Primulina fengshanensis (Gesneriaceae), a new species from Guangxi, China

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Primulina fengshanensis Fang Wen & Yue Wang, a new species of Gesneriaceae from Guangxi, is described and illustrated. The new species is compared with the similar P. linearifolia and P. longgangensis.

The genus Chirita in southern China once consisted of over 140 species, especially in the section Gibbosaccus (Li & Zhu 2010). However, it was recently revised by Wang et al. (2011) and Möller et al. (2011). Chiritopsis, Wentsaiboea and all species of the section Gibbosaccus of Chirita were incorporated into Primulina, which incipiently had only one species, P. tabacum (Hance 1883, Wang 1990, Wang et al. 1998, Li & Wang 2004, Wei et al. 2010).


Primulina fengshanensis Fang Wen & Yue Wang, sp. nova (Fig. 1)

Type: China. Guangxi Zhuang Autonomous Region, Fengshan County, Hungkun Tong, in a large scale limestone cave, alt. 568–580 m, flowering, 1 Oct. 2004 F. Wen 06100101 (holotype IBK; isotype IBK, BJFC).

Etymology. The specific epithet is derived from the type locality, Fengshan County.

Herbs perennial. Rhizome subterete, 3–10 cm long, 1–1.3 cm in diam., internodes inconspicuous. Leaves 6–21, clustered at apex of rhizome, ternate, sessile; blade fleshy, obovate-elliptical to obovate-lanceolate, 4–15 × 2–3 cm, apex obtuse, elliptic or rotund, base attenuate, margin entire, densely appressed pubescent on both surfaces, lateral veins ca. 3 on each side, unapparent adaxially and slightly prominent abaxially. Cymes 3–8 or more, 2–5-branched, 10–20-flowered or more; peduncle 15–50 cm long, 2–2.5 mm in diam., sparsely appressed pubescent and glandular pilose; bracts 4, pairwise opposite, larger pair
oblong-lanceolate, 12–14 × 4.2–4.5 mm, smaller pair linear or linear-lanceolate, 9–10 × 1.2–2.0 mm, all margin entire, larger pair acuminate at apex, smaller pair acute at apex, all outside densely appressed pubescent, all inner nearly glabrous, margin pubescent or ciliate; bracteole 2, opposite, linear, 4–5 × 1 mm, margin entire, acute at apex, hairs same as bracts. Pedicels 1.5–3 cm long, spreading glandular-pubescent. Calyx 5-parted to base, lobes narrow lanceolate, 2.5–3.2 × 0.35–0.52 mm, margin entire, acute at apex, glandular-pubescent outside, glabrous inside. Corolla fuchsia or purple, 2.5–4 cm long, outside short pubescent-glandular, sparsely short pubescent inside; corolla tube funnel-formed, lilac, 2.0–3.0 cm long, 5–9 mm in diam. at mouth; limb distinctly 2-lipped, adaxial 2-lobed to middle, lobes narrowly ovate, 4.5–5 × 2.0–3.0 mm, obtuse at apex, with dark purple lines inside; abaxial lip 3-lobed to or slightly over middle, obtuse at apex, with 3 dark lines inside, lobes ovate-oblong, 5.0–7.0 × 2.5–4.0 mm, rounded at apex, with 3 dark purple stripes inside. Stamens 2, adnate to 1.0–1.2 cm above base of corolla tube, filaments geniculate, 8–9 mm long, glabrous; anthers subreniform, 1.1–1.2 mm long, glabrous, fused face to face. Staminodes 2, 3–5 mm long, glabrous, adnate to 3–4.5 mm above base of corolla tube, turgid and curved at apex. Disc annular, 0.5–0.8 mm high, margin entire. Pistil 1.5–1.9 cm long, ovary linear, 8.5–10 mm long, 0.8–0.9 mm in diam., densely short glandular-pubescent; style 5.3–7.5 mm long; stigma 1.2–1.5 mm long, 2-lobed, lobes narrow triangular or triangular, parted to or over half-length, lobes 1–1.5 mm long, acute or
**Table 1.** Comparison of the diagnostic characters of *Primulina fengshanensis*, *P. linearifolia*, and *P. longgangensis*.

<table>
<thead>
<tr>
<th>Characters</th>
<th><em>P. fengshanensis</em></th>
<th><em>P. linearifolia</em></th>
<th><em>P. longgangensis</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaf arrangement</td>
<td>ternate</td>
<td>opposite</td>
<td>opposite or ternate</td>
</tr>
<tr>
<td>Petiole</td>
<td>sessile</td>
<td>sessile</td>
<td>sessile or petiolate</td>
</tr>
<tr>
<td>Shape of blade</td>
<td>obovate-elliptical to obovate-lanceolate; apex obtuse, elliptic or rotund</td>
<td>linear to narrowly elliptic or narrowly oblanceolate; apex attenuate to acute</td>
<td>linear to narrowly elliptic or narrowly oblanceolate to oblanceolate linear; apex acute to acuminate</td>
</tr>
<tr>
<td>Texture of blade</td>
<td>fleshy</td>
<td>leathery</td>
<td>papery to leathery</td>
</tr>
<tr>
<td>Indumentum of leaf blade</td>
<td>both surfaces</td>
<td>appressed</td>
<td>densely appressed</td>
</tr>
<tr>
<td>Inflorescence</td>
<td>10–20-flowered</td>
<td>1–7-flowered</td>
<td>2–15-flowered</td>
</tr>
<tr>
<td>Bracts</td>
<td>4, pairwise opposite, larger pairs oblanceolate, 1.2–1.4 x 0.42–0.45 cm, smaller pairs linear or oblanceolate, 9–10 x 1.2–2.0 mm</td>
<td>2, free, lanceolate to ovate, 4–10 x 1.6–5 mm</td>
<td>2, free, linear to lanceolate or oblanceolate or obovate, 4–20 x 0.5–6 mm</td>
</tr>
<tr>
<td>Indumentum of bracts</td>
<td>outside densely appressed pubescent, margin pubescent or ciliate</td>
<td>outside puberulent to glabrous</td>
<td>outside pilose to puberulent</td>
</tr>
<tr>
<td>Corolla colour</td>
<td>fuchsia or purple, every lobe with 3 dark purple stripes</td>
<td>white or pale pink, lobes colour same as corolla</td>
<td>pink or deep pink, lobes colour same as corolla</td>
</tr>
<tr>
<td>Abaxial corolla lobe length</td>
<td>5.0–7.0 mm long</td>
<td>ca. 9 mm</td>
<td>ca. 1.2 cm</td>
</tr>
</tbody>
</table>

acuminate at apex. Capsule linear, 3–4 cm long, 2–3 mm in diam., pubescent when young, style persistent, straight.

*Primulina fengshanensis* grows on a moist rock surface in a large limestone cave, alt. 568–580 m in Fengshan County, northern Guangxi Autonomous Region, China. Flowering from September to October. Fruiting from December to January. It is similar to *P. longgangensis* and *P. linearifolia*, but differs e.g. by its fleshy leaves, apex of leaf blades ovate or rotund, and by two pairs bracts and pairwise opposite. A more detailed comparison of these *Primulina* species is given in Table 1.

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