

## A new species of *Typhonium* from Thailand

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### Abstract

*Typhonium smitinandii* D. Sookhaloem et J. Murata is described from Peninsular Thailand as a new species. This species belongs to sect. *Typhonium* and is distinct in the association of the broadly ovate leaves, peduncle with glandular hairs, filiform spadix appendix and capitate sterile flowers.

Key words: Araceae– Thailand– *Typhonium*

### Introduction

The genus *Typhonium* is distributed widely in tropical and subtropical Asia, extending throughout the South Pacific area to Australia. Several species occur in temperate regions in the eastern Himalaya, Tibet and western and northwestern China. Thailand is the center of diversity for the genus. In the recent revision of *Typhonium*, Sriboonma et al. (1994) recognized 37 species of five sections, of which 14 species of four sections are distributed in Thailand. In this study a peculiar specimen from Krabi, Thailand (Smitinand 12243) was examined in comparison to the specimens including type specimens in AAU, BK, BKF, C, P, L, K, KUN, SING, TI and information given in Sriboonma et al. (1994). It is recognized as a new species in section *Typhonium*.

***Typhonium smitinandii*** D. Sookchaloem et J. Murata, sp. nov. differt a *T. roxburghii* foliis late ovatis (non ut in *T. roxburghii* triangulatis vel trilobatis) et pedunculis pilis glandulosis (in *T. roxburghii* grabris), floribus sterilibus capitatis decumbentibus (in *T. roxburghii* subulatis recurvis). Figure 1.

Type: Thailand, Peninsular, Krabi, common along limestone foot hill, 30 m alt., 27 May 1976, T. Smitinand 12243 (BKF holotype).

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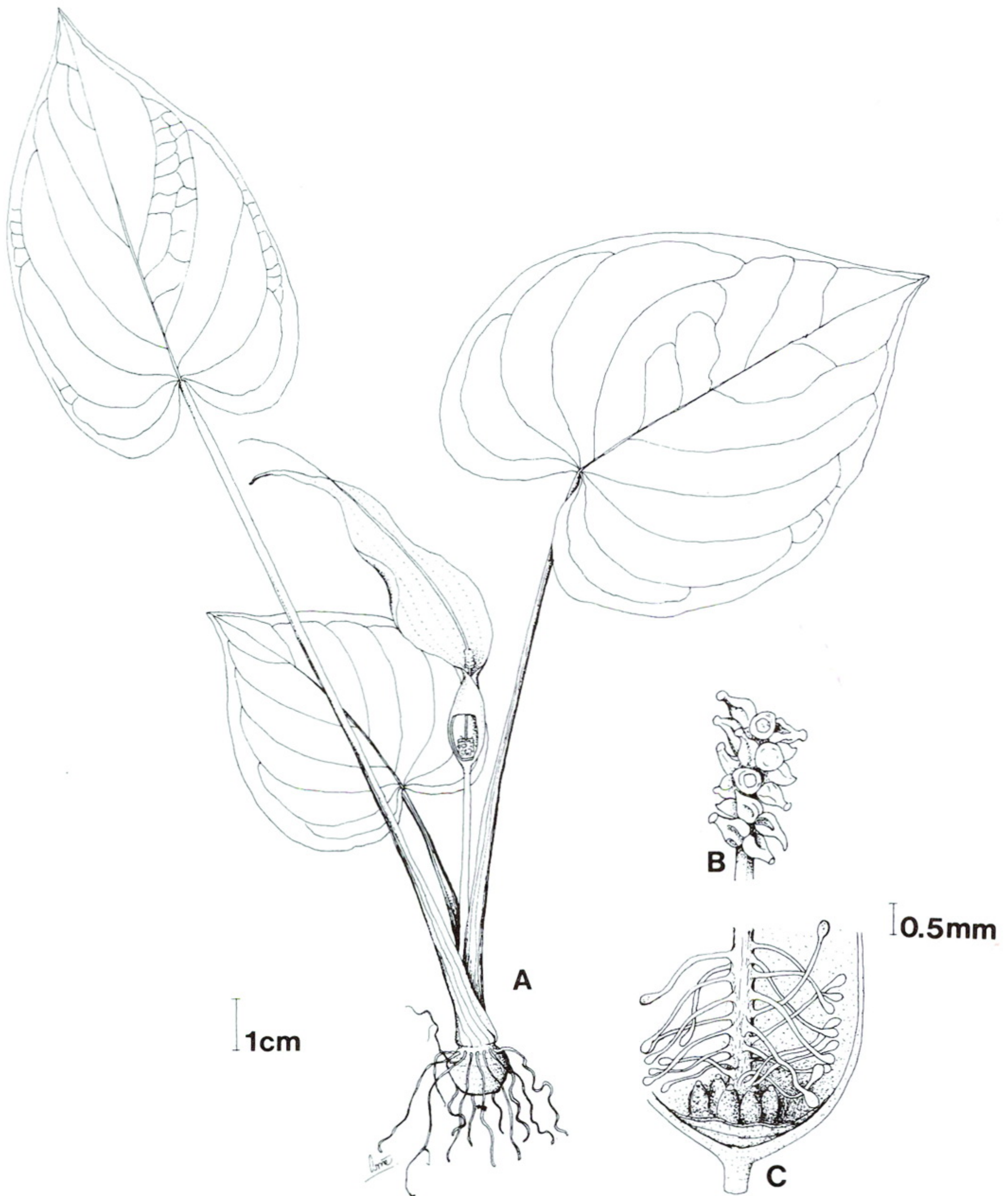


