

## *Globba sirirugsae*, a New Species of *Zingiberaceae* from Thailand

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*Globba sirirugsae* Saensouk & P. Saensouk, sp. nov. from the Phu Phan Mountain Range, Kut Bak District, Sakhon Nakhon Province, northeast Thailand is reported. A detailed description, flowering and fruiting period, distribution, habitat, uses, photographs and illustration are provided.

**Key words:** *Globba sirirugsae*, new species, *Zingiberaceae*.

*Globba* L. belongs to the tribe *Globbeae* Meisn., subfamily *Zingiberoideae* Hassk., family *Zingiberaceae* Martinov, and consists of about one hundred species (Kress et al. 2002, Williams et al. 2004, Sangvirodjanapat et al. 2019). It is widely distributed from India eastwards through southern China and Indochina to the east Malesian region, including New Guinea and Queensland, Australia. Monsoon Asia harbors the richest diversity (Larsen and Larsen 2006). In Thailand, 41 species have been previously listed by Larsen and Larsen (2006). After that Picheansoonthon and Tiyaworanant (2010) reported *G. ranongensis* Pichaens. & Tiyaw. as a new species from southern Thailand, Saensouk et al. (2016) reported *G. bicolor* Gagnep. as a new record for Thailand and Sangvirodjanapat et al. (2019) described three new species, *G. aranyaniae* Sangvir. & M. F. Newman, *G. lithophila* Sangvir. & M. F. Newman, and *G. macrochila* Sangvir. & M. F. Newman. Consequently, 45 species are known in Thailand

at present.

Recently, we found an interesting and unknown *Globba* species from a mixed deciduous forest, Phu Phan Mountain Range, Kut Bak District, Sakhon Nakhon Province, northeast of Thailand. Subsequently, we checked specimens from Mahasarakham University and other herbaria. As we could not find specimens that agree well with this strange species, we recognize it as a rare newly-discovered species from Thailand. In comparison to known species of the genus, this new species has many distinctive characters (Table 1) and hence is described as a new species, *Globba sirirugsae* Saensouk & P. Saensouk. A detailed description, flowering and fruiting period, distribution, habitat, uses, colour photographs and illustration are provided (Table 1, Figs. 1, 2). This new species belongs to the subgenus *Globba* section *Globba* based on the persistent bracts and two pairs of anther appendages (Figs. 1C, 2E) according to a new infrageneric classification

slightly incurved, pubescence outside. Lateral staminodes obovate or oblong, apex slightly rounded, 7–9 × 6–8 mm, yellow, glabrous. Labellum triangular, ca. 7 × 5 mm, yellow, glabrous, ca. 3 mm deep at base, apex bilobed, lobes semi-triangular. Filament 1.8–2 cm long, glabrous. Anther yellow, 2–2.1 × 1–1.1 mm, thecae parallel; anther appendages two pairs, fused at base, yellow, the upper pair falcate, apex acute, 3–3.2 × 0.7–0.8 mm, the lower pairs acuminate triangular, 3–3.2 × 0.3–0.4 mm. Ovary 1–1.2 × 1–1.2 mm, 3-carpellate, cream-coloured, glabrous, unilocular with many ovules on parietal placenta. Stylode slender, glabrous, creamy. Stigma inserted to the top of anther, adpressed triangular, ca. 0.5 mm in diameter, mouth ciliate. Nectary glands 2, above ovary, 1.4–1.5 mm long. Fruits globose, 5–6 mm in diameter, surface rough, with persistent calyx at tip, green.

**Etymology:** The name of the species honours Prof. Puangpen Sirirugsa (Prince of Songkla University: PSU), an outstanding botanist of the Thai Flora and she is also the first Thai to study the family *Zingiberaceae* in Thailand.

**Distribution:** Rare and endemic to Thailand; few populations in Phu Phan Mountain Range, Kudbak District, Sakon Nakhon Province, elevation ca. 400 m a.s.l.

**Ecology:** This species grows under the shade of dry dipterocarp forest.

**Phenology:** Flowering in June–July and fruiting in July.

**Vernacular name:** Hong-Hern-Sirirugsa (หงส์เหินศิริริกษั).

**Uses:** Ornamental plants in home gardens.

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S. Saensouk<sup>a</sup>, P. Saensouk<sup>b</sup>: タイ産ショウガ科植物の1新種, *Globba sirirugsae*

ショウガ科の *Globba* 属は 100 種超が知られており、熱帯アジアのモンスーン地域がその多様性の中心となっている。そのうちタイではこれまでに 45 種が認められている。本稿では、新たにタイ北東部の Sakhon Nakhon Province から 1 新種, *Globba sirirugsae* Saensouk & P. Saensouk を記載した。本新種は *G. barthei* Gagnep. と

*G. bicolor* Gagnep. に似るが、葉や花の形態などにより区別される。

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