

## ***SCAPHOCHLAMYS LONGIPEDUNCULATA*, A NEW SPECIES FROM SOUTHERN THAILAND**

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A new species, *Scaphochlamys longipedunculata* (Zingiberaceae), is described and illustrated here. It is similar to *Scaphochlamys grandis* but differs in having 1- or 2-leaved shoots (versus shoots with 5 or more leaves) and peduncle length c.17 cm (versus peduncle length c.7 cm).

*Keywords.* *Scaphochlamys perakensis*, Southeast Asia, Zingiberaceae.

### INTRODUCTION

*Scaphochlamys* Baker (Zingiberaceae) consists of about 40 species distributed from Thailand to Borneo and Sumatra (Searle, 2010; Sam *et al.*, 2015; Sam & Ibrahim, 2018). Six species of *Scaphochlamys* have been reported in Thailand (Larsen, 2001; Jenjittikul & Larsen, 2002): *S. biloba* (Ridl.) Holttum, *S. klossii* (Ridl.) Holttum, *S. minutiflora* Jenjitt. & K.Larsen, *S. obcordata* Sirirugsa & K.Larsen, *S. perakensis* Holttum, and *S. rubescens* Jenjitt. & K.Larsen.

To finish the *Flora of Thailand*, we studied some specimens and reviewed the literature from Thailand and neighbouring countries, especially Malaysia, the diversity hotspot of this genus (Holttum, 1950; Searle, 2010). We did not find any specimens of *Scaphochlamys klossii* or *S. perakensis*, so we decided to exclude these taxa from the treatment of *Scaphochlamys* in Thailand. The specimen of *Scaphochlamys perakensis* reported in Maknoi & Sirirugsa (2002) did not match the type specimens and description of that species in Malaysia (Holttum, 1950), or any other species (Holttum, 1950; Searle, 2010). Hence, we describe a new species and illustrate it here.

### SPECIES DESCRIPTION

***Scaphochlamys longipedunculata* Maknoi, Ruchis. & Jenjitt., sp. nov.**

Similar to *Scaphochlamys grandis* Holttum in its large, elliptic leaves, long inflorescence, and large bracts but differs by its 1- or 2-leaved shoots (versus shoots with 5 or more leaves) and peduncle length c.17 cm (versus peduncle length c.7 cm). – Type: Thailand, Narathiwat, Waeng, 2 viii 2000, C. Maknoi T96 (holo QBG, iso QBG). **Figs 1–3.**

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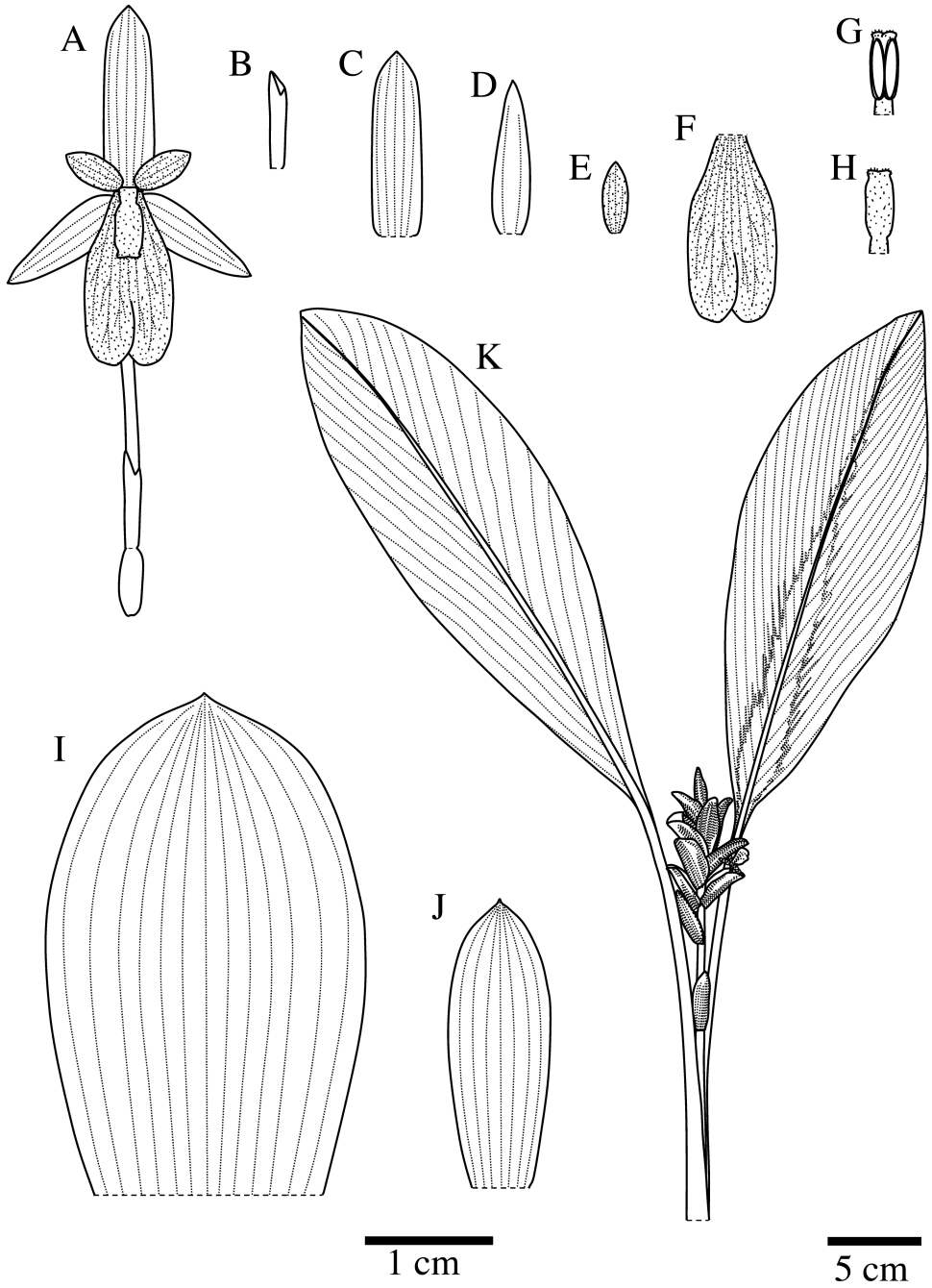


