A NEW RECORD FOR THE FLORA OF IRAQ: *LIMONIUM MEYERI* (PLUMBAGINACEAE)

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ABSTRACT

Limonium meyeri (Boiss.) Kuntze is reported for the first time from Iraq. Short morphological descriptions with pictures of the species and its habitat are provided.

Keywords: Iraq, Limonium, Plumbaginaceae, New Record, Flora

INTRODUCTION

The genus *Limonium* Miller belongs to Plumbaginaceae family, and contains about 300 species distributed through all parts of the world (Tse-Hsiang and Kamelin, 1996), Al-Rawi (1964) listed three species belonging to *Limonium* in his study of *wild plants of Iraq with their distribution; L. carnosum* (Boiss.) O. Kuntza, *L. spicatum* (Willd.) Kuntze and *L. thouinii* (Viv.) Kuntza. The first revision of the genus *Limonium* in the flora of Iraq was done by Mobayen (2013); he recognized only two species, *L. lobatum* (L.f.) Chaz. and *L. iranicum* (Bornmuller) Lincz, he also noted that *L. meyeri* is species expected to occur in Iraq but no material was seen.

In 2015, during a field survey carried by National Herbarium (BAG) staff to study the flora of upper plains and foothills region in east of Iraq, unusual *Limonium* specimen was collected and homed in (BAG) could not be identified by using flora of Iraq. After extensive examination of the flora Iranica (Rechinger and Schiman-Czeika, 1974) and flora of Turkey (Bokhari and Edmondson, 1982), it was identified as *L. meyeri*, which is distributed in Turkey, Crimea, S. Russia, Caucasia, C. Asia, NW & W Iran, but this species was not reported from Iraq. Therefore, this study aims to report the occurrence of this species in flora of Iraq for the first time, and described its distribution and habitat in Iraq along with its morphological characters.

RESULT AND DISCUSSION

Limonium meyeri Kuntze Revis. Gen. Pl. 2: 395. 1891 (Figure 1A and 1B).

Perennial herbs, 26-48 cm tall. Caudex short 4-6 cm long, strongly thickened, dark brown, mostly with few branches. Leaves in rosette, broadly elliptic to obovate, $8-29 \times 2-6$ cm, margin entire, base attenuated into broad flattish petiole, apex mucronate, adaxial glabrous with very rare sessile white glands more dense in abaxial.

Scapes erect, cylindrical, glabrous, branched almost from lower part, forming a loosely panicled inflorescence; spikes loose, 5-25 mm long, with 5-10 spikelets, 2-5-flowered, outer bract broadly ovate, $1.8-2 \times 1.2-1.5$ mm, apex acute-obtuse, with broadly membranous margin, smaller than inner bract, broadly ovate-orbiculate, $3-4 \times 3$ mm, strongly concave and partly enclosing the flowers, apex emarginate, with membranous margin, bracteole, membranous with a narrow green midrib, oblong-ovate, $2.5-3 \times 1.2-1.5$ mm. Calyx obconical, straight, 4-4.5 mm long, covered with eglandular pilose hairs on the nerves, tube 3-3.5 mm long, with thick nerves not reaching the limb margin, membranous between the nerves, limb membranous, 5-6 lobed, 1.5-0.5 mm long, with obtuse apex. Corolla 5-5.5 mm long, violate, 5 petals, connate only at the basal, expanded on apex. Stamens 5, free, adnate to corolla base. Ovary obovoid, styles 5, glabrous, quite free at the base; stigmas elongated-filiform.

L. meyeri belong to Sect. Limonium Boiss. and it is closely related to *L. gmelini* (Willd.) O. Kuntze, but it different from *L. gmelini* by having inflorescence with many branched, loosely paniculate with flowers in loose spikes (Shishkin and Bobrov, 1952).

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Short Communication

Specimen Seen: Iraq, 7 km S of Badra (road between Badra and Al-Shahabi), N: 33 04 03.0; E: 45 58 58.4, 45 m., 6/5/2015, A. Haloob & Saif 58644 (BAG)!

Habitat: Plain salty clay soil in open area between Tamarix sp. and Nitraria retusa (Forssk.) Asch. shrubs in altitude 45 m (Figure 1C).





Figure 1: Limonium meyeri in Southern Badra, Wasit Province, Iraq A- Habit, **B-Inflorescence**, C- Habitat

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