SAMERARIA STENOXYLLA (BRASSICACEAE), A NEW RECORD FOR THE FLORA OF IRAN

H. Moazzeni, S. Sajedi & M. R. Joharchi


Sameraria stenophylla is reported as a new record from E Iran. This species is easily distinguished from its closest relative, Sameraria elegans, by having larger petals and stem leaves which are sagittate-cordate at base. A geographical distribution map and an illustration of the species are given.

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Key words. Sameraria, Brassicaceae, new record, Iran.

Introduction

Iran, with about 120 genera representing 358 species of Brassicaceae (Akhani 2003), is one of the most important diversification centers of the family in the world. After the publication of the Brassicaceae for Flora Iranica (Hedge 1968), several new species or new combinations have been proposed for Iran (see for example: Sajedi & al. 2004, Akhani 2003, Khosravi 2003, Kavousi 2001, Sonboli 2000, Moussavi 1985, Mozaffarian 1985, Assadi 1983). Sameraria Desv. is a genus of about nine species distributed solely in Central and SW Asia (Appel & Al-Shehbaz 2003). It is closely related to Isatis and shows several characters in common with it, namely the habit, leaves, inflorescence and flowers. However, it is separated from Isatis by having silique and/or silicule fruits possessing short and distinct style, instead of mostly silique fruits and sessile stigmas.

In the framework of preparing a revision of Sameraria and its allies as the M.Sc. thesis by the first author, we could identify Sameraria stenophylla among the material deposited in the Iranian herbaria, including Ferdowsi (Mashhad) University (FUMH). This species has not previously been reported from Iran. This new record elevates the number of Sameraria species distributed in Iran to five out of the six species reported by Hedge (1968) for entire Flora Iranica area.

Sameraria stenophylla Rech. f. & Koeie (sect. Sameraria), Fig. 1.

Specimens seen:


Annuals 15–40 cm tall, glabrous except for fruits, branched at base. Basal leaves obovate to oblong, 2–8 × 1–1.5 (–2.2) cm, lobed to entire at margins, obtuse to rounded at tip, cuneate at base; petiole 0–1 cm long. Cauline leaves linear to oblanceolate, sagittate or cordate at base, narrowing towards apex. Fruit pedicel 7–10 mm long, thin, deflexed. Sepals oblong, 3.8–4.5 × 1.5 mm, glabrous, violet to pale yellow. Petals 6–7 × 2–2.5 mm, obovate, cuneate at base. Long filaments 3.5–3.8 mm long, short filaments ca. 2.5 mm long. Fruit indehiscent, 1-seeded, ca. 15 × 15 mm, orbicular to broadly olate, broadly winged at margins, suture wings absent, below the locule cylindrical, emarginate to cordate at base, densely villous; style 1–3 mm long.
Map 1. Distribution of *Sameraria stenophylla* (■) and *S. elegans* (●) in Iran.

General distribution (map 1):
According to Hedge (1968), *S. stenophylla* is endemic to SW Afghanistan, the area around Jija in Prov. Farah. We found also a second material of the same species in the herbarium of Institute of Systematic Botany in Munich collected by O. Anders in Afghanistan (deposited in MSB) from Prov. Kandhar, near Shar-e Safa. So, the species is distributed much wider in Afghanistan than previously known, and its presence at eastern borders of Iran is not surprising.

This species is closely related to *Sameraria elegans* Boiss. The differences between these species are summarized in table 1.

Table 1. Diagnostic characters useful in separating *Sameraria stenophylla* and *S. elegans*.

<table>
<thead>
<tr>
<th>Character</th>
<th><em>S. stenophylla</em></th>
<th><em>S. elegans</em></th>
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<tbody>
<tr>
<td>Petals</td>
<td>6–7 × ca. 2 mm</td>
<td>ca. 4 × 1 mm</td>
</tr>
<tr>
<td>Style</td>
<td>1–3 mm</td>
<td>0.5–1.5 mm</td>
</tr>
<tr>
<td>Cauline leaves</td>
<td>attenuate</td>
<td>obtuse</td>
</tr>
<tr>
<td>at apex</td>
<td>sagittate-cordate</td>
<td>rounded-auriculate</td>
</tr>
<tr>
<td>Basal leaves</td>
<td>lobed to entire</td>
<td>entire</td>
</tr>
</tbody>
</table>

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References