Figure 1. *Typhonium smitinandii* D. Sookchaloem et J. Murata, sp. nov. A. Habit; B. Upper part of spadix show male flowers; C. Lower part of spadix show female flowers in vertical plane, sterile flowers in horizontal plane



Tuber depressed globose, 0.5 cm long, 1 cm wide. Petiole 5–14 cm long, 1 mm wide, sheathing in the basal part. Leaf blade widely ovate, base cordate, apex acute to short acuminate, 7–9 cm long, 5–8 cm wide. Peduncle 6–17 cm long, 0.5 mm wide, glandular hairy. Spathe tube ovate, 15 cm long, 0.5 cm wide; spathe blade broadly ovate-lanceolate, spreading in middle and gradually tapering to apex, 5.5–6 cm long, 1.5–2 cm wide, brownish purple. Spadix subequal to spathe; female part 1 mm long, 1.5 mm wide; interstice 1–1.2 cm long, in the lower 2 mm covered with sterile flowers, naked above; male part cylindrical, 3 mm long, 1.5 mm wide; appendix filiform, 6.5 cm long. Female flowers: pistils 1–2 series, ovate oblong, 0.5 mm long. Male flowers: anthers obconical, 0.5 mm long, apex acuminate, laterally dehiscent into pore. Sterile flowers capitate, 2 mm long, decumbent.

*D i s t r i b u t i o n*.— THAILAND; Peninsular, Krabi, common along limestone foothill, 30 m alt. (T. Smitinand 12243, BKF holotype)

The specific epithet is given in honor of Prof. Dr. Tem Smitinand, BKF, Thailand

*N o t e*.— *Typhonium smitinandii*, lacking distinct cataphylls seen from outside, evidently belongs to sect. *Typhonium* (Sriboonma et al., 1994). It is generally similar and considered to be close to *T. roxburghii* or *T. blumei* but distinction in having broadly ovate (not triangular or trilobed) leaf blade, glandular hairy (not grabrous) peduncle, filiform (not conical) spadix appendix and capitate (not subulate or filiform) sterile flowers. It may also be close to the species with filiform spadix appendix, i.e. *T. acetosella*, *T. laoticum*, *T. filiforme*, *T. violifolium* and *T. bulbiferum*, but is distinct in the shape of spathe and sterile flowers.

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#### Literature Cited

- Murata, J. 1990. Diversity of shoot morphology in *Typhonium* (Araceae). *Amer. J. Bot.* 77: 1475–1481.
- Nicolson, D. H. and M. Sivadasan. 1981. Four frequently confused species of *Typhonium* Schott (Araceae). *Blumea* 27: 483–497.
- Sriboonma, D., M. Hasebe, N. Murakami, J. Murata and K. Iwatsuki. 1993. Phylogeny of *Typhonium* (Araceae) inferred from restriction fragment analysis of Chloroplast DNA. *J. Plant Res.* 106: 11–14.
- Sriboonma, D., J. Murata and K. Iwatsuki. 1994. A Revision of *Typhonium* (Araceae). *J. Fac. Sci. Univ. Tokyo III.* Vol. 15: 255–313.