FIG. 1. *Scaphochlamys longipedunculata* Maknoi, Ruchis. & Jenjitt. A, Flower; B, calyx; C, dorsal corolla lobe; D, lateral corolla lobe; E, lateral staminode; F, labellum; G, stamen (front view); H, stamen (back view); I, bract; J, bracteole; K, habit. Scale bars: A–J, 1 cm; K, 5 cm. Drawn from dried specimens by Saroj Ruchisansakun.



FIG. 2. *Scaphochlamys longipedunculata* Maknoi, Ruchis. & Jenjitt.: inflorescence. Photograph taken by Charun Maknoi. Reproduced with permission from the Prince of Songkla University.

Terrestrial perennial herb, c.50 cm tall. Leafy shoot composed of 1 or 2 leaves. *Leaves* c.55 cm long; leaf sheaths 5–6 cm, glabrous or sparsely pilose near ligule, green; ligule bilobed, c.4 mm long, glabrous; petiole 15–17 cm long, pilose; blade elliptic, 30–35 × 11.5–12.5 cm, base cuneate, apex acute, green with pale green patch along midrib, brown or brownish green beneath, glabrous above, pilose below. *Inflorescence* central, c.24–26 cm long with c.9 flowers per cincinnus; peduncle c.17 cm long, pale green, glabrous; rachis c.6–7 cm, pale green, glabrous; thyrse ovoid, 7–9 × 4–4.5 cm; bracts c.12 per inflorescence, spirally arranged, well-spaced, broadly elliptic, 3–3.5 × 2–2.5 cm, apex acute, margin entire, imbricate, greenish brown, glabrous; bracteoles distichous, obovate, 1.5–2.3 × 0.4–1 cm, inner ones smaller, apex acute. *Flowers*: floral plane c.3 × 2 cm, floral tube c.3.8 cm long, white; calyx tubular, c.6 mm long, apex shallowly trilobed, split down one side by c.1.5 mm, glabrous; floral tube c.2.5 cm long, glabrous; dorsal corolla lobe oblong, c.1.3 × 0.4 cm, apex acute, glabrous; lateral corolla lobes lanceolate, c.1.1 × 0.3 cm, apex acute, glabrous; lateral staminodes broadly elliptic, c.5 × 2 mm, apex acute, pilose with glandular hairs; labellum ovate, c.1.3 × 0.7 cm, apex bilobed, pilose with glandular hair on adaxial surface; stamen c.5 mm long; filament

