

Capparis daknongensis (Capparaceae), a new species from Vietnam

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Capparis daknongensis D.T. Sy, G.C. Tucker, Cornejo & Joongku Lee, a new species of Capparaceae from Dak Nong province, Vietnam, is described and illustrated. It is morphologically similar to *C. khuamak*, but differs in having pruinose twigs, fewer stamens, longer filaments and gynophore, and a different fruit morphology.

The genus *Capparis* comprises approximately 400 species (Zhang & Tucker 2008) distributed mostly in tropical and subtropical regions worldwide, but some thrive in temperate regions as well. In Vietnam, about 40 species have been recorded so far (Gagnepain 1908, Ho 1999, Ban 2003). During a revisionary work on the 'Capparaceae in Vietnam' we came across an interesting species of *Capparis* from Dak Nong province. It closely resembled *C. khuamak* but differed by its pruinose twigs, number of stamens, length of filaments and gynophore and the shape and size of fruit. After a thorough scrutiny of the specimens kept in HN, HNU, HNPM, P, and VNM, relevant type specimens and literature (Gagnepain 1908, 1943, Jacobs 1960, 1965, Chayamarit 1991, Liu

et al. 1994, Ho 1999, Ban 2003, Hu 2007, Zhang & Tucker 2008), we determined this taxon a new species.

***Capparis daknongensis* D.T. Sy, G.C. Tucker, Cornejo & Joongku Lee, *sp. nova* (Figs. 1–2)**

TYPE: Vietnam. Dak Nong Province, Gia Nghia district, Dak Nia commune, 11°56'12''N, 107°45'01''E, alt. 500 m, 5 April 2010 T.T. Bach, V.T. Chinh, D.V. Hai, B.H. Quang, S.D. Thuong, VK-3675 (holotype HN; isotype KRIB!). — PARATYPE: Vietnam. Dak Lak province, Lak district, Nam Ka Commune, 12°16'25.3''N, 108°07'19.1''E, alt. 550 m, 28 March 2012 T.T. Bach, V.T. Chinh, D.V. Hai, B.H. Quang, S.D. Thuong PTV-1053 (HN!).



Fig. 1. *Capparis daknongensis*. — **A:** Habit. — **B:** Flower. — **C and D:** Adaxial and abaxial view of the sepals. — **E:** Petals. — **F:** Pistil showing gynophore and ovary. — **G:** Fruit

ETYMOLOGY: The species is named after the type locality, Dak Nong province in Vietnam.

Scandent shrubs up to 4 m long. Twigs smooth, pruinose, usually with stipular spines but sometimes spines absent. Spines up to 3 mm long, recurved downwards, apex sharp. Petiole 1.5–1.7 cm long, pruinose; leaf blade elliptic to oblong, 6–8 × 3–4 cm, smooth, young ones yellowish green, dark green when older; midvein abaxially raised, adaxially thinly grooved; secondary veins 6–7 on each side of midvein, thin; reticulate veins not obvious; base round to acute; apex caudate-acuminate, 0.6–1 cm long. Inflorescences axillary or terminal panicles of corymbs, 5–12 flowered; peduncle 1.5–5 cm long; pedicel 1.5–2 cm long. Flower buds globose. Sepals 4, 6–7 × 2–3 mm, at first yellowish green then reddish; sepals of outer pair navicular, pluricellular hairs outside, margin and inside glabrous; sepals of inner pair spatulate, pluricellular hairs outside, base of inside and margin ciliate. Petals 4, white, oblong, margins with irregular lobes, outside glabrous, inside and margin tomentose; adaxial pair of petals irregular, ca. 13

× 3–4 mm; abaxial pair of petals regular, ca. 16 × 4–5 mm. Stamens 13–18; filaments 3.7–4.5 cm long, glabrous, white then turning reddish; anthers oblong, 1–2 mm long, black or reddish. Gynophore 3.5–4 cm long, red, glabrous. Ovary ellipsoid, ca. 2 × 1 mm, yellowish green, glabrous. Fruits oval, 1.6–1.8 × 1.3–1.5 cm, yellowish when mature, surface smooth. Flowering and fruiting in March–July.

Morphological comparison of *C. daknongensis* with *C. khuamak* is presented in Table 1. *Capparis daknongensis* was found growing on small hillocks in the open secondary sub-tropical forest areas of Dak Nia Commune in association with *Saccharum spontaneum*, *Eurycoma longifolia*, *Melastoma* sp. and ferns at 500–550 m a.s.l. During our investigations in this area, we observed only 25–30 individuals, which were growing on small hillocks in open secondary forests, hence, prone to be affected by the anthropogenic activities. Survey of the adjacent forests and long-term monitoring of the type locality is required to obtain more information of this species.

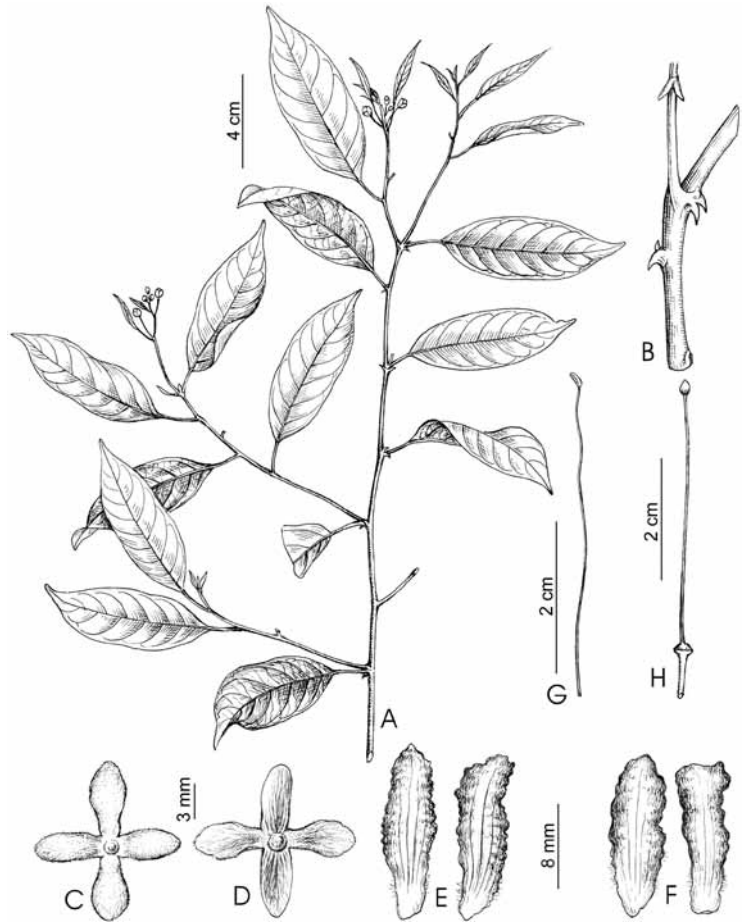


Fig. 2. *Capparis daknongensis* (A and B drawn from the holotype, C–H drawn from the paratype PTV 1053): — A: Flowering twig. — B: Branch showing spines. — C and D: Sepals (abaxial and adaxial view). — E: Abaxial pair of petals. — F: Adaxial pair of petals. — G: Stamen. — H: Pistil showing gynophore and ovary.

Table 1. Morphological comparison of *Capparis daknongensis* with *C. khuamak*.

Characters	<i>Capparis daknongensis</i>	<i>Capparis khuamak</i>
Twigs	smooth, pruinose	densely yellowish gray then tan-colored tomentose, gradually glabrescent
Leaves	apex caudate-acuminate	apex of leaf obtuse to acute and often shortly mucronate
Sepals	sepals of outer pair navicular, margin lobed; sepals of inner pair spatulate, pluricellular hairs outside, base of inside and margin ciliate	sepals of outer pair inwardly concave to navicular, margin entire; sepals of inner pair obovate, nearly flat, outside shortly tomentose at middle, inside glabrous
Petals	oblong, regular or irregular, 13–16 × 3–5 mm, outside glabrous, inside and margin tomentose; margin subentire to lobed	obovate-oblong, roughly equal, 9–12 × 3–4 mm, inside shortly tomentose from the base to middle; margin entire
Number of stamens	13–18	20–28
Length of filaments	3.7–4.5 cm	2–2.5 cm
Length of gynophore	3.5–4 cm	2.5–3 cm
Fruit	oval, surface smooth	globose, surface scabrous

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