

## A NEW SPECIES OF *CAULOKAEMPFERIA* (*ZINGIBERACEAE*) FROM LAOS

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The genus *Caulokaempferia* (*Zingiberaceae*) is recorded for the first time from Laos with the description and illustration of the new species *C. burttii*.

*Keywords.* *Caulokaempferia*, Laos, new species, *Zingiberaceae*.

### INTRODUCTION

The genus *Caulokaempferia* K. Larsen (*Zingiberaceae*) consists of a dozen tiny species from humid environments: mossy rocks along streams, wet rock walls and swampy areas. It was established by the first author (Larsen, 1964) and further species were described by Larsen & Smith (1972) and Larsen (1973). Intensive collecting in recent years in the mountainous regions of northern Thailand and Myanmar has revealed a number of undescribed species of *Caulokaempferia* (Larsen, 2003). Recently, material of an undescribed species collected in Laos was discovered at the flower market in Bangkok, where it had been brought by local traders from Champassak Province in Laos. *Caulokaempferia* has now been recorded from northern India, Bhutan, northern Bangladesh, Myanmar, southern China, Vietnam, Laos and Thailand.

***Caulokaempferia burttii* K. Larsen & Jenjitt., sp. nov. Fig. 1.**

*C. albae* K. Larsen & R.M. Smith affinis, a qua differt bracteolis longioribus 3-dentatis, unaquaque plus quam unum florem subtendente, floribus roseis ad pallide violaceis, staminodiis lateralibus late triangularibus, labello non profunde emarginato margine crenulato, crista antherae minuta, bidentata, stylo longe exserto, stigmatibus cupulato, ciliato cum 2–3 appendicibus linearibus.

Type: Chatuchak Market, Bangkok, 24 vi 2002, *Jenjittikul* 8263. Origin: Laos, Champassak Province, Paksong (Bolovens Plateau), alt. 1000–1300m (holo. AAU; iso. BKF, E, PBM).

Perennial herb with short rhizome and spindle-shaped storage roots. *Leafy shoot* to 80cm; lowermost 3–4 sheaths without lamina, purple; upper 4–5 lamina-bearing sheaths green with purple stripes along veins; ligule bifid with rounded lobes, c.5mm

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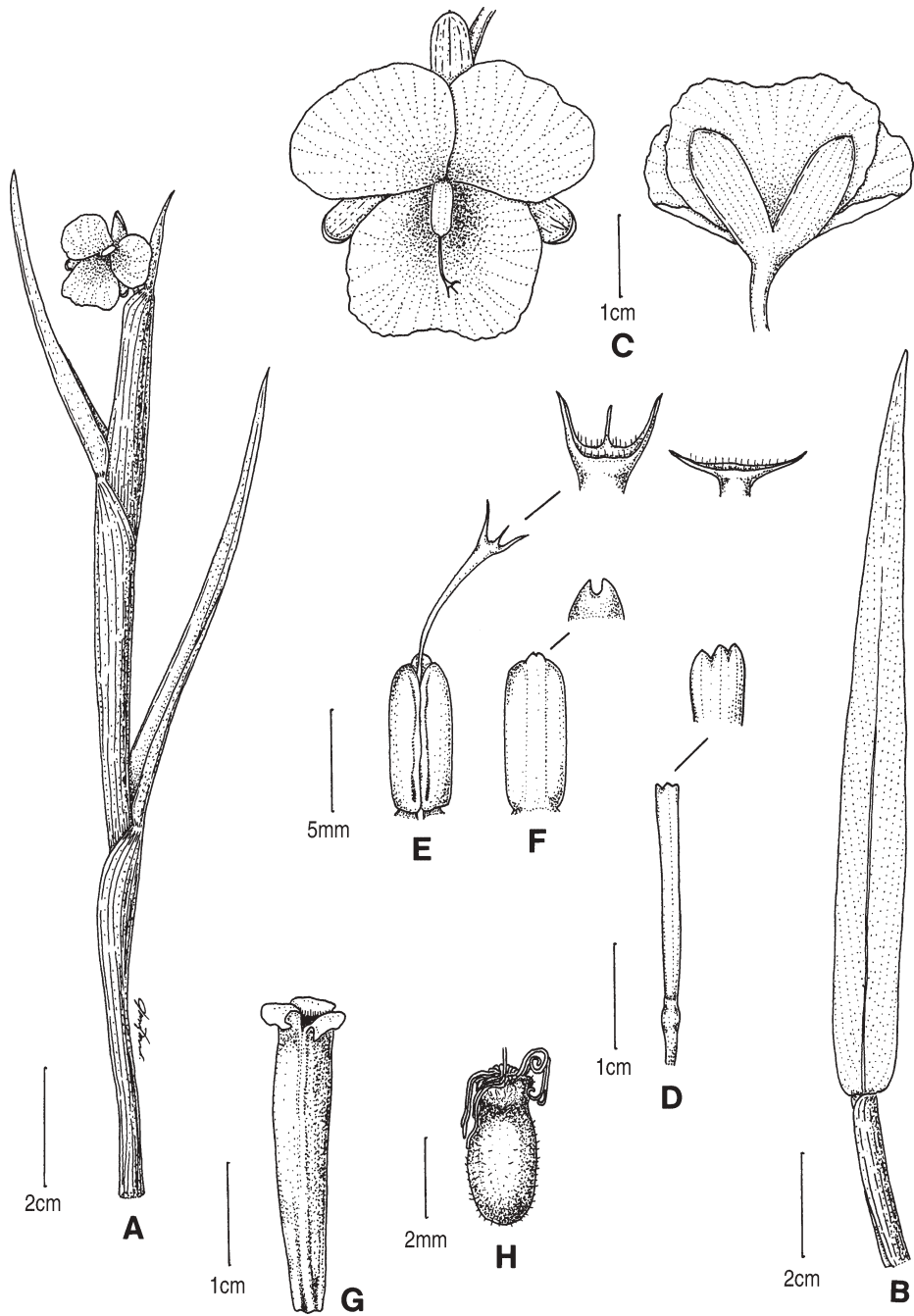


