

## A NEW SPECIES OF *ONOSMA* (*BORAGINACEAE*–*LITHOSPERMEAE*) FROM SOUTHERN TURKEY

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A new species of *Onosma* (*Boraginaceae*), *O. mersinana*, in sect. *Asterotricha*, is described from southern Turkey, and its affinities discussed.

*Keywords.* *Boraginaceae*, new species, *Onosma*, Turkey.

### INTRODUCTION

In Turkey there are 95 species of *Onosma*, 48 of which are endemic (Yıldırım, 2000). Since the genus was revised for the Flora of Turkey (Riedl, 1979), some new species have been described and several new records made. These include *O. propontica* Aznav., *O. kaheirei* Teppner, *O. taurica* Pallas ex Willd. var. *viridis* Borbas, *O. mirabilis* A.P.Khokhr. and *O. nydeggeri* Hub.-Mor. In 2000 the authors collected a sterile *Onosma* (Binzet 118), which they suspected was a new taxon, on stony slopes in the Müğlü deresi near Mersin in southern Turkey. In the following year they managed to obtain flowering material (Binzet 119). The latter collection showed it to belong to sect. *Asterotricha* Boiss. On consulting Riedl (1970, 1974) and the account of *Onosma* in the Flora of Turkey (Riedl, 1979), the material appeared close to *O. lineariloba* Hausskn. ex Riedl, *O. lycaonica* Hub.-Mor and *O. subulifolia* Riedl, although it did not satisfactorily match any of these species. After comparison with specimens in the herbaria at W, ISTF, GAZI and ANK it was decided to describe the material as a new species.

### ***Onosma mersinana* Riedl, Binzet & Orcan, sp. nov. Fig. 1.**

Species nova proxima esse videtur *O. linearilobae* Hausskn. ex Riedl (Riedl, 1970) sed differt foliis multo angustioribus marginibus revolutis, infimis florendi tempore persistentibus; ab *O. lycaonica* Hub.-Mor. caulibus altioribus, setis foliorum minus appressis, floribus in inflorescentia numerosioribus, calyce longiore, corolla saepe brevioris cremae haud postea rosea demum violascenti diversum. Marginibus foliorum valde revolutis *O. subulifolia* Riedl, tantum comparanda a qua caulibus stramineis (non caeruleis-nigricantibus) altioribus, bracteis brevioribus haud caeruleis-nigricantibus, foliis angustioribus, corolla cremae (haud alba) et subcylindrica usque cylindrico-campanulata (non clavato-campanulata), pedicellis brevioribus differt.

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FIG. 1. *Onosma mersinana* Riedl, Binzet & Orcan: A, habit (scale=1cm); B, flower (scale=1cm); C, hair from upper surface of leaf (scale=0.5mm); D, opened corolla showing stamens (scale=1cm); E, nutlet, abaxial view (scale=1mm). Drawn by R. Binzet from *Binzet* 119.

Type: Turkey (C5), Mersin Region, Erdemli, Müğlü deresi, 36°49'N, 34°16'E, 1100m, stony slopes, 15 vi 2001, *Binzet* 119 (holo. GAZI; iso. E, W, Mersin University, Turkey).

Perennial herb; rhizome divided into several long, subterranean, slender, creeping branches with dark reddish-brown bark and sometimes a few leafy scales; branches divided again distally into several short,  $\pm$  erect branches ending in flowering stems, rarely in sterile leaf-rosettes. *Stems* 18–25cm, c.2mm in diameter, ascending, simple, straw-coloured, densely leafy, with slightly antrorse bristles arising from small white, glabrous or stellate-hairy tubercles, and with very short, retrorse hairs between the

