**Epimedium pudingense** (Berberidaceae), a new species from Guizhou, China

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**Epimedium pudingense** S.Z. He, Y.Y. Wang & B.L. Guo (Berberidaceae), a new species from Guizhou, SW China, is described and illustrated. It is similar to *E. sagittatum* in its nodose rhizome, two opposite ternate leaves and saccate petals, but differs by the size and shape of the four inner sepals and by the leaves pilose or glabrous on the abaxial surface.

Key words: Berberidaceae, *Epimedium*, new species, taxonomy

The genus *Epimedium* comprises about 56 species (Ying 2001, Stearn 2002, He 2004). On the basis of flower size, the genus may be divided into two groups, the small-flowered and large-flowered. The wide and fragmented range of the genus from Japan westward to Algeria in N Africa renders many of the species very local, and the major areas of species diversity are in China.

Since 1980, we have been carrying out botanical explorations focusing on *Epimedium* in the Guizhou Province, one of the centers of species diversity for this genus in China, and we have previously described five new species and two new varieties (He 1993, He & Zhang 1994, He & Guo 1996, He & Xu 2003, He et al. 2003). In April 1995, we collected an unusual population in the small-flowered group of *Epimedium* from Puding County, southwestern Guizhou. Based on field observations of several years, the population was confirmed to be an undescribed species.
both sides, margin spinose. Inflorescence compound, usually glabrous, 30–80–(120)-flowered, 10–15–(20) cm long, 3.5–6 cm broad; pedicels glabrous, 0.7–1.2 cm long. Flowers small, white, ca. 7 mm across; outer sepals 4, purple, unequal, the outer pair oblong, ca. 2.5 mm long, ca. 1.4 mm broad, inner pair obovate, ca. 3.5 mm long, ca. 2.3 mm broad; inner sepals 4, white, lanceolate, 8–10 mm long, ca. 1.5 mm broad; petals saccate, brownish-yellow, ca. 3 mm long, with spurs ca. 1 mm long; stamens ca. 4 mm long, filaments ca. 1.8 mm long; pistil ca. 5 mm long, style ca. 2.6 mm. Capsule ca. 1.3 cm long, persistent style ca. 5 mm long. Flowering March to April, fruiting April to May.

*Epimedium pudingense* is notable among the small-flowered taxa of *Epimedium* for its flower size (7 mm across). It resembles *E. sagittatum* by having a nodose rhizome, two opposite ternate leaves, and saccate petals, but can be distinguished by the size and shape of the four inner sepals and the leaves pilose or glabrous on the abaxial surface. A detailed morphological comparison between the two species is given in Table 1.
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References


Table 1. Morphological comparison between Epimedium pudingense and E. sagittatum.

<table>
<thead>
<tr>
<th></th>
<th>E. pudingense</th>
<th>E. sagittatum</th>
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<tbody>
<tr>
<td>Flower stem</td>
<td>20–35 cm in height</td>
<td>30–50 cm in height</td>
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<tr>
<td>Leaflet</td>
<td>narrowly ovate, 5–9 cm × 1.5–3 cm, long-acuminate at apex, outer lobe of lateral leaflet rounded, underside glabrous</td>
<td>ovate to lanceolate, 5–19 cm × 3–8 cm, acute or acuminate at apex, outer lobe of lateral leaflet deltoid and acute, underside pilose</td>
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<tr>
<td>Panicle</td>
<td>10–15(–20) cm × 3.5–6 cm, 30–80(–120) flowers</td>
<td>10–20(–30) cm × 2–4 cm, 18–50 flowers</td>
</tr>
<tr>
<td>Inner sepals</td>
<td>lanceolate, 8–10 mm × 1.5 mm</td>
<td>ovate-deltoid and acute, 4 mm × 2 mm</td>
</tr>
<tr>
<td>Outer sepals</td>
<td>outer pair oblong, 2.5 mm × 1.4 mm, inner pair obovate, 3.5 mm × 2.3 mm</td>
<td>outer pair narrowly ovate, 3.5 mm × 1.5 mm, inner pair oblong-ovate, 4.5 mm × 2 mm</td>
</tr>
<tr>
<td>Spur</td>
<td>saccate, brownish-yellow, ca. 1 mm long</td>
<td>saccate, brownish-yellow or yellow, ca. 1.5–2 mm long</td>
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