



Capparis sikkimensis Kurz subsp. *masaikai* (H. Lév.) Jacobs (Capparaceae): a new distributional record for Vietnam

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Capparis sikkimensis Kurz subsp. *masaikai* (H. Lév.) Jacobs: 베트남 미기록종

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ABSTRACT: *Capparis sikkimensis* Kurz subsp. *masaikai* (H. Lév.) Jacobs, is being reported as addition to the flora of Vietnam. Line drawing of the taxon has been provided in support of taxonomic treatment and to facilitate easy identification of the species.

Keywords: *Capparis sikkimensis* Kurz subsp. *masaikai*, new record, Capparaceae, Vietnam.

적 요: 베트남에서 발견된 *Capparis sikkimensis* Kurz subsp. *Masaikai* (H. Lév.) Jacobs 를 베트남 미기록 분 류군으로 보고하고 분류학적 처리 및 식별을 위한 도해를 첨부하였다.

주요어: *Capparis sikkimensis* Kurz subsp. *masaikai*, 미기록, 풍접초과, 베트남

Capparis L. is the largest genus in the family Capparaceae with approximately 250 species (Mabberley, 2008) distributed mostly in tropical and subtropical regions worldwide and some in temperate regions (Zhang & Tucker, 2008). In Vietnam, the genus is represented by 37 species (Pham, 1993). During the course of revisionary work on the Capparaceae in Vietnam,

we came across an interesting specimen of *Capparis* housed in the herbarium of Institute of Ecology and Biological Resource, Hanoi (HN). After thorough morphological study with help of the relevant literature (Zhang & Tucker, 2003; Jacobs, 1965; Pham, 1999), identified as *Capparis sikkimensis* Kurz subsp. *masaikai* (H. Lév.) Jacobs, a new distributional record for Vietnam. This taxon was so far known only from China (Zhang & Tucker, 2008) and had never been recorded in Vietnam. A detailed description along with illustration (Fig. 1) has been provided to aid species identification.

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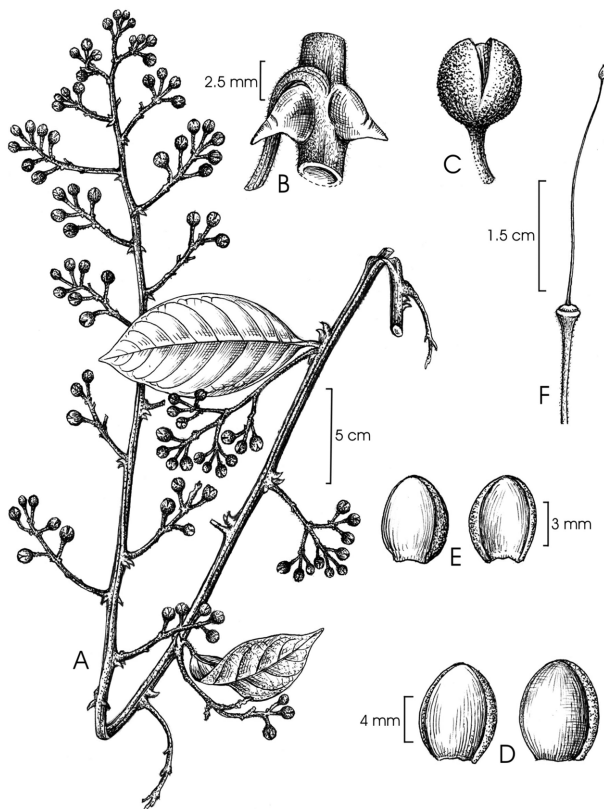


Fig 1. *Capparis sikkimensis* Kurz subsp. *masaikai* (H. Lév.) Jacobs. A: Flowering branch; B: Spine; C: A flower bud; D: Pair of outer sepals; E: Pair of inner sepals; F: Ovary and gynophore (Illustration drawn by Mrs. Kim Chi from *L. K. Biën 14562*).

Taxonomic Treatment

Capparis sikkimensis Kurz subsp. *masaikai* (H. Lév.) Jacobs, *Blumea*, 12(3): 496, 1965. *C. masakai* H. Lév. Fl. Kouy-Tchéou 59, 1914 [1914-1915]; Wu Zhengyi, Fl. Reipubl. Pop. Sin. 32: 517, 1999; Zhang M. & Gordon C. Tucker, Fl. China, 7: 445, 2008. (Fig. 1)

Type: Described from China, Kweichow (no further locations). *Esquirol 3230* (Holotype: E-Photo!; Isotype: A, K, L).

