

A NEW SPECIES OF *MICROSORUM* (POLYPODIACEAE) FROM THAILAND

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SUMMARY

A new species, *Microsorium siamensis*, is described and illustrated.

Key words: Polypodiaceae, *Microsorium*, new species.

Microsorium siamensis T. Boonkerd, *spec. nov.* — Fig. 1

Rhizoma 3.2–4.2 mm diametro filis sclerenchymatis 60–240 dispersis squamis peltatis ovatis vel triangularibus 3–3.5 mm longis, 1–1.3 mm latis. Frondes subcoreaceae in statu vivo caeruleae iridescentes, in statu sicco brunneae. Lamina simplex 13–23.5 cm longa, 2.2–4.5 cm lata, indice 4.5–5.9, apice longe acuminato, base attenuata, hydathodis manifeste irregulariter dispersis super lamina, soris separatis irregulariter dispersis super venis singularibus vel connectivis in parte apicali laminae, sporas vivide auratus. — Typus: *P.V. Fern 1* (holo L; iso BCU), Thailand, Yala.

Rhizome 3.2–4.2 mm in diam., not white waxy, approximately cylindrical with scattered strands of sclerenchyma, vascular bundles in cylinder 9 or 10, sclerenchyma strands 60–240, roots densely set, bearing two rows of close to imbricate fronds. Scales densely set, slightly spreading, widest near the base, ovate or triangular, 3–3.5 by 1–1.3 mm, peltate, margin denticulate, apex acuminate to slightly caudate, clathrate throughout, dark black on central region. *Phyllopodia* more or less distinct, 3.1–4.1 mm apart. *Fronde*s monomorphic (well proportioned to the rhizome diameter), subcoriaceous, iridescent blue-green in colour when living, Havana brown to raw umber in dry specimens. *Lamina* simple, hydathodes scattered on upper surface, elliptic to narrowly elliptic, 13–23.5 by 2.2–4.5 cm, index 4.5–5.9, base attenuate, the stipe more or less winged, margin entire undulate, apex acute to long acuminate, costa raised on lower surface, slightly raised on upper surface. *Venation*: connecting veins forming a row of about equally sized areoles between two adjacent veins and no prominent veinlet situated parallel to the veins; the venation is hidden in living specimen, free veinlets simple or 1 or 2 times forked. *Sori* separate, mostly irregularly scattered on a simple free vein or on 2 or 3 connective veins, usually occupying the upper half portion of the lamina, more or less round, superficial, 4–14 per cm², 0.7–1.6 mm in diam.; paraphysis absent; sporangium hyaline when young, turning yellowish brown when mature, sporangium annulus 17–21-celled, indurated cells 11–14; spores concavo-convex, brightly golden yellow, 35–38 by 50–55 μ m.

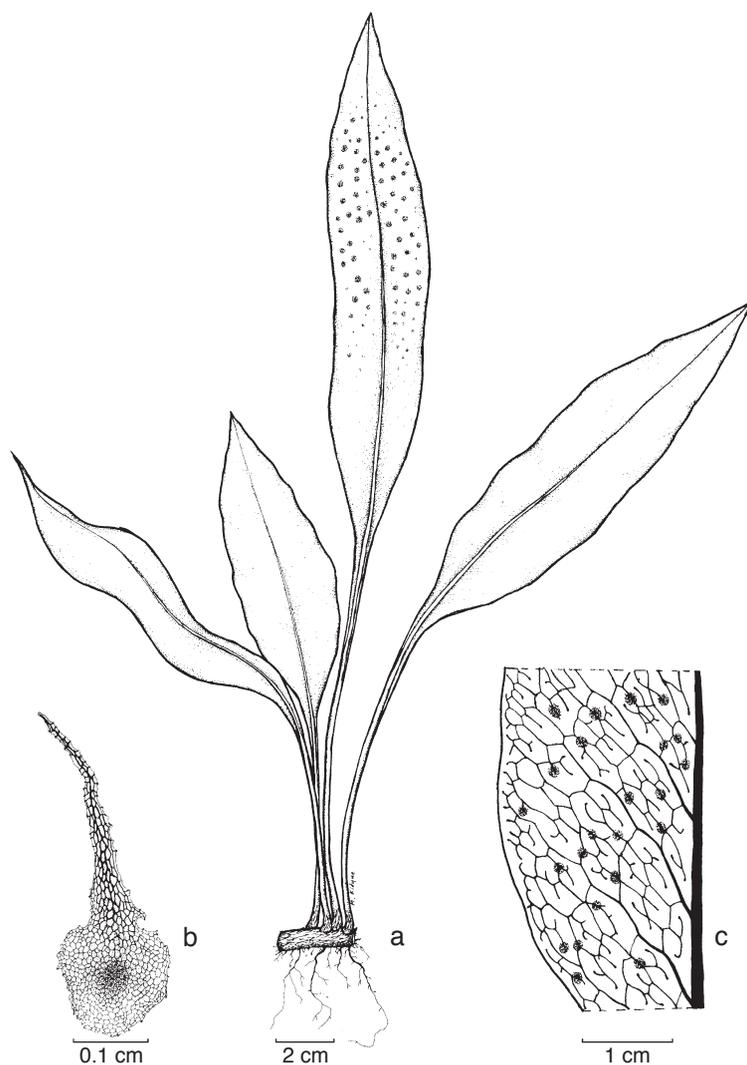


Fig. 1. *Microsorium siamensis* T. Boonkerd. a. Habit; b. rhizome scale; c. detail of venation (all: *P.V. Fern 1*). Drawn by Manit Kidyue.

Distribution — Thailand (Yala).

Habitat & Ecology — In rock crevices on moist rock of limestone hills in semi-shade, about 100 m altitude.

Notes — This iridescent blue-green *Microsorium* species was collected by Mr. Poon-sak Vatcharakorn from Peninsular Thailand. It is an easily cultivated species, but still uncommon among enthusiastic fern hobbyist. This species is a lithophyte, occurs in a small population on limestone hills in semi-shade and usually on moist and humus-rich rocks or cliffs.

So far, it has a natural affinity with *Microsorium thailandicum* T. Boonkerd & Noot., but these two species have never been found together in the wild. The new species is easily noticed by numerous prominent hydathodes on the upper surface of the frond. They also differ in shape, breadth, and venation of the lamina. Moreover, mature sporangium size and colour, number of annulus cells and colour of spores are inconsistent.

The specific epithet '*siamensis*' refers to Siam, the old name of Thailand where this species was collected.

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