

## A NEW SPECIES OF THE GENUS *CAMPYLANDRA* (CONVALLARIACEAE–CONVALLARIEAE) FROM THAILAND

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### SUMMARY

Based on the specimens collected from Thailand and preserved in AAU, BKF, C, and KYO, *Campylandra siamensis* (Convallariaceae, Liliaceae s.l.) is newly described in this paper. This species is similar to *C. chinensis* (Baker) M.N. Tamura, S. Yun Liang & Turland, but differs from it in having numerous sessile leaves, longer white bracts, longer perianth tube and larger pistil.

**Key words:** *Campylandra siamensis*, Convallariaceae, Liliaceae s.l., *Tupistra*, Thailand.

### INTRODUCTION

Tamura (1991) reported identifications of the Liliaceae s.l. in Doi Inthanon, Prov. Chiang Mai, Northern Region, Thailand, based on herbarium specimens at BKF and KYO; however, he did not identify the plant discussed in this paper and provisionally treated it as *Tupistra* spec. A. Later, Tamura considered that *Tupistra* species with anthers positioned higher than or as high as the stigma, a short style and a small 3-lobed stigma should be separated from *Tupistra* species with anthers lower than the stigma, a long style, and a large, peltate to fungilliform stigma, and treated the former as *Campylandra* (Conran & Tamura, 1998; Tamura et al., 2000; Liang & Tamura, 2000). The plant discussed in this paper (*Tupistra* spec. A) has anthers higher than the stigma and a small sessile 3-lobed stigma. Accordingly, in Tamura's more recent opinion, the plant is identified not as *Tupistra* but as *Campylandra*.

The plant is similar to *Campylandra chinensis* (Baker) M.N. Tamura, S. Yun Liang & Turland, which is distributed in C and S China and Taiwan, but differs from it in having numerous sessile leaves, longer white bracts, a longer perianth tube and a larger pistil. Accordingly, we consider the plant a new species and name it *Campylandra siamensis*.

We examined the specimens preserved in AAU, BKF, C, and KYO, and found the specimens of *Campylandra siamensis* collected in Provs. Mae Hong Son and Chiang Mai, Northern Region; Prov. Loei, Northeastern Region; Prov. Chaiphaphum, Eastern Region, all of Thailand, and not from the countries other than Thailand. As far as we know now, *Campylandra siamensis* is endemic to Thailand. The specimens that we identify as *C. siamensis* at C were annotated as *Tupistra yunnanensis* F.T. Wang & S. Yun Liang by B. Hansen & K. Rahn. However, *Campylandra siamensis* has long bracts and light green flowers, and *Tupistra yunnanensis* short bracts and white flowers. We think that the two species are different from each other.



Fig. 1. *Campylandra siamensis* Yamashita & M.N. Tamura. a. Habit (*T. Santisuk 1608, BKF*); b. rhizome and roots (*M.N. Tamura & J. Yamashita 6033, KYO*).

