Aspidistra nankunshanensis (Asparagaceae), a new species from Guangdong, China

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Received 17 July 2012, final version received 25 Jan. 2013, accepted 7 Feb. 2013


A new species Aspidistra nankunshanensis Yan Liu & C.R. Lin (Asparagaceae) from Guangdong province, China, is described and illustrated. It resembles A. punctatoides in the shape and size of the flowers, but differs in its adaxially yellow perianth, yellow pistil, and stigma upper surface with four inconspicuous radial lines in the center.


In March 2012, during our investigation of the plants in Guangdong Province, south China, we found in the Nankunshan National Forest Park an unusual Aspidistra specimen with fruits and buds only; however, we could not identify it without flowers. In April, we returned to the place for further observations of the species. We found the plant with yellow, bell-shaped flowers. After consulting herbarium specimens and relevant literature on Aspidistra, it became apparent that we had a new species at hand.

Aspidistra nankunshanensis Yan Liu & C.R. Lin, sp. nova (Figs. 1 and 2)


Etymology. The specific epithet is derived from the name of the type locality, Nankunshan Mountains, Longmen County, Guangdong Province, China.

Herbs perennial, evergreen, rhizomatous. Rhizome creeping, suberete, 6–8 mm thick, covered with scales, nodes dense. Roots numerous. Vaginal leaves 5–6, purple-red, 2–12 cm long, enveloping base of petiole, becoming black-brown when dry. Leaves solitary, 1–2 cm apart; petiole stiff upright, 17–45 cm long, 2–3 mm thick, adaxially sulcate; leaf blade usually oblong-lanceolate to lanceolate, 21–31 cm long, 5–7.5 cm wide, dark green, base cuneate, gradually tapered to petiole, inequilateral, apex long acuminate, margin entire. Peduncle erect...
or declining, purple, 5–6 cm long, with 5–6 bracts, bracts gradually wider from base to top of peduncle, upper most ones at base of perianth broadly ovate, purplish red, 6–8 mm long, 10–12 mm wide, apex obtuse. Flower solitary; perianth campanulate, 10–20 mm long, abaxially purple or yellowish purple, adaxially yellow, slightly 8-lobed apically; lobes explanate, ovate-triangular, 5–7 mm long, 5–8 mm wide at base, adaxially with 2 keels at base; tube 10–13 mm long, 15–18 mm in diam. Stamens 8, opposite to lobes, subsessile, inserted in base of perianth tube, anthers oblong, white or pale yellow, ca. 2 mm long and 1 mm wide. Pistil yellow, 6–8 mm long, ovary inconspicuous, style short, cylindrical, ca. 1 mm in diam., stigma enlarged, obconical, 5–6 mm long, upper surface flat, ca. 10 mm in diam., with 4 inconspicuous radial lines in center, undulate 4-lobed at margin, lobes emarginate at apex. Berry subglobose, 12–15 mm in diam., tuberculate. Flowering from April to May, fruits mature in March to April next year.

Aspidistra nankunshanensis is currently known only from the Nankunshan National
Aspidistra nankunshanensis, a new species from China

Forest Park in south-central Guangdong, China. It grows underneath shrubbery in a river valley in evergreen broad-leaved forest, at elevations between 350–450 m a.s.l.

Aspidistra nankunshanensis is similar to A. punctatoides (see Lin & Liu 2011) in the shape and size of the flowers, but differs by several characters (see Appendix).

Acknowledgements

We are grateful to Mr. Wan-Hui Wu, Lei Wu and Bing-Mou Wang for collecting in the wild. We also thank Mr. Wen-Hong Lin (IBK) for the drawing. This study was supported

by the National Natural Science Foundation of China (grant 41161011), Guangxi Natural Science Foundation (grant 018051) and the Science Research Foundation of Guangxi Institute of Botany (grant 10005).

References


Fig. 2. Aspidistra nankunshanensis. — A: Flowers. — B: Habit. — C: Fruit. — D: Fruit, dissected to show seed. — E: Flower, side view. — F: Flower, half of perianth removed to show stamens and pistil. — G: Flower, apical view. — H: Perianth, dissected to show stamens. — I: Stigma, adaxial view.


**Appendix.** Morphological comparison between *Aspidistra nankunshanensis* and *A. punctatoides*.

<table>
<thead>
<tr>
<th></th>
<th><em>A. nankunshanensis</em></th>
<th><em>A. punctatoides</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leaf</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>blade (cm)</td>
<td>21–31 × 5–7.5, base cuneate</td>
<td>15–27 × 4.5–7.5, base broadly cuneate to cuneate</td>
</tr>
<tr>
<td>petiole (cm)</td>
<td>17–45</td>
<td>11–26</td>
</tr>
<tr>
<td><strong>Tube</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>size</td>
<td>10–13 mm long, ∅ 15–18 mm</td>
<td>5–7 mm long, ∅ 10–14 mm</td>
</tr>
<tr>
<td>colour of adaxial surface</td>
<td>yellow</td>
<td>blackish purple</td>
</tr>
<tr>
<td><strong>Lobes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number</td>
<td>8 yellow</td>
<td>8 (sometimes 6)</td>
</tr>
<tr>
<td>size (cm)</td>
<td>5–7 × 5–8, shorter than tube</td>
<td>pale yellow-green with small purple spots</td>
</tr>
<tr>
<td><strong>Stamens</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>size</td>
<td>5–6 mm long, ∅ 10 mm</td>
<td>5–6 mm long, ∅ 10 mm</td>
</tr>
<tr>
<td>color adaxial surface</td>
<td>yellow</td>
<td>white adaxially, blackish purple abaxially</td>
</tr>
<tr>
<td><strong>Margin</strong></td>
<td>Undulate, 4-lobed</td>
<td>4(3)-lobed</td>
</tr>
<tr>
<td><strong>Flowers</strong></td>
<td>April to May</td>
<td>December to February</td>
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