tubercles. *Leaves* linear to linear-lanceolate, 1.8–2.5 × 0.2–0.3cm, sessile, sometimes semiauriculate, acute or subacute at apex, with strongly revolute margins, adaxially with stout, ± appressed bristles arising from white, stellate-hairy tubercles formed by 2–3 rings of convex cells, abaxially with tiny, slender bristles on smaller tubercles and with two rows of stout, ± patent bristles along the midrib. *Cymes* solitary, rarely paired, strongly involute at anthesis, 2.5–3(–3.5)cm in diameter, with 10–15 dense flowers. *Bracts* linear-lanceolate to ovate-cordate, the lowest 15–20mm, with indumentum similar to leaves, the rest 8–10mm, with short antrorse hairs and bristles on midrib. Lower pedicels 1.5–2.5mm long, the rest usually 1mm, with ± patent bristles. *Calyx* 12–15mm long at anthesis, deeply 5-lobed, with dense patent, white bristles outside, glabrous inside, lobes linear, acute, 1–1.2mm wide. *Corolla* cream-coloured, subcylindric to cylindric-clavate, c.17 × 2–3mm at widest point below lobes (c.4.5mm wide when pressed), longitudinally plicate between lobes in juvenile state, glabrous; lobes 5, c.1mm long, 1.5mm wide at base, broadly triangular, acute, rarely acuminate, revolute. *Nectary* at corolla base, lobed, glabrous. *Stamens* 5, wholly included, borne c.1/3 from corolla base; anthers linear, 6mm long, with sterile apex c.0.5mm long, horizontally truncate, base bilobed, lobes longer than wide, straight (not divaricate). *Style* c.1–2mm longer than corolla; stigma very small, distinctly bilobed. *Nutlets* 3 × 2mm, obtuse-acuminate with dorsal keel, grey to pale brown.

*Other specimens examined.* TURKEY (C5). Mersin Region, Erdemli, Müğlü deresi, 36°49'N, 34°16'E, 1100m, 30 v 2000, *Binzet* 118 (E, W, Mersin University, Turkey).

*Onosma mersinana* seems closest to *O. lineariloba* Hausskn. ex Riedl but differs in its much narrower leaves with revolute margins, the lowest of which persist throughout flowering though they may be already dry. *Onosma lycaonica* Hub.-Mor., another closely related species, has shorter stems, more distinctly appressed bristles on the

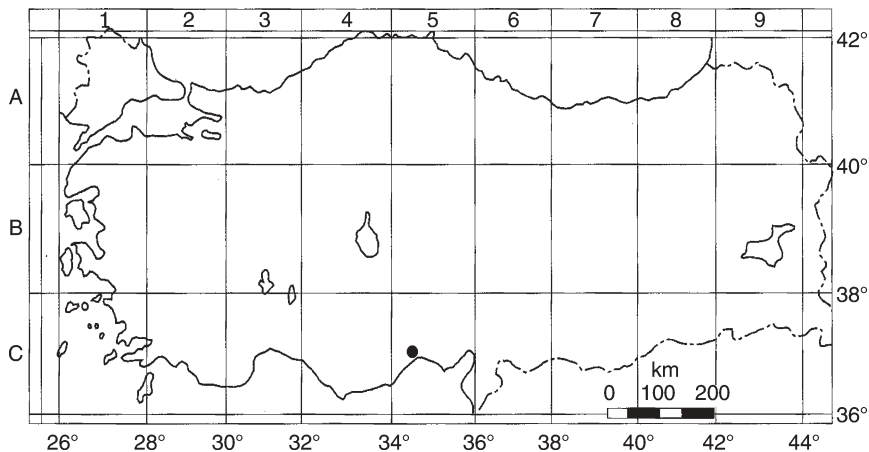


FIG. 2. Locality (●) of *O. mersinana* near Mersin in southern Turkey.

leaves, some of which are stalked, fewer flowers in the inflorescence, a shorter calyx and often a longer corolla which is whitish turning pink and finally bluish-violet. The leaves of *O. subulifolia* Riedl, though also with strongly revolute margins, are wider and it has shorter stems, longer bluish-black bracts, longer pedicels and a white clavate-campanulate corolla.

The locality of *O. mersinana* in southern Turkey is shown in Fig. 2.

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