Zingiber idae, a new name for Z. villosum Theilade (Zingiberaceae)

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ABSTRACT. A new name, Zingiber idae P. Triboun and K. Larsen is proposed for Z. villosum L. Theilade. New detailed illustrations of the species are included, and an emended description given. SEM of pollen have been studied.

The genus Zingiber was recently revised by Theilade (1999), who recognized 26 species in Thailand. During an ongoing revision by the first author of the genus for the Flora of Thailand it was discovered that the name Zingiber villosum Theilade is a later homonym of Z. villosum (Louriero) Stokes (1812). A new name, Z. idae, is therefore proposed and the first floral description is emended.

Zingiber idae P. Triboun & K. Larsen, nom. nov.


Rhizomatous herb with leafy stem 1.3–1.8 m tall. Leaf sheaths and petiole villous. Ligule bilobed, 2–3 mm long, villous. Blade linear to ovate lanceolate, 30–35 by 3–6.5 cm, lower surface and midrib hairy, base cuneate, apex acuminate to caudate. Petiole very short, villous. Peduncle radical, erect, slender, 15–30 cm long with 5–7 sheaths, villous. Inflorescence narrowly fusiform, 15–20 by 2–3.5 cm, apex acuminate. Bracts 25–40, loosely imbricate, lanceolate, 4–5 by 1.3–1.5 cm, dark green turning to orange-red when fruiting, villous on both sides, apex acuminate. Bracteoles lanceolate, 3.5–4 by 1–1.4 cm, villous outside, glabrous inside. Flower whitish cream, calyx glabrous or sparsely hairy, tube ca. 1.5 cm long, lobe 10 by 6–7 mm, apex shallowly tridentate. Corolla ca. 6 cm long, tube ca. 2.9 cm long, dorsal lobe 2.6–3 by 1.1–1.3 cm, lateral lobes 2.2–2.5 by 0.6–0.7 cm. Labellum emarginate, mid lobe 1.4–1.5 by 1.6 cm, apex divided almost to the middle, middle lobe slender ca. 4 mm long; side lobes more or less the same size and shape 4–8 by 6–7 mm. Anther 11–12 by 3 mm. Anther appendage white, ca. 1.3 cm long, shorter than stigma. Pollen spheroidal, inaperturate, 60–70 mm, tectum cerebroid. Ovary ca. 4 by 3 mm, villous, 3–locular, 11–13 ovules per locule. Capsule ellipsoid, hairy, 4–6 seeds per locule. Seeds black with white aril, globose ca. 4 mm in diameter.

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Thailand.—WESTERN: Kanchanaburi (Sai Yok, Huay Bankan, 14°55' N 98°45' E, Beusekom et al. 3531, holotype L, isotypes C, P; Sai Yok, Larsen 8614 (C); Triboun 1239 (spirit collection) (AAU, BK); Triboun 3020 (BK, Khon Kaen University Herbarium)).

Distribution.—Endemic.

Ecology.—In mixed deciduous and forests with bamboo on limestone hill, 250–800 m. Flowering in June-July and fruiting in August-November, flowering time after 4–5 p.m.

Vernacular.—Khing khon (ขิงขอน), Khing son tha ya (ขิงสวนยา).

Note.—Four Thai gingers, Zingiber barbatum, Z. gramineum, Z. idae and Z. pellitum, are hairy throughout. Z. idae is distinguished by the white flowers and the vegetative parts covered with villous hairs. The species is related to Z. barbatum, Z. pellitum and Z. gramineum. It differs from the first two in having larger leafy stems and from the third in not having terminal inflorescence on the leafy stem and yellow flowers. It is still known only from Sai Yok district, Kanchanaburi Province. The specific epithet of Z. idae honours Dr. Ida Theilade for her important work on the genus Zingiber in Southeast Asia.

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REFERENCES


Figure 1. SEM micrographs of *Zingiber idae* (scale bars 5 mm)
A. pollen grain
B. part of pollen surface
Figure 2. Zingiber idae: A. leaf; B. flower; C. bract; D. bracteole; E. calyx; F. dorsal lobe of corolla; G. lateral lobe of corolla; H. labellum. drawn from P. Triboun 1239 (in spirit).

A new combination in *Hedyotis* (Rubiaceae)

Figure 2. *Hedyotis kamputensis* (Fitard) K. Wangwasit & Chantar. C. habit; D. inflorescence.