatae; ala margine introflexo dentata, dense glandulosa.

*Typus.* Tehran: Zarand, Saveh, 950 m, Dini & Bazargan 8343 (holotypus TARI).

Perennial, 30 cm high. Greyish hirsute, mixed with rather long stalked glands. Branches erect, sparingly branched. Basal leaves petiolate, 50-100 mm long, 5-10 mm broad, lanceolate-spathulate, acute, densely hispid, cauline leaves smaller. Inflorescences terminal, without bracts, or with bracts at the bottom. Pedicels 2-5 mm long, erect-spreading, sparsely pilose. Calyx lobes 3-5 mm long, narrowly-lanceolate, acute in flower, in fruiting stage accrescent,  $\pm 8$  mm long, 1.5-2 mm broad, oblong-linear with rather long stalked

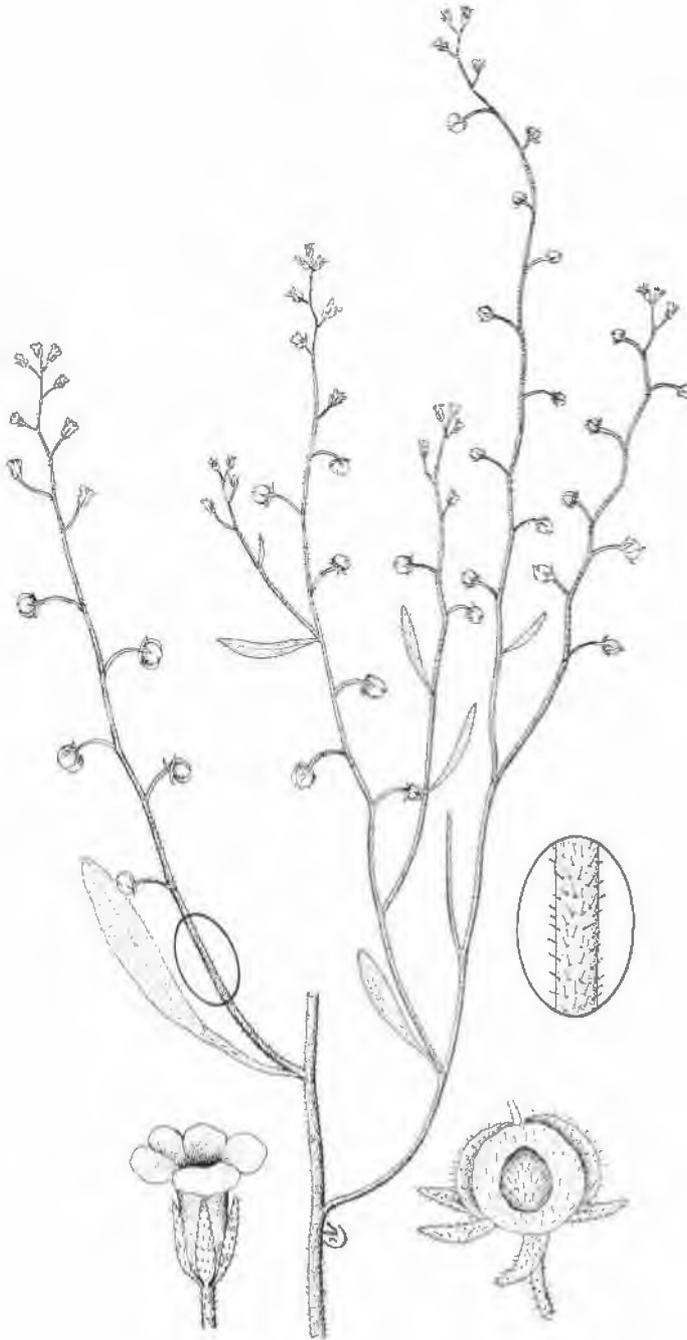


Fig. 1. *Paracaryum glandulosom* (x5.6); flower (x3.9); fruit(x2.4).

glands. Corolla 7 mm long, tubular, covered with glandular hairs, dark purple; limb of corolla shorter than tube; lobes broadly rounded; scales of the corolla inserted at the upper margin of throat. Anthers enclosed. Style short. Nutlet outline ovate or suborbicular,  $\pm 6$  mm long, disc smooth or echinulate on keel, margin of wing incurved, densely glandular.

The new species differs from all species of *Paracaryum* in having long stalked glands on the stem, corolla, calyx and nutlets.

## NEW RECORDS

***Paracaryum cynoglossoides*** (Rech. f. & Riedl) Khatamsaz, **comb. nov.** (Fig. 2.).

Syn.: *Mattiastrum cynoglossoides* Rech. f. & Riedl, Flora Iranica no. 48: 123 (1967).

Baluchestan: Kuh-e Taftan, Sardarya, 2500-2650 m, Valizadeh & Ramak-Maassoumi 1159; 30 Km to Zahedan from Zabol, 1200 m, Valizadeh & Ramak-Maassoumi 1084.

***Paracaryum heratense*** (Rech. f. & Riedl) Kamelin

Syn.: *Mattiastrum heratense* Rech.f. & Riedl, Dan. Biol. Skr. 13, no. 4: 210 (1963).

Khorasan: Radekan, Baro Mont., Ayatolahi & Zangui 12761; Between Kardeh & Al villages, 1400 m, Faghieh-nia & Zangui 17917; N. of Mashad, Kardeh, Dyohartchi & Zangui 12960.

The closest locality to the Iranian gathering is in Afghanistan (Riedl 1967).

***Paracaryum leptophyllum*** (DC.) Boiss.

Azərbaycan: Urmiyeh, Silvana, Bardehsu, Siami 327.

The closest locality to the Iranian gathering is in NE. Turkey (Mill. 1978).

***Paracaryum papillosum*** (DC.) Gurke (Fig.3).

Baluchestan: 55 Km from Khash to Iranshahr, 1500 m, Mozaffarian 42909.

Previously, it was known from Pakistan (Riedl 1967).

***Paracaryum polyanthum*** (Rech. f. & Reidl.), **comb. nov.**

Syn.: *Mattiastrum polyanthum* Rech.f & Riedl, Flora Iranica no. 48: 123 (1967).

Semnan: ca. 20 Km NW of Shahrud, above

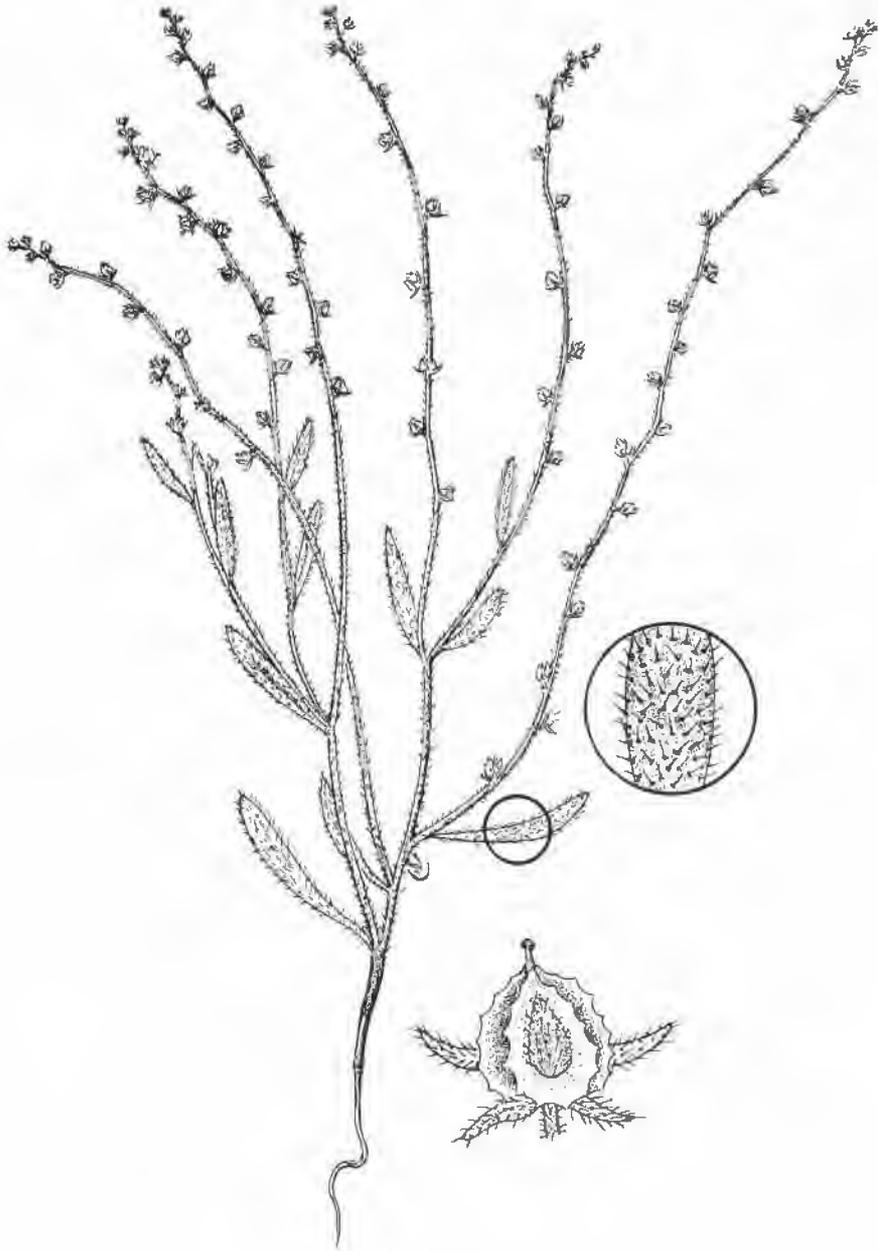


Fig. 2. *Paracaryum cynoglossoides* (x0.9); fruit (x0.3).



Fig. 3. *Paracaryum papillosum* (x0.65); fruit (x2.6).

Nekarman, Kuh-e Shahvar, near the top,  
2800-3500 m, Assadi & Mozaffarian 40929.

Previously, it was known from  
Afghanistan (Riedl 1967).

Mill, R. R. 1978: *Paracaryum* in P. H. Davis  
Flora of Turkey vol. 6: 282- 300.  
-Edinburgh.

Riedl. H. 1967: Boraginaceae in K. H.  
Rechinger Flora Iranica no. 48 -Graz.

**REFERENCE**