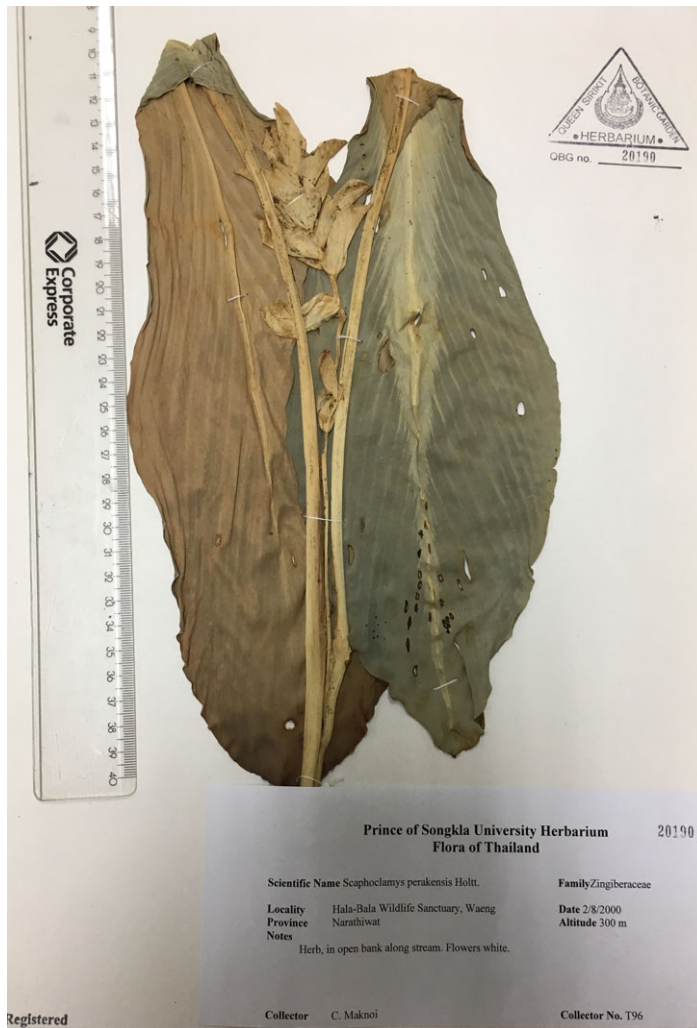


FIG. 3. Holotype of *Scaphochlamys longipedunculata* Maknoi, Ruchis. & Jenjitt. Photograph taken by Saroj Ruchisansakun.

c.1 mm long; anther  $4 \times 2$  mm; connective pilose with glandular hairs; anther crest shallowly bilobed, 0.5 mm long; ovary cylindrical, 5 mm long. *Fruits* not seen.

*Distribution.* Thailand.

*Etymology.* The specific epithet, *longipedunculata*, refers to the peduncle, which is long in comparison with that of other Thai species. A long peduncle can also be observed in *Scaphochlamys minutiflora*, but that species is distinctly different from others in its crisped bracts.

TABLE. Comparison of morphological characters of *Scaphochlamys longipedunculata* and similar species

Character	<i>S. longipedunculata</i>	<i>S. grandis</i> Holttum (1950)	<i>S. perakensis</i> Holttum (1950)	<i>S. breviscapa</i> Holttum (1950)	<i>S. kunstleri</i> (Baker) Holttum (1950)
No. of leaves	1 or 2	5 or more	2	1	2
Petiole	15–17 cm long	0 to very small	10–30 cm long	20–30(–35) cm long	2–7 cm long
Lamina	Elliptic, base cuneate	Narrow elliptic, base cuneate	Broadly elliptic to oblanceolate, base cuneate	Elliptic to ovate, base rounded	Ovate
Lamina size	30–35 × 11.5–12.5 cm	To 50 × 10 cm	25–45 × 5–11 cm	20–26 × 8–12.5 cm	30–40(–60) × 17 cm
Lower lamina colour	Brown or brownish green	Pale green	Pale green	Pale green	Paler green or dark purple
Peduncle	17 cm long	To 7 cm long	7–18 cm long, densely hairy	1–3.5 cm long	6–10 cm long
Inflorescence	7–9 cm long	7–12 cm long	3–8 cm long	c.6 cm long	4–8 cm long
Bract	Broadly elliptic, entire	Boat-shaped, c.4.5 × 3.1–1.5 cm, entire	Boat-shaped, 2.5–3 × 1 cm, crisped	2.5–3.3 × 1.5 cm, entire	Distinctly pouched in appearance, entire

*Habit and ecology.* Growing near open stream banks in evergreen forest, altitude about 400 m.

*Proposed IUCN conservation status.* Data Deficient (DD). This species occurs in Narathiwat Province, near the border with Malaysia, where the opportunities for botanical survey work are limited.

*Specimen examined.* THAILAND. **Narathiwat:** Waeng, 14 i 2001, A. Augsonkitt A.A.23 (PSU).

The morphological differences between *Scaphochlamys longipedunculata* and similar species are summarised in the Table.

#### KEY TO *SCAPHOCHLAMYS* SPECIES IN THAILAND

- 1a. Leaf 1 to the shoot \_\_\_\_\_ 2  
 1b. Leaves 2–6 to the shoot \_\_\_\_\_ 3
- 2a. Each bract subtending 1 flower \_\_\_\_\_ *S. biloba*  
 2b. Each bract subtending 2–4 flowers \_\_\_\_\_ *S. rubescens*
- 3a. Labellum more than 20 mm long, bracts lax \_\_\_\_\_ *S. obcordata*  
 3b. Labellum 5–13 mm long, bracts lax or congested \_\_\_\_\_ 4
- 4a. Bracts crisped \_\_\_\_\_ *S. minutiflora*  
 4b. Bracts entire \_\_\_\_\_ 5
- 5a. Peduncle 6–10 cm long, bracts distinctly pouched \_\_\_\_\_ *S. kunstleri*  
 5b. Peduncle longer than 15 cm long, bracts curved outwards but not distinctly pouched \_\_\_\_\_
- S. longipedunculata***

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