Gypsophila torulensis (Caryophyllaceae), a new species from Turkey

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Gypsophila torulensis M. Koç sp. nova (Caryophyllaceae) is described from the Torul district (Gümüşhane Province) in Turkey. The specimen was collected from calcareous rocks, at an altitude of 1100 m a.s.l. The new species resembles G. muralis; the differences between these two taxa are given in a table. Diagnostic characters, a full description, and a detailed figure of G. torulensis are provided in the article.

Gypsophila belongs in the subfamily Caryophylloidea of the family Caryophyllaceae. The genus comprises ca. 150 species, mostly found in steppes, on dry slopes and sandy soils of temperate Eurasia, the Eastern Mediterranean, and the Irano-Turanian region (Bittrich 1993). There are some species also in the north temperate zone and colder regions (Hutchinson 1973). In Turkey, Gypsophila had 55 species in ten sections (Huber-Morath 1967, Davis et al. 1988, Ataslar 2000). As a result of recent studies, three species have been added to the genus (Ataslar & Ocak 2005, Hamzaoğlu 2012, Budak 2012).

In Turkey, Gypsophila sect. Macrorrhziae is represented by three species. The section includes annuals with ± tubular capsules, oblong and incised to 1/3 or less (Huber-Morath 1967, Davis et al. 1988). The species described here belongs to that section and raises the number of Gypsophila species in Turkey to 59.

The author collected some peculiar Gypsophila specimens in the Torul district, Gümüşhane Province, in northwest Anatolia. The specimens were compared with the Gypsophila material in EDTU, to the photos of G. muralis in the Linnean collections (Hb. Linn. 579/18), and to relevant literature (Barkoudah 1962, Barkoudah et al. 1964, Rechinger 1964, Zohary 1966, Huber-Morath 1967, Shishkin 1970, Rechinger 1988, Bojišansky & Fargašová 2007). It was concluded that the collected specimens represented an undescribed species.

Gypsophila torulensis M. Koç, sp. nova (Fig. 1)


Annual, whole plant glandular hairy. Stems slender, numerous, erect-ascending, 7–28 cm long, 0.5–2 mm diameter below. Leaves oblongate, 5–10 × 1.3–2 mm, ± acute, green. Inflorescence a very lax corymb, many-flowered. Bracts oblongate, 1.5–4 mm. Pedicels 5–10 mm.
Calyx long glandular-hispid, campanulate, 2–4 mm, divided to 2/3; teeth oblong, acute to acuminate, 0.6–1.5 mm, broadly scarious at margins. Petals whitish or pink, cuneate, 3–6 ¥ 1.8–2 mm, emarginate. Capsule oblong, 2–3.8 ¥ 1.3–1.8 mm, immersed in calyx. Seeds black-brown to blackish, reniform to subglobular, 6–10 in each capsule, 0.6–0.8 ¥ 0.5–0.8 mm, with flat tubercles on surface. Flowering in June, fruiting in July.

Gypsophila torulensis is endemic to Gümüşhane Province in northwest Anatolia. It resembles G. muralis but has several distinguishing characters (Table 1).

References


Table 1. Morphological differences between Gypsophila torulensis and G. muralis. Specimens examined of the latter: M. Kireç (EDTU-7213) and F. Dane & N. Polat (EDTU-3881).

<table>
<thead>
<tr>
<th>Characters</th>
<th>G. torulensis</th>
<th>G. muralis</th>
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</thead>
<tbody>
<tr>
<td>Stem</td>
<td>glandular hairy</td>
<td>± puberulent</td>
</tr>
<tr>
<td>Leaves</td>
<td>ob lanceolate</td>
<td>linear</td>
</tr>
<tr>
<td>Inflorescence</td>
<td>very lax corymb</td>
<td>lax corymb</td>
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<tr>
<td>Bracts</td>
<td>ob lanceolate</td>
<td>linear, glabrous, campanulate</td>
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<tr>
<td>Calyx</td>
<td>long, glandular-hispid, campanulate</td>
<td>turbinate</td>
</tr>
<tr>
<td>Calyx teeth</td>
<td>acute to acuminate</td>
<td>obtuse</td>
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<tr>
<td>Ovary</td>
<td>6–10-ovuled</td>
<td>12–36-ovuled</td>
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