

# ***Capparis trisonthiae* (Capparaceae), a new species from Thailand**

**Prachaya SRISANGA**

Herbarium, Queen Sirikit Botanic Garden, P.O. Box 7, Mae Rim, Chiang Mai 50180 (Thailand)  
and Biology Department, Faculty of Science,  
Chiang Mai University, Chiang Mai 50200 (Thailand)  
p\_srisanga@yahoo.com

**Kongkanda CHAYAMARIT**

The Forest Herbarium, Department of National Parks, Wildlife and Plants,  
Chatuchak, Bangkok 10900 (Thailand)  
kchayama@mozart.inet.co.th

## **ABSTRACT**

A new species of Capparaceae, *Capparis trisonthiae* Srisanga & Chayamarit, from Doi Phu Kha National Park, Nan Province, northern Thailand, is described and illustrated. It belongs to *Capparis* sect. *Monostichocalyx* Radlk. and resembles *C. klossii* Ridl., endemic to the Isthmus of Kra in southern Thailand, but can be distinguished by several characters of the leaves and flowers.

## **KEY WORDS**

Capparaceae,  
*Capparis*,  
*Capparis trisonthiae*,  
Thailand.

## **RÉSUMÉ**

*Capparis trisonthiae* (Capparaceae), nouvelle espèce de Thaïlande.

Une nouvelle espèce de Capparaceae, *Capparis trisonthiae* Srisanga & Chayamarit, du Doi Phu Kha National Park, province de Nan, nord de la Thaïlande est décrite et illustrée. Elle appartient à *Capparis* sect. *Monostichocalyx* Radlk. et ressemble à *C. klossii* Ridl., endémique de l'Isthme de Kra au sud de la Thaïlande, dont elle se distingue par plusieurs caractères des feuilles et des fleurs.

## **MOTS CLÉS**

Capparaceae,  
*Capparis*,  
*Capparis trisonthiae*,  
Thaïlande.

The genus *Capparis* L. (Capparaceae) consists of about 250 species distributed mostly in tropical and subtropical regions (JACOBS 1965; MABBERLEY 1997). In the account of *Capparis* for

the Flora of Thailand, 25 indigenous species and one doubtful species due to the lack of good material were recorded (CHAYAMARIT 1991). Recently, one additional taxon, *Capparis sikkimensis*

Kurz subsp. *yunnanensis* (Craib & W.W. Sm.) Jacobs was newly recorded for Thailand (SRISANGA *et al.* 2003). During a botanical expedition by the first author to Doi Phu Kha National Park, Nan Province, northern Thailand, yet another undescribed species was discovered, which we describe here as *Capparis trisonthiae*. It belongs to section *Monostichocalyx* Radlk., according to JACOBS (1965), characterized by well developed and persistent leaves, sepals all free in bud and both sepals of a pair equal. This section contains about 100 species distributed in Africa (except the dry northern part), Asia and all over Malesia to the Pacific region.

***Capparis trisonthiae* Srisanga & Chayamarit, sp. nov.**

*Affinis* *Capparis* *klossii* Ridl. *foliis plus minusve coriaceis ellipticis usque late ellipticis, apice mucronulato vel retuso et basi cordata, sed ejusdem differt laminis distincte reticulatis, subtus glabris, latioribus (1.8-2.5 × 1.3-2 cm) sepalis cum introrsum puberulis marginibus, quoque latioribus (4.5-5 × (1.6-)1.8-2.2 cm) petalis, pluribus (140-170) staminibus, brevissimo (2-2.5 mm) gynophoro ovarioque longistrorsum vadose sulcato.*

TYPUS. — *Srisanga* 2550, Thailand, Nan Province, Pua District, Doi Phu Kha National Park, Tham Pha Kong, along streams in dry evergreen forest, 19°10'N, 101°02'E, 700 m, 26 June 2002, fl. (holo-, QBG; iso-, BKF, P).

