A New Species of *Alocasia* (Araceae-Colocasieae)
From Cambodia

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Abstract

*Alocasia jiewhoei* V.D.Nguyen, a new species from Cambodia, is described and illustrated.

Introduction

The genus *Alocasia* (Araceae-Colocasieae) includes about 75 species distributed mainly in tropical Asia, Malesia, Australia and Melanesia (Govaerts and Frodin, 2000). In Indo-China, eleven species have been recorded in the *Flore Général de l’Indo-Chine* by Gagnepain (1942). In 2007, during fieldwork in Cambodia, V.D. Nguyen’s group found a new species of *Alocasia* growing on dry leaf litter in forest in Kulen National Park of Siem Riep Province. The plant does not match any known species in the genus (Boyce, 2007, 2008; Hay, 1998, 1999; Hay and Wise, 1991; Medecillo et al., 2007; Wang et al., 2005).

A comparison of morphological characters with other species in the genus showed the species resemble *A. odora* (Lindl.) K.Koch and *A. navicularis* (K.Koch & C.D.Bouché) K.Koch & C.D.Bouché, in having peltate, cordate-ovate leaf blades, 5-10 pairs of lateral veins, the greenish spathe and conical appendices. However, it is distinguished from *A. odora* and *A. navicularis* by its smaller size, slender petioles, stolons with bulbils at the apex, conspicuous styles and prominently lobed stigmas (Table 1). It closely resembles *A. navicularis* in having erect, cymbiform spathes.

*Alocasia jiewhoei* V.D. Nguyen, sp. nov.

Alocasiae odorae similis in folii lamina peltata et spatheae lamina dilute viridi, sed spatheae lamina cymbiformi, stylis longis, stigmatibus longe lobatis differt.−**Typus:** Cambodia, Siem Riep Province, Phrom Ku Len National Park, 13°36’58.1” N 104°02’20.4” E, 150 m alt., V.D. Nguyen & Rattana CB-VN 212 (holotype, HN; isotypes, K, P, MO). **Fig. 1 & Plate 1.**
Table 1. A comparison of *Alocasia jiewhoei* and closely related species.

<table>
<thead>
<tr>
<th>Characters</th>
<th><em>A. odora</em></th>
<th><em>A. navicularis</em></th>
<th><em>A. jiewhoei</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant height</td>
<td>40 to &gt;250 cm</td>
<td>50 to 150 cm</td>
<td>30 to 70 cm</td>
</tr>
<tr>
<td>Rhizome internal colour</td>
<td>Light green and white</td>
<td>Light green and white</td>
<td>Light yellow</td>
</tr>
<tr>
<td>Petiole</td>
<td>Stout</td>
<td>Stout</td>
<td>Slender</td>
</tr>
<tr>
<td>Bulbils on the stolons</td>
<td>None</td>
<td>None</td>
<td>At the apex</td>
</tr>
<tr>
<td>Style</td>
<td>Very short or inconspicuous</td>
<td>Very short or inconspicuous</td>
<td>Conspicuous, 1-1.5 mm long</td>
</tr>
<tr>
<td>Spathe limb - shape</td>
<td>Hooked cymbiform</td>
<td>Erect cymbiform</td>
<td>Erect cymbiform</td>
</tr>
<tr>
<td>Spathe limb - colour</td>
<td>Green to dull green</td>
<td>Dull yellow</td>
<td>Medium green</td>
</tr>
<tr>
<td>Stigma</td>
<td>Shallowly lobed</td>
<td>Shallowly lobed</td>
<td>Prominently lobed</td>
</tr>
<tr>
<td>Habitat</td>
<td>Wet, evergreen forest</td>
<td>Wet, evergreen forest</td>
<td>Dry, deciduous forest</td>
</tr>
</tbody>
</table>

**Rhizomatous** plants, *ca* 70 cm tall. **Rhizomes** decumbent, slender to stout, aerial parts 10-15 cm long, 1-4 cm in diameter, internodes 1.5-3 mm long, grey to dark brown externally, light yellow internally, covered by traces of decayed cataphylls. **Roots** stout, 10-15 cm long, not branched. **Stolons** several, subterranean, apex aerial, bearing bulbils at the apex; bulbils obovate, winged, six-angular in cross section, 1.5 cm long, *ca* 1 cm in diameter, oblong at base, abruptly acuminate, covered by several brown, small triangular scales. **Leaves** peltate, 4-7 together; petioles slender, 40-70 cm long, sheathed up to >1/3 of the length, green with dull dark green veins sunk below the surface; leaf blades ovate, 22-50 cm long, 17-30 cm at widest point, basal lobes broadly triangular, 7-16 cm long, 6-13 cm wide at base, apices obtuse, connection between 2 lobes 5-8 cm wide from petiole apex, dark green
and glossy above, dull green beneath; lateral veins 7-8 pairs in anterior lobes, 2-3 veins in posterior lobes, pronounced above, prominent beneath, secondary veins originating from lateral veins and midrib, run parallel and ascend towards leaf margins, connected by reticular veins. **Inflorescences** one per axil, several per plant; peduncles slender, 25-30(-45) cm long, 7-10 mm in diameter, expanded at top, green, covered by a thin white chalky layer; **spathes** 11-12 cm long, constricted about 1/5 of the way from the base; lower part ellipsoid or subglobose, green; limb 8.3-10 cm long, *ca* 4 cm wide, cymbiform, green when young, medium green at anthesis; **spadices** 8.5-10 cm long; female zones cylindrical, 0.8-1 cm long, **female flowers** congested, light yellow; ovaries subglobose in general, shallowly concaved into three lobes, 2 mm in diameter, green; styles 1 mm long, white; stigmas three lobed, 1-1.2 mm wide, white; ovules *ca* 10, placentaion basal; sterile interstice conical at lower part, constricted near apex then slightly expanded at apex, 1.8-2.3 cm long, 9 mm in diameter at base, 3-4 mm at the constriction and 4-5 mm at apex, bearing 2 whorls of white, acute-ovate, flattened sterile flowers in

**Figure 1.** *Alocasia jiewhoei* V.D. Nguyen. 1. Habit; 2. Inflorescence; 3. Detail of female flower zone; 4. Male flower; 5. Ovary in longitudinal section; 6. Ovule.
upper part; base covered by 2 rows of sterile flowers, columnar or ring-like; male zones cylindrical, 1.8-2.3 cm long, 8-10 mm in diameter, oblong to base, white; appendices conical, 3.5-4.8 cm long, smaller in diameter than male zone, acute at apex, very shallowly concaved on surface, without veins, dull white; **male flowers** sub-rectangular, 3 mm long, ca 2 mm wide, bearing 4-6 stamens. **Berries** subglobose, 3-4 mm in diameter; **seeds** 2-3.

**Ecology:** Dry seasonal forest, altitude 0-500 m.

**Distribution:** Endemic in Cambodia.

**Vernacular name:** None recorded.

**Uses:** None recorded. However the new species has potential as an ornamental plant.

**Etymology:** The plant is named in honour of Tan Jiew Hoe of Singapore.

**Conservation status:** The plant is found in the Phrom Ku Len National Park of Siem Riep Province where the forest is protected. Although the new species is rare, there is little data to show if it is threatened.

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**References**


