WEBBIA Journal of Plant Taxonomy and Geography

Firenze University Press
https://oaj.fupress.net/index.php/webbia

OPEN ACCESS

Citation: Irsyam A.S.D., Raynalta E., Hariri M.R. (2025). One name, many faces: the dolphin case of *Homalomena siaisensis* in ornamental trade. *Webbia. Journal of Plant Taxonomy and Geography*80(2):291-294. doi:10.36253/jopt-17743

Received: April 18, 2025

Accepted: April 30, 2025

Published: July 18, 2025

Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

Competing Interests: The Author(s) declare(s) no conflict of interest.

Editor: Peter C. Boyce

ORCID
ASDI: 0000-0001-7873-6665
ER: 0000-0002-3553-7735
MRH: 0000-0003-0943-3198

One name, many faces: the dolphin case of *Homalomena siaisensis* in ornamental trade

Arifin S.D. Irsyam[1], Erick Raynalta[2], Muhammad R. Hariri[3,*]

[1] *Herbarium Bandungense, School of Life Sciences and Technology, Institut Teknologi Bandung, Sumedang 45363, Indonesia*
[2] *Botani Tropika Indonesia Foundation (Botanika), Bogor 16112, Indonesia*
[3] *Research Center for Biosystematics and Evolution, National Research and Innovation Agency (BRIN), Cibinong 16911, Indonesia*
*Corresponding author. Email: muhammad.rifqi.hariri@brin.go.id

Abstract. *Homalomena siaisensis* is a newly described species of Sumatran aroid. The species was discovered in January 2024 from South Tapanuli, North Sumatra, Indonesia. This small lithophytic species has recently gained attention in the ornamental plant trade, where it is informally known as *Homalomena* 'Dolphin Skin' and frequently marketed via social media platforms. The species is formally described and illustrated in the present work.

Keywords: Araceae, Malesia, ornamental, Philodendreae, Sumatra.

INTRODUCTION

The genus *Homalomena* in Sumatra represents a taxonomically rich group, offering considerable potential for further systematic investigation and species delimitation. To date thirty-eight species have been recorded from the Sumatran region, underscoring the island's floristic diversity and the need for continued botanical exploration (POWO 2025; Irsyam et al. 2025a; Irsyam et al. 2025b). In 2025, a previously undescribed species that had been circulating in horticultural trade under the provisional name *Homalomena* 'Dolphin' was formally described as *Homalomena pistioides* A.S.D.Irsyam, M.R.Hariri & Raynalta (Irsyam et al. 2025a).

During recent investigations, we identified a previously undocumented lithophytic species of *Homalomena*, informally referred to as *Homalomena* 'Dolphin Skin'. The type specimen was collected by the second author in January 2024 from South Tapanuli, North Sumatra. Interestingly, by December 2024, morphologically similar material had already appeared in horticultural circulation via various social media platforms. Based on comprehensive morphological assessment, we assign this distinctive, small lithophytic taxon to the Chamaecladon SG and herein describe it as *Homalomena siaisensis* A.S.D.Irsyam, M.R.Hariri & Raynalta, a species new to science.

MATERIALS AND METHODS

Field exploration was carried out in Siais Subdistrict, South Tapanuli Regency, North Sumatra, in January 2024. The plants were examined for morphological characteristics, and inflorescences were documented using a Dinolite digital microscope at the National Research and Innovation Agency (BRIN), Cibinong. Additionally, further examination of specimens was performed at Herbarium Bogoriense (BO) to identify any matching specimens.

TAXONOMIC TREATMENT

Homalomena siaisensis A.S.D.Irsyam, M.R.Hariri & Raynalta, **sp. nov.** (Figure 1)

Type**:** Indonesia, Sumatra, North Sumatra Province, South Tapanuli Regency, waterfall near the Siais Lake, 5 Jan 2024, *E Raynalta s.n.* (holotype FIPIA; isotype UIDEP).

Diagnosis

Homalomena siaisensis most closely resembles *Homalomena pistioides* A.S.D.Irsyam, M.R.Hariri & Raynalta but can be easily distinguished by having obovate to oblong elliptic leaf shape (vs obovate), cuneate to cordate leaf base (vs obtuse to cuneate), crisped leaf margin (vs entire), acuminate to mucronate leaf apex (vs truncate, rounded or mucronate), fleshy leaf texture (vs papery), lateral primary veins 4–6 (vs 2–3), brownish-green to dark red spathe (vs yellowish with reddish at base), very short stipe (vs absent), pistils in 3 whorls (vs 2 whorls), light coral pistils with tiny red spots (vs white), angular pistils (vs globose), angular staminodes with light coral colored (vs ovoid with white colored), 2–3 stamens per staminate flower (vs 2), and light red staminate florets (vs yellowish).

