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Secamone marsupiata Klack. (Asclepiadaceae, Secamonoideae), a new species from Madagascar

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ABSTRACT

KLACKENBERG, J. (1997). Secamone marsupiata Klack. (Asclepiadaceae, Secamonoideae), a new species from Madagascar. *Candollea* 52: 301-304. In English, English and French abstracts.

Secamone marsupiata Klack., a new species of Asclepiadaceae, Secamonoideae, from Madagascar, is described, illustrated and compared with related taxa.

RÉSUMÉ

KLACKENBERG, J. (1997). Secamone marsupiata Klack. (Asclepiadaceae, Secamonoideae), une nouvelle espèce décrite de Madagascar. *Candollea* 52: 301-304. En anglais, résumés anglais et français.

Secamone marsupiata Klack., une nouvelle espèce provenant de Madagascar, est décrite et illustrée. Ses affinités sont discutées.

KEY-WORDS: ASCLEPIADACEAE – *Secamone* – Madagascar – Taxonomy.

Secamone R. Br. is a palaeotropical genus of suffrutescent twiners or small scrambling herbs, rarely erect shrubs, with usually small white to yellow flowers. In a revision of the *Secamone* species from the Madagascar Region (KLACKENBERG, 1992), 56 species were recognized from Madagascar. In the course of preparing the *Secamonoideae* for the Flore de Madagascar et des Comores, I have come across a recently collected specimen of *Secamone* from Ambohitra (Montagne d'Ambre). Ambohitra is a geographically isolated mountain in the far north of Madagascar, which is considered to be phytogeographically related to the Central Domain in the East Malagasy Phytogeographical Region of HUMBERT (1955). Of the 56 recognized Malagasy species of *Secamone*, two, *S. pinnata* Choux and *S. varia* Klack., have been collected at this same locality (KLACKENBERG, 1992: 10). After studying the present new specimen it has become evident that it represents not only a third species from Ambohitra Mt but furthermore does not correspond to any known species of *Secamone,* and must be recognized as a new species, *Secamone marsupiata.*

Secamone marsupiata belongs to a group of Malagasy *Secamone* that are characterized by having pouch-like structures along and at the bases of the anther wings. In this group, several taxa are also characterized by having raised nerves on the upper leaf surface when dry. Furthermore, two taxa, *S. humbertii* Choux and *S. supranervis* Klack., share with *S. marsupiata* a similar shape of the corona lobes, i.e. more or less rectangular lobes not overtopping the thecae. *S. humbertii* differs from the new species, however, by its corolla with long tube and short rounded lobes and by having an annular corona at the corolla mouth. *S. marsupiata* shows closest affinity

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to *S. supranervis,* a taxon known from the coastal zone of eastern Madagascar. In addition to the venation, pouch and corona characters, it shares with *S. marsupiata* also triangular valvate corolla lobes with thick margins. It is distinguished from this taxon, however, by the ferruginous indumentum of the stems, as well as by its distinctly dilated style head at the apex. Furthermore it differs by its ovate leaf lamina with truncate base on a short petiole and also by the short inflorescences. In the shape of the pouches and the corona lobes, *S. marsupiata* is also similar to *S. urceolata* Klack., but this species differs by lacking the raised venation on the leaves as well as the ferruginous indumentum at the stems. *S. urceolata* has also more elongated inflorescences.

Secamone marsupiata Klack., **spec. nova** (Fig. 1).

Typus: MADAGASCAR, Antsiranana (Diego Suarez), Montagne d'Ambre, along path near Grand Cascade, 900 m alt, 1994, *Leeuwenberg, Andrianantoanina & Rapanarivo 14293* (WAG, holo; P, iso).

Species haec S. humbertii et S. supranervi affinis folii nervatura et gynostegii structura umbinibus parvis elongatisque supra basim antherarum instructis autem differt ab illa lobis corollae valvatis et triangularibus, et a hac caulibus ferrugine pubescentibus necnon inflorescentiis brevibus.

Suffrutescent twiner up to 10 m high with younger branches covered with ± erect reddish hairs. Leaves opposite, somewhat coriaceous, flat or revolute at the very margin; blade 1.0-2.0 × 0.8-1.3 cm, ovate, ± truncate at the base, acute at the apex, hairy along the mid-ribs and margins, glabrescent; venation pinnate, looped near the margin, ± reticulate and very distinct on the upper side when dry; midrib and secondary nerves on both sides distinctly raised when dry; epidermis smooth on both sides; petiole 1.0-1.5 mm long, hairy. Inflorescences extraaxillary along the branches, much shorter than the adjacent leaves; cymes dense with much shortened axes but with only one to two flowers, somewhat hairy; pedicels ca 1.3-1.7 mm long; bracts several at base of pedicels, ca 1 mm long. Flowers pentamerous, actinomorphic. Calyx lobes only shortly connate, ca 0.6 × 0.5 mm, broadly triangular, acute to rounded at the very apex, sparsely hairy near tip outside, hairy inside, finely ciliate along the margin, with rather broad colleters at the sinuses. Corolla broadly ellipsoid in bud and rounded at the apex, not contorted, with the lobes valvate, fused for ca 2/3 of its length into a tube, hairy in a filled triangle below each lobe in the middle of the tube inside with the hairs becoming longer and retrorse towards the base, white turning pale yellow; tube ca 1.4 mm long, slightly pitcher-shaped; lobes erect to slightly bent outwards, ca 0.9 × 0.9 mm, broadly triangular, subacute at the apex, rather thick. Stamens in a column inserted at the base of the corolla tube; staminal column ca 0.9 mm high; filaments with horny margins (anther wings). Coronal lobes ca 0.3 mm long, dorsiventrally compressed with flat back, erect, ± equalling the staminal column; basal part ± as broad as the lobe, with two distinct pouch-like structures at the bases of the anther wings, attached along ca 1/2 of the stamen. Pollinia minute, 4 standing close together on a soft corpusculum, ± ascending, ellipsoidal