Large woody climber, 10-20 m high; branches terete, glabrous, reddish; young shoots and inflorescence not surrounded by cataphylls; thorns recurved, in pairs, 2-4 mm long. Leaves elliptic to broadly elliptic, (10-)12-18 cm long, (6.5-)8-11 cm wide, subcoriaceous to coriaceous; apex mucronulate or retuse; base cordate; lamina glabrous on both surfaces; midrib more or less impressed above at least in the basal part, raised and prominent below; secondary veins 6-8 pairs, reticulation distinct on both surfaces; petiole 13-20 mm long, glabrous. Inflorescence a terminal leafy panicle of which the upper part has mostly lost its leaves; peduncle 3-9 cm long, glabrous except for ferruginous puberulous at the upper part; pedicels 2.5-3 cm long, ferruginous puberulous. Sepals biseriate, free, boat-

shaped, 1.8-2.5 cm long, 1.3-2 cm wide, ferruginous puberulous outside, puberulous inside in the marginal parts; the outer pair slightly smaller, coriaceous, apex obtuse to rounded; the inner pair with a membranous and slightly repand margin, apex retuse to emarginate. Petals white with pink-purplish at base inside, free, oblanceolate-spatulate, 4.5-5 cm long, (1.6-)1.8-2.2 cm wide, crenate to slightly crisped and emarginate at apex, glabrous except for pubescent at base on both sides. Torus 5-7 mm wide, ferruginous puberulous. Stamens 140-170, white; filaments (4-)4.8-5.5 cm long, glabrous except for hairy at base; anthers 2-3 mm long, subbasifixed, introrse, dehiscing by longitudinal slits. Gynophore dark purplish, 2-2.5 mm long, glabrous. Ovary spindle-shaped, slightly curved, dark purplish, 2-3 mm long, c. 1 mm wide, glabrous, with shallow longitudinal grooves; placentas 4; stigma knob-shaped. Fruit ellipsoid, 7-10 cm long, 6-8 cm wide, smooth or slightly apiculate; pericarp 7-10 mm thick; stipe 8-11 cm long, 7-12 mm thick. Seeds 15-40, ovoid-ellipsoid, embedded in pink-purplish pulp, 17-20 mm long, 13-15 mm wide, 7-10 mm high. — Fig. 1.

ETYMOLOGY. — The species epithet honors Dr Chusie TRISONTHI, Biology Department, Faculty of Science, Chiang Mai University, who is a leading authority of the Ethnobotany and Biodiversity studies at Doi Phu Kha National Park, Nan Province, and who was an inspiration to the first author to study plant taxonomy.

PHENOLOGY. — Flowering between June and July; fruiting between December and January.

DISTRIBUTION. — Only known from the type locality. Population small, i.e. about 25 individuals mostly in juvenile state.

ECOLOGY. — Near streams in dry evergreen forest; 700 m.

PARATYPES. — Same as type locality: *Srisanga* 2389, 17 Jan. 2002, fr. (P, QBG); *Srisanga* 2611, 10 Dec. 2002, fr. (QBG).

*Capparis trisonthiae* is easily distinguished by its large (1.8-2.5 cm long, 1.3-2 cm wide) boat-

