

A new species of *Somrania* (Gesneriaceae) from Thailand

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ABSTRACT. The new species *Somrania flavida* D.J.Middleton & Triboun, from Khao Sok National Park in Surat Thani Province, Thailand, is described. It is the third species in this genus which is restricted to karst limestone habitats in Thailand. A key to the species of *Somrania* is provided.

Keywords. New species, *Somrania*, Thailand

Introduction

The genus *Somrania* D.J.Middleton was originally described from karst limestone habitats in southern Thailand with two new species, *Somrania albiflora* D.J.Middleton and *S. lineata* D.J.Middleton & Triboun (Middleton & Triboun 2012). Its distinctive characters are branched hairs, tubular corolla, a stigma with only the lower lobe developed and bifid, and short straight fruit. From DNA sequence data it is most closely related to *Damrongia* Kerr ex Craib (Puglisi, pers. comm.) in the “*Boea* group” sensu Möller et al. (2009).

At the time of publication we were aware that there may be a third species from Khao Sok National Park but the available material was inadequate to describe it. Plants grown from seed collected at Khao Sok in 2008 have now flowered at the Royal Botanic Garden Edinburgh and we have been able to confirm that it is indeed a new species of *Somrania*.

The new species is described below and a key to the species of *Somrania* is provided.

Key to the species of *Somrania*

- 1a. Corolla c. 13.5 mm long, white throughout with no coloured lines inside tube
..... *S. albiflora*
- 1b. Corolla 15–18 mm long, with orange-brown or yellowish markings on ventral
surface inside corolla tube 2

- 2a. Corolla with sharp orange-brown lines on ventral surface inside corolla tube; branched hairs on leaves but not on inflorescence axes; petioles 3–10.2 cm long ..
..... *S. lineata*
- 2b. Corolla with diffuse yellowish lines on ventral surface inside corolla tube; branched hairs present on leaves and inflorescence axes; petioles 1–3 cm long
..... *S. flavida*

***Somrania flavida* D.J.Middleton & Triboun, sp. nov.**

Differs from *Somrania albiflora* in the diffuse yellowish lines on the ventral surface of the inside of the corolla (white throughout in *Somrania albiflora*), and the denser hair covering on the upper surface of the leaves. Differs from *Somrania lineata* in the diffuse lines on the ventral surface of the inside of the corolla (two sharp lines in *Somrania lineata*), shorter petioles, and in the presence of branched hairs on the inflorescence (inflorescence hairs unbranched in *Somrania lineata*).

TYPE: *Middleton 5297*, cultivated at Royal Botanic Garden Edinburgh, Scotland, 1 Oct 2013 (holo E). Originally from Thailand, Surat Thani, Ban Thakhun District, Khao Sok National Park, edge of the lake, 100 m alt., 6 Sep 2008, *Middleton, Triboun, Chamchumroon, Saengrit & Simma 4324*, cultivated as RBGE 20081567. Fig. 1.

Herb, acaulescent or forming a short stem to 1.5 cm long at flowering. **Leaves:** petioles 1–3 cm long, densely covered in branched hairs and sessile glands; lamina broadly elliptic to orbicular, 1.1–12.2 × 0.8–8.4 cm, 1.2–1.5 times as long as wide, apex rounded, base rounded to subcordate, slightly unequal or not, margin crenate, with 4–6 pairs of steeply ascending secondary veins, densely covered in a mixture of unbranched slightly curved eglandular hairs and with occasional sessile or shortly stalked gland-tipped hairs above, densely covered with branched hairs and sessile glands beneath. **Inflorescence** 12–13-flowered, densely pubescent with a mixture of eglandular branched hairs (but see note below) and short gland-tipped hairs throughout; bracts narrowly ovate, pubescent as on calyx; 2–4 × 0.5–0.9 mm, peduncle 7.5–9.5 cm long; pedicels 3–8 mm long. **Calyx** of 5 lobes almost free to base (fused for < 0.5 mm); lobes narrowly triangular, c. 4.4 × 0.9 mm, apex acute, densely pubescent outside with a mixture of eglandular branched hairs, shorter eglandular hairs and short gland-tipped hairs, inside with sessile glands. **Corolla** white throughout except with 2 broad and diffuse yellow bands from sinuses of lower lip down into tube, fainter yellow spots at other 3 sinuses, mouth slightly oblique, limb 2-lipped, 15–17 mm long; tube c. 12 mm long, outside with a mixture of eglandular branched hairs, simple eglandular hairs and gland-tipped hairs, inside glabrous; lower lip c. 5 mm long, upper lip c. 3.5 mm long; upper lobes orbicular, c. 3.5 × 4 mm, apices rounded; lateral lobes orbicular, c. 3.6 × 4 mm, apex rounded; lower lobe orbicular, c. 3.8 × 4.5 mm, apex rounded. **Stamens** 2, anterior, white throughout, inserted at 2.5 mm from corolla base which is 21% of tube length; filaments straight, c. 4 mm long, glabrous; anthers oriented with locules upwards and downwards in tube, fused by the apices and touching face to face, 0.7 × 1.7 mm; 2 lateral staminodes c. 1.5 mm long, geniculate, medial staminode c. 1 mm long, straight. **Disc** 0.7 mm long, a simple annular ring. **Pistil** c. 12 mm long; ovary



Fig. 1. *Somrania flavida* D.J.Middleton & Triboun. Inflorescence showing diffuse yellow bands in corolla. Inset: corolla side view. (Photos: D.J. Middleton)

c. 3.5 mm long, pinkish, with a mixture of unbranched eglandular hairs and shorter to subsessile gland-tipped hairs; style c. 8.5 mm long, white, with a mixture of unbranched eglandular hairs and shorter gland-tipped hairs; only lower lobe of stigma developing, bifid, lobes c. 0.7 mm long. **Fruit** a plagiocarpic capsule, narrowly fusiform, c. 8 mm long. **Seed** ellipsoid, apiculate at each end, c. 4 × 2 mm, surface reticulate.

Distribution. Only known from Khao Sok National Park in Surat Thani Province, Thailand.

Ecology. In partial shade on limestone cliffs at low altitude.

Etymology. The name refers to the yellowish throat of the corolla tube.

Provisional IUCN Conservation Assessment. Least Concern (LC). Although this species is known from very few collections and the size of the population is unknown it was collected from a limestone site in Khao Sok National Park. It occurs on inaccessible cliffs, not prone to human disturbance, and the National Park status will prevent exploitation of the limestone for the construction and chemical industry.

Additional specimen studied. Middleton, Triboun, Chamchumroon, Saengrit & Simma 4324, Thailand, Surat Thani, Ban Thakhun District, Khao Sok National Park, 100 m alt., 6 Sep 2008 (BKF, E).

Note. *Middleton et al.* 4324 is the parent plant from which seeds were taken to grow the plants later vouchered as *Middleton 5297*, the type specimen. The branched hairs are very much more obvious in the live plants than they are in dried plants so care should be taken when studying material.

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