Description

Lithophytic small herbs, 2.9–5.4 cm in height. Stem condensed, ca 10 mm long; internodes obscured by overlapping leaf bases. Leaves 8–9 per crown; sheath fully adnate to petiole, ¼ to ½ petiole length, 1–15 mm long, reddish brown to green, with undulate hyaline margin, apex truncate to obtuse; petiole short, 4.4–24.2 mm long, 0.8–2.2 mm in diam., ribbed, canaliculate, reddish brown to green; blade obovate to oblong elliptic or asymmetrical elliptic, 0.8–7.3 × 0.5–4.2 cm, base cuneate to cordate, margin revolute with crispulate hyaline (< 1 mm), apex acuminate to mucronate, adaxial surface yellowish green to green, abaxial surface pale green, fleshy, midrib impressed adaxially, prominently raised abaxially, red; primary lateral veins 4–6 on each side, impressed adaxially, prominently raised abaxially, green; secondary veins arising from midrib; tertiary veins inconspicuous. Inflorescence erect-spreading, 2–3 together; peduncle slender, 10–25 mm long, thin, red. Spathe conical, without constriction, up to 10 mm long, up to 5 mm in diam., apex with a terminal mucro to 0.4 mm long, green, turning brownish green to dark red. Spadix ca 8.9 mm long, fertile to tip, extended after anthesis, with very short stipe; pistillate flower zone shorter than staminate flower zone, ca 2.15 mm long; pistils few, in three whorls, angular, ca 0.85 mm in height, ca 0.77 mm in diam., light coral with red spots; stigma sessile, ca 0.38 mm in diam.; staminode 1, angular, sessile, ca 0.29 mm in height, light coral with tiny red spots; suprapistillar interstice absent; staminate flower zone ca 6.8 mm long, conical, apex blunt; staminate flowers densely arranged, 1–1.25 mm long, each consisting of 2–3 stamens, light red; thecae ellipsoid, opening by a wide terminal pore; pollen powdery, white. Fruiting spathe, fruits and seeds not observed.

Etymology

The specific epithet *siaisensis* is derived from the type locality, Siais, North Sumatra. This nomenclatural choice serves to both reflect the geographical origin of the species and highlight the botanical significance of the region, which continues to yield novel taxa of remarkable diversity and endemism.

Distribution and Ecology

The species is distributed in Siais, located in the South Tapanuli region of North Sumatra. displays a lithophytic growth habit, thriving on the moss-covered cliffs near the waterfall. This species is not found in the area that is exposed to direct water splashing (Fig. 2). In the observed habitat, *H. siaisensis* coexists with *H. anthurioides* S.Y.Wong, P.C.Boyce & A.Hay.

Proposed conservation assessment

Homalomena siaisensis is known from a single location, where at least ten mature individuals have been observed. Based on the IUCN Red List categories and criteria (IUCN Standards and Petitions Subcommittee 2022), this species is provisionally assessed as Endangered (EN B2b[ii,iv,v]). The species was originally discovered in a forested area that is not part of a protected conservation zone and is currently undergoing conversion into a tourism development site and near the oil palm plantations. This habitat disturbance poses a significant threat to the species, further justifying its pro-