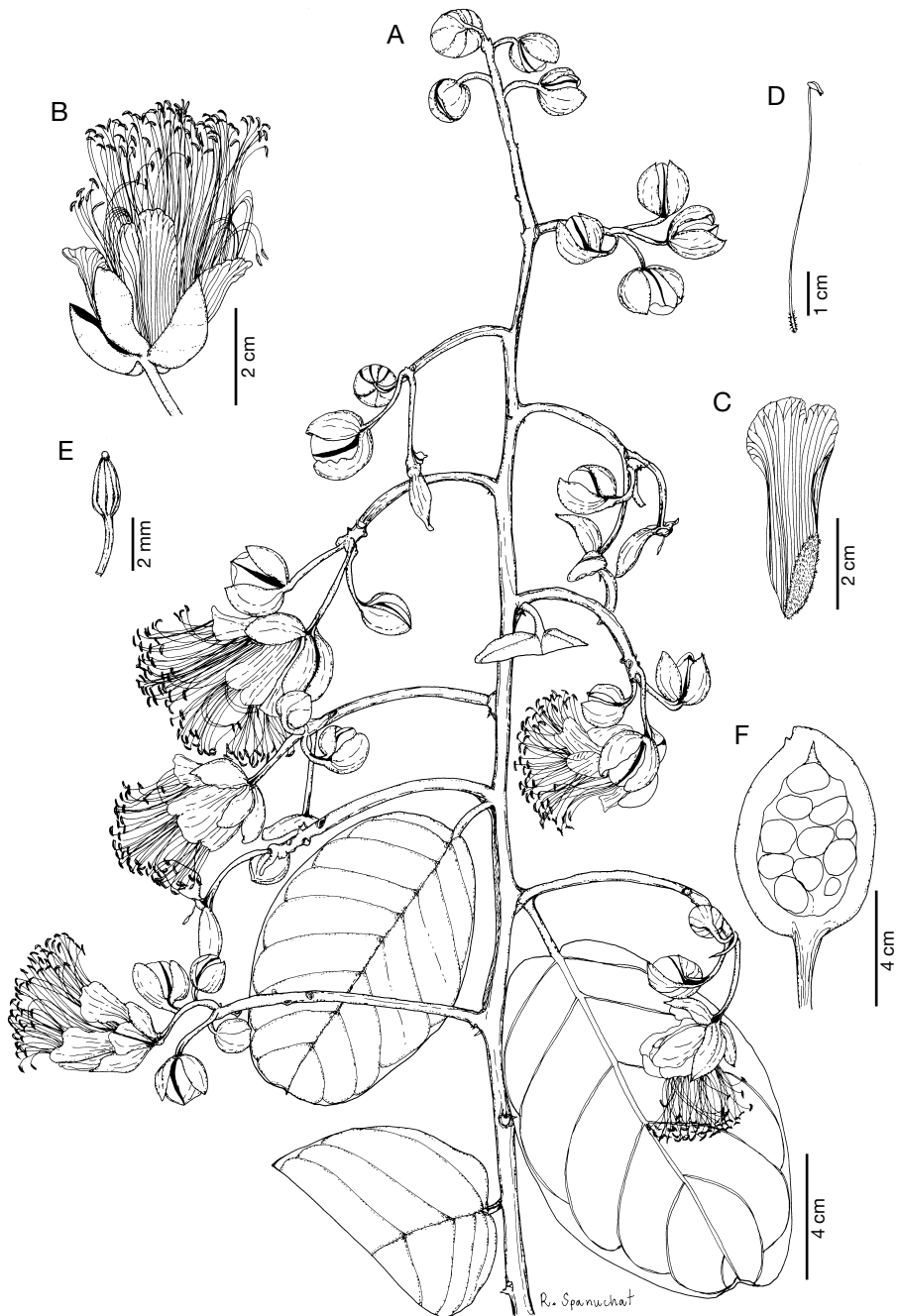


FIG. 1. — *Capparis trisonthiae*: A, flowering branch; B, flower; C, upper left petal; D, stamen; E, gynophore and ovary; F, longitudinal section of fruit showing seeds. A-E, *Srisanga* 2550 (QBG); F, *Srisanga* 2389 (QBG).

shaped sepals with ferruginous puberulous outside and puberulous in the marginal parts inside and its oblanceolate-spatulate petals (4.5-5 cm long, (1.6-)1.8-2.2 cm wide), long filaments ((4-)4.8-5.5 cm), very short gynophore (2-2.5 mm) and ovary with shallow longitudinal grooves.

Our new species resembles *C. klossii* Ridl., endemic to the Isthmus of Kra in southern Thailand, in leaf shape and texture (subcoriaceous to coriaceous, elliptic to broadly elliptic, with mucronulate or retuse apex and cordate base), the presence of 6-8 pairs of secondary veins, and its large ellipsoid fruit (7-10 cm long, 6-8 cm wide). The new species differs from *C. klossii* in its glabrous (vs more or less densely fulvous puberulous) leaves beneath, distinct (vs obscure) reticulation, and several floral characters, such as larger (vs 11-13 mm long, 6-7 mm wide) sepals, puberulous (vs glabrous) sepals in the marginal parts inside, much larger (vs 1.5-2 cm long, 0.75-1 cm wide) petals, more numerous (140-170 vs *c.* 55) stamens, very short (vs 4.25-5.5 cm long) gynophore, and the presence of shallow longitudinal grooves on the ovary.

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