FIG. 1. *Caulokaempferia burttii* K. Larsen & Jenjitt. A, upper part of flowering shoot; B, leaf; C, front view of flower (left); back view of flower (right); D, ovary and calyx; E, anther, style and stigma; F, anther showing crest; G, capsule; H, seed with aril. Drawn by P. Suksathan from *Jenjittikul* 8263.

long; lamina sessile, narrowly lanceolate, glabrous on both sides, somewhat succulent, 10–17 × 1–2 cm, base truncate to rounded, apex acute. *Inflorescence* with 10–12 flowers surrounded by two green bracts, the lower with reduced lamina, c. 5 × 0.5 cm, upper with rudimentary lamina, c. 10 × 1 mm; subsequent bracts diminishing towards apex, 1.5–3 × 0.3–0.6 cm, each subtending 2 or 3 flowers; bracteoles membranous, lanceolate, c. 3 cm long, apex irregularly dentate. *Calyx* tubular, shallowly 3-dentate, c. 2 cm long. *Corolla* tube narrow, c. 5 cm long, white to pale pink in upper part; lobes lanceolate, c. 3 × 1.2 cm, pink. *Lateral staminodes* broadly triangular, c. 1.5 × 1.2 cm, pale violet; labellum broadly triangular, crenulate, shallowly emarginate, 2–2.2 × 1.5–1.8 cm, pink to pale violet. *Anther* subsessile, 7–8 × 3–4 mm, white, opening by two slits; anther crest minute, bidentate. *Style* extending 4–6 mm beyond anther; stigma c. 3.5 mm wide, cup-shaped, finely ciliate and with 2 or 3 linear appendages. *Ovary* 3-locular with axile placentation. *Capsule* narrowly ellipsoid, glabrous, shining, pale pinkish, c. 20 × 4 mm, on 4–5 mm stipe; beak 2–3 mm crowned by persistent perianth, dehiscent by 3 recurving valves. *Seeds* whitish, ellipsoid, sparsely pubescent; aril short, lacerate.

Named in honour of B.L. Burtt who, through his comprehensive taxonomic and biogeographic studies of *Zingiberaceae*, has contributed immensely to a better understanding of the diversity of the family in SE Asia.

*Distribution.* So far known only from the type collection from the Bolovens Plateau in Champassak Province. It is also said by local market traders to have been found in Attopeu Province covering the eastern slopes of the Bolovens Plateau, but the authors have not seen any material from there.

#### DISCUSSION

The genus *Caulokaempferia* can be divided into two groups: (i) species with yellow flowers and a unilocular ovary dehiscent by one broad apical opening, and (ii) species with white to pale violet flowers and a 3-locular ovary dehiscent by three recurving valves. *Caulokaempferia burttii* belongs to the second group, first described from Thailand by Larsen & Smith (1972) for *C. alba*, later including *C. thailandica* K. Larsen. The diversity of the genus is discussed by Larsen (2003). Further interpretation of morphological differences awaits a planned molecular investigation. *Caulokaempferia burttii* has been in cultivation at the University of Aarhus since July 2002 but has not yet produced any flowers under greenhouse conditions.

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