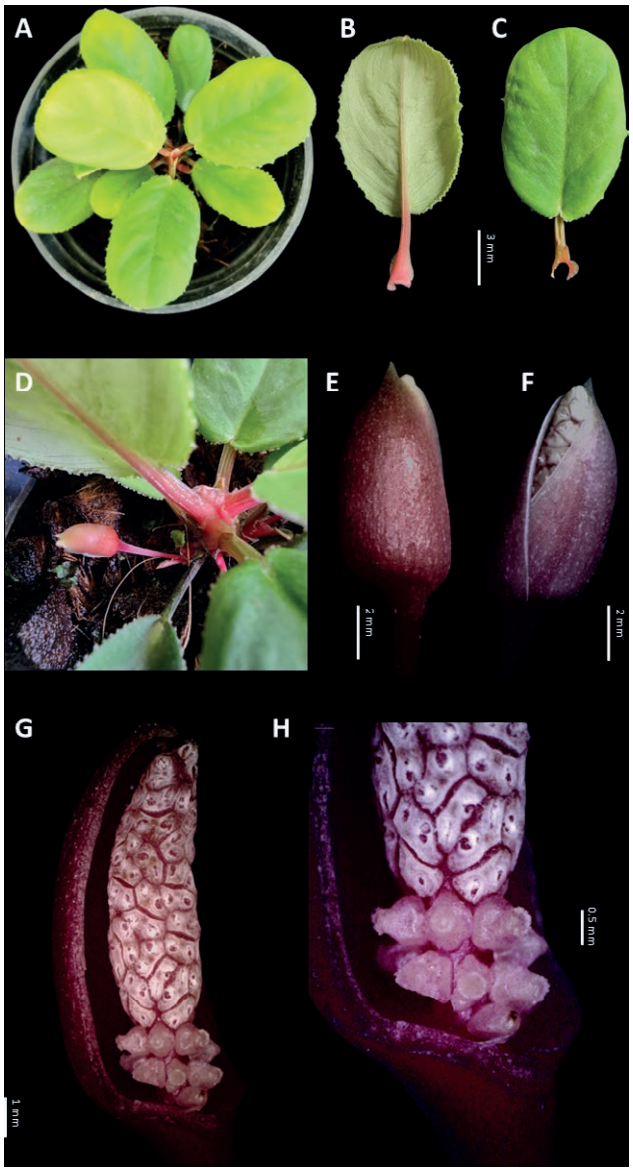

Figure 1. A. Habit; B-C. abaxial and adaxial leaf surface; D. Emerging inflorescense; E-F. Dorsal and Ventral view of spathe (28.2×); G. Spadix (half of spathe artificially removed, 36.6×); H. Close-up view of pistils (69.2×).

visional classification under the endangered status. The ongoing transformation of its natural environment into a commercial tourism area underscores the urgent need for conservation efforts to protect this newly described species and its fragile habitat.

Remarks

Homalomena siaisensis is placed within the Chamaecladon super group (SG) (Ng et al. 2011), a taxonomic assemblage characterized by a suite of shared

Figure 2. The type locality of *Homalomena siaisensis* near the Siais Lake, North Sumatra.

morphological traits. This placement is supported by the presence of a non-constricted spathe, the occurrence of 2–3 stamens per male flower, and the presence of a staminode within the pistillate zone—diagnostic features consistent with the Chamaecladon SG as defined by Ng et al. (2011).

ACKNOWLEDGMENTS

We sincerely thank the Directorate for Scientific Management Collection (BRIN) for providing access to their facilities, which played a crucial role in the successful completion of this research. Financial support for this study was provided through the National Research and Innovation Agency's Call for Joint Research Collaboration (CfJRC), under the Rumah Program Organisasi Riset Hayati dan Lingkungan for the 2025 funding cycle, as stipulated in contract number B-3605/III.5/PR.03.06/12/2024. We are also deeply grateful to the editor and anonymous reviewers for their thoughtful critiques, constructive comments, and valuable suggestions,

all of which have contributed significantly to enhancing the quality and clarity of this manuscript.

REFERENCES

Irsyam ASD, Husaini IPA, Raynalta E, Hariri MR. 2025a. *Homalomena pistioides*: a new small-sized lithophytic species of Sumatran Aroid. Webbia. 80(1): 95–98.

Irsyam ASD, Raynalta E, Hariri MR. 2025b. Nomenclatural changes and new species in Malesian *Homalomena* (Araceae). Webbia. 80(1): 99–104.

IUCN Standards and Petitions Subcommittee. 2022. Guidelines for Using the IUCN Red List Categories and Criteria, Version 15.1. Published at https://nc.iucnredlist.org/redlist/content/attachment_files/RedListGuidelines.pdf [Accessed 14 February 2025].

Ng KK, Sofiman O, Boyce PC, Wong SY. 2011. Studies on Homalomeneae (Araceae) of Borneo VIII: Delimitation of additional informal suprageneric taxa for Sundaic *Homalomena*. Webbia 66(1): 21–28.

POWO. 2025. Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published at https://powo.science.kew.org/ [accessed 14 February 2025].