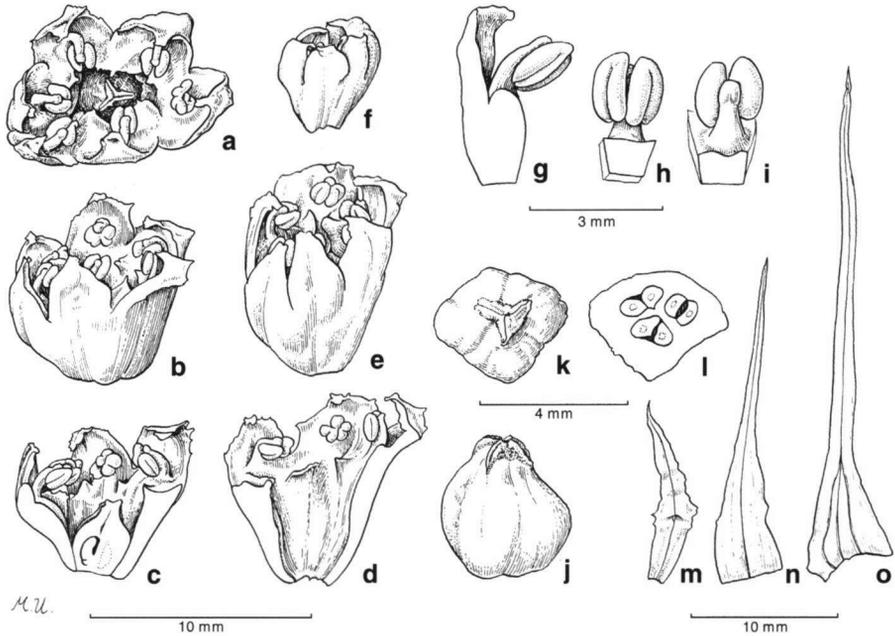


Fig. 2. *Campylandra siamensis* Yamashita & M.N. Tamura. — a–d. Flower positioned in lower portion of inflorescence: a. front view; b. side view; c. longitudinal section; d. half of perianth. — e & f. Flower in side view: e. middle portion of inflorescence; f. upper portion of inflorescence. — g–i. Stamen: g. lateral view; h. adaxial view; i. abaxial view. — j–l. Pistil: j. side view; k. front view; l. cross section. — m–o. Bract: m. upper portion of inflorescence; n. middle portion of inflorescence; o. lower portion of inflorescence [all from *Osaka City Univ. cult. (M.N. Tamura 10201)*].

***Campylandra siamensis* Yamashita & M.N. Tamura, *spec. nov.* — Fig. 1, 2**

Affine *Campylandro chinensi*, sed foliis numerioribus sessilibus, bracteis albis longioribus, tubis perianthiorum longioribus, pistillis majoribus a qua diversa. — Typus: *T. Santisuk 1608* (holo BKF), Thailand, N. Prov. Chiang Mai, Doi Inthanon, Mae Pan waterfall, 1100 m.

*Rhizome* terete, c. 1.8 cm diam., ± vertically elongate, densely noded (space 1–2 mm). *Roots* 3–4 mm diam., densely pubescent when young. *Stem* 2–6 cm long. *Leaves* 7–18, distichous, strap-shaped, 45–80 cm long, 2–4.8 cm broad, long acuminate at apex, margin entire but sometimes slightly vertically undulate, sessile, with prominent midrib. *Inflorescence* a terminal spike, 3.7–7.2 cm long, 1–2.3 cm diam., 47–120-flowered, with several sterile bracts at apex; peduncle up to 19 cm long, c. 7 mm diam. *Flowers* subglobose to campanulate, 6.5–9.2 mm long, 7.8–10 mm diam., light green; bracts linear-lanceolate to filiform, 12–65 mm long, white, broadened in lower part, minutely denticulate on upper margin. *Perianth segments* (5 or) 6 (or 7), fleshy, connate proximally; tube 3.8–6.2 mm long, thickening inward, especially sharply protruding between filaments along throat; lobes ovate to deltoid, 2.7–4.5 by 2.5–4 mm, incurved. *Stamens* (5 or) 6 (or 7); filaments proximally adnate to perianth tube, free part 1.3–2.3 mm

long, incurved, thickening downward, c. 0.8 mm diam. at base, inflated abaxially at apex; anthers ovoid, 1.2–1.5 mm long, light yellow, introrse, positioned higher than the stigma. *Ovary* subspheroidal, 2.3–3 mm long, 2.7–3.5 mm diam., 3-locular; ovules 2 per locule. *Stigma* 0.5–0.7 mm thick, c. 1.5 mm diam., sessile, 3-lobed, grooved longitudinally along apex of each lobe. *Fruit* a berry, ellipsoidal, 1.1–1.4 cm long, orange at maturity.

**Distribution** — Endemic to Thailand (N, NE, and E Regions).

**Habitat** — Evergreen or mixed deciduous forest. On granitic rocks or sandstone, often by streams. Altitude 600–1420 m.

*Additional specimens examined:*

THAILAND: N Prov. Mae Hong Son: Doi Chong, 1420 m (*B. Hansen & T. Smitinand 12643*, C); Prov. Chiang Mai: Kawng San near Omkoi (*B. Hansen & K. Rahn P.1964/202*, C; *B. Hansen 12/3 1985*, C); Mae Pan waterfall, Doi Inthanon, 1100 m (*M.N. Tamura & J. Yamashita 6033*, KYO; *M.N. Tamura 10140*, KYO); NE Prov. Loei: Phu Paek, 1200 m (*C.F. van Beusekom & C. Phengkklai 2995*, AAU, C); E Prov. Chaiyaphum: Nam Phrom, 600 m (*C.F. van Beusekom et al. 4142*, C, KYO).

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