**Silene ferdowsii** (Caryophyllaceae), a new species from Iran

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**Silene ferdowsii** Joharchi, Nejati & F. Gahrem. sp. nova (Caryophyllaceae), from sect. *Auriculatae*, is described from Khorassan province, NE Iran. It is morphologically most similar to *S. albescens*, especially in its indumentums, but differs in having longer internodes and crowded stems. *Silene ferdowsii* is also compared with *S. eriocalyicinae* and *S. sisianica*.

*Silene* is the largest genus in the Caryophyllaceae, with nearly 700 species in the board circumscription, of which approximately half occur in the Mediterranean area (Melzheimer 1988). The southern part of the Balkan Peninsula and SW Asia are two main centers of diversity of the genus (Greuter 1995). In Iran, *Silene* includes 98 species, of which 28 are endemic. The Iranian species are placed in 21 sections (Melzheimer 1988).

During taxonomic works on the *Silene* specimens in FUMH (herbarium of Ferdowsi University of Mashhad), a sheet with a new perennial species from Khorassan province, NE Iran, was identified by the authors. This new species was compared with all plant specimens in FUMH, and with the relevant floras (Schischkin 1936, Cullen & Coode 1967, Ghazanfar & Nasir 1986).

The new species belongs to *Silene* section *Auriculatae*, originally established by Boissier (1867). The most important characters for section *Auriculatae* are: Perennial, eglandular-glandular pubescent. Inflorescence dichotomous or alternate, racemose, cyme or 1-flowered. Flowers bisexual. Peduncle eglandular-glandular pubescent. Calyx cylindric-clavate, glandular-eglandular pubescent, not umbilicate, number of calyx veins 10, tooth of calyx triangular to semicircular, obtuse. Petal limb bifid; claw glabrous, auriculate above; coronal scale present, emarginate, rarely bifid. Anthophore puberlent, rarely glabrous. Filament glabrous. Styles three.

The morphologically closest sections are *Sclerocalycinae* and *Ampullatae*. The section *Auriculatae* differs from the section *Ampullatae* in the flower type (dioecious in the section *Ampullatae*), and from the section *Sclerocalycinae* in having pubescence on the calyx.

*Auriculatae* is the largest section in *Silene*, with 47 species distributed in SW Asia, Central Asia, the Caucasus and the Middle East. The center of diversity is situated in the Caucasus and N Iranian mountains. Thirty-five species have been reported in this section from Iran,
distributed in most parts of the country; 21 of the species are endemic. All the measurements given in the description were taken from dried herbarium specimens.

**Silene ferdowsii** Joharchi, Nejati & F. Gahrem., *sp. nova* (Fig. 1)

Perennis, saepe suffrutescens. Tota planta retro-
sis breviter tomentose-canescens rarus puberuli,
caulis erectus, interdum dense, tenues, glauca
rarus pallide viridi-flavescente, caules floriferi
numerosis 17–45 cm longi, internodii longis
(70–100 mm), caules sterilibus pauci 10–13 cm
longi. Folia 11–37 × 1–3 mm longi, lineari-
lanceolata, uninervia, acuta, sessile, pubescent.
Inflorescentia dichasium; pedicelli floris alaris
ad 5 mm longi; pedicelli florum ceterum ad 25
mm longi. Bracteae 2–5 mm longi, lanceola-
tae vel ovatae-triangulares ± acuminate, herba-
ceous, uninervia, puberuli. Calyx 10–17 mm
longus, cylindrico-clavatus, albido-flavescenti–
viridi, nervis viridi vel purpureo-viridi, stria-
tus, crispe pubescens; dentes 1.5–2.5 mm longi,
triangular-oblongus, obtuse, margine membra-
nacei, ciliati. Petala alba ad lilacino-purpure-
scenti; limbus ad 6 mm longi, ad medium vel
pauro profundis bifidus, lobos oblong-lineari;
unguis ad 10 mm longus, apice dilatatus, glaber;

![Fig. 1. Silene ferdowsii (from the holotype). — A: Habit. — B: Flower. — C: Calyx. Scales: A = 5 cm; B and C = 3.5 cm.](image-url)
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paracorollae ad 1 mm longi, obtuse rarus emarginatus. Anthophore ad 6 mm, pubescent. Filament glaber. Style 3, pilosa. Capsula 6–8 × 2–5 mm, cylindric ad late ovoidea.

Type: Iran. Khorassan province, Sarakhs-Mashhad road, 20 km SW of Shoorlogh village, 28.IV.1994 Faghihnia & Zangooei 23846 (holotype FUMH; isotypes FAR, FUMH).

Etymology: The epithet honours “Hakim Abolghasem Ferdowsi Toosi” (935–1020 AD), one of the greatest Iranian poets; his tomb is located in Toos town, near to Mashhad, Khorassan Province, Iran.

Perennial. Stem suffrutescent, erect, branched, crowded, thin, glaucous, rarely gray-green-pale yellow, retrorse shortly tomentose-canescence rarely puberulent; flowering stems numerous, 17–45 cm long, internodes long (70–100 mm); sterile branches few, 10–13 cm long. Leaves linear-lanceolate, 11–37 mm long, 1–3 mm wide, one-nerved, acute, sessile, pubescent. Inflorescence a dichasium. Bracts lanceolate or ovate-triangular ± acuminate, herbaceous, 1-veined, puberulent, 2–5 mm long. Calyx cylindric-clavate, 10–17 mm long, 2–6 mm wide, whitish-pale yellow-green, nerves green or purple-green, striate, crisped pubescent; teeth 1.5–2.5 mm long, triangular-oblong, obtuse, margins membranous, ciliate. Petal white to pale violet; limb 6 mm long ± bilobate, lobes oblong-linear, claw up to 10 mm long, apex widened, glabrous; coronal scale 1 mm long, obtuse rarely emarginated. Anthophore up to 6 mm long, densely pubescent. Filaments glabrous. Styles three, hairy. Capsule 6–8 mm long, 2–5 mm wide, cylindric to later ovoid. Flowering and fruiting in March–May.

Silene ferdowsii is endemic to Khorassan province, and known only from the type material. It grows in dry regions on sandy-argillaceous hills and argilliferous calcareous rocks in NE Iran. It is similar to S. albescens, S. eriocalycinae and S. sisianica, but differs from them in several characters (Table 1). Silene albescens is endemic to Iran and is distributed in the southern and western parts of the country. Silene eriocalycinae is distributed in Iraq and W Iran, and Silene sisianica is distributed in Iraq, and N and NW Iran.


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References


Islamabad.