Shrubs or climbers up to 5 m. Innovations with vertical grooves, scarlet-tinged, with indumentums of dark brown red, simple, short hairs. Thorns mostly wanting, or up to 6 mm, recurved, base inflated, apex sharp. Petiole 1.5–2 cm, leaf blade elliptic or obovate, 7–14 × 4.5–6.5 cm, surfaces dull, abaxially densely reddish-brown tomentose, brown when dry, adaxially almost glabrous, dark brown when dry; secondary veins 6–8 pairs, both surface slightly raised, reticulation rather obscure; base acute to cuneate; apex acute to obtuse, sometimes acuminate. Peduncles up to 10 cm, densely reddish-brown tomentose, angular, bearing

3–8 (–20) pedicels conferred towards the top; subumbels axillary, the apical ones often forming a panicle, densely reddish-brown tomentose; pedicel 2–5 cm, hairy. Sepals densely reddish-brown tomentose outside, inside glabrous; the pair of outer sepals inwardly concave to hemispheric, ca. 9–11 × 5–6 mm; the pair of inner sepals slightly inwardly concave, ca. 6–8 × 3–4 mm. Petals white or pink, 1.2–1.5 cm, both surfaces tomentose; apical petal pair obovate, base wrapping disk; basal petal pair oblong. Stamens 55–65; filaments ca. 1.5 cm, red, not hairy at base; anthers 2–3 mm. Gynophore 2.5–3.5 cm, glabrous; ovary ovoid, glabrous, 2–3 × 1–1.5 mm, apically with several vertical ridges and grooves; placentae (3–) 4, bearing 7–9 ovules. Fruit on a stipe, reddish purple-brown when mature and dry, globose or nearly ellipsoid, 4–6 × 4–5 cm, with 4–8 vertical ridges, crest 3–6 mm tall, apex with a ca. 1.5 mm long beak; fruiting pedicel and gynophore together 4.5–7 cm. Seeds more than 10 per fruit, reddish-brown, ca. 1.8 × 1.5 × 1 cm. Fl. & Fr. May–Dec.

Distribution: China (Guangdong, Guangxi, S. Guizhou, SE Yunnan), Vietnam (Ha Giang Province).

Specimens examined: VIETNAM, Ha Giang Province: Bac Quang, 12th April, 1985, *L. K. Biën 14562* (HN).

Notes: H. Lévillé (1914), while describing this taxon, cited the specific epithet twice as “masakai” in his hand written manuscript, which is hard to read and cannot be legible since the type specimen labels at A, E, K and L show “masaikai” (IPNI). Later, Jacobs (1965) during his revisionary work on *Capparis*, corrected the error and accepted the valid epithet as “masaikai”. He also narrowed down the status of *C. masakai* to subspecies level treating it as *C. sikkimensis* ssp. *masaikai*. Hence, we have also followed the same in the present manuscript. *C. sikkimensis* ssp. *masaikai* is morphologically very similar to *C. sikkimensis* ssp. *sikkimensis* but can be easily differentiated from later by presence of the dark brown-red indumentums, hairy surface of leaves with darker nerves and the ribbed fruits (Table 1). Though we could not collect the fruits either in the vouchers or during our field visits, but presence of other below mentioned morphological characters (Table 1) are striking and clearly indicate our plant to be *C. sikkimensis* ssp. *masaikai*. The plant grows in thick forests, valleys, slopes or limestone-mountains at elevations below 1600 m. During our extensive surveys in the last seven years in different parts of Vietnam, we could not locate this species anywhere in central or Southern parts of the country. Hence, we imagine this species to be rare and scarcely distributed in and around boundaries of the N. Vietnam and China only.

Table 1. Morphological comparison of *Capparis sikkimensis* ssp. *masaikai* with its supposedly closest allied taxon.

Morphological characters	<i>C. sikkimensis</i> ssp. <i>masaikai</i>	<i>C. sikkimensis</i> ssp. <i>sikkimensis</i>
Indumentums	Dark brown red	Pale brown
Young branches	Scarlet tinged	Dull purplish
Leaf	Up to 14 cm long, widest at the middle, underneath hairy and the nerves darker	Comparatively small to medium-sized (to 12 cm long), often ovate, glabrous.
Pedicel	3-4 cm long	1.5-5 cm long
Sepals	9-11 mm long	7-9 mm long
Stamens	55-65	28-36
Fruit	Red-purplish brown when dry. Globose to nearly ellipsoid with 4-8 vertical ridges	Tan when dry. Globose, smooth
Seed	More than 10 per fruit	4-8 per fruit

Thorough field surveys are required to know the current population structure of this plant in Vietnam.

Key to the known allied taxa of *Capparis sikkimensis*

1. Flowers with up to 6 at the top of normal twigs. Outer pair of sepals glabrous *C. moonii*
1. Flowers largely subumbellate. Outer pair of sepals puberulous outside
 2. Stamens 28-36 *C. sikkimensis* ssp. *sikkimensis*
 2. Stamens more than 50
 3. Fruits ribbed, indumentum dark brown red *C. sikkimensis* ssp. *masaikai*
 3. Fruits smooth, indumentum not as above
 4. New branches with trichomes *C. sikkimensis* ssp. *yunnanensis*
 4. New branches glabrous *C. sikkimensis* ssp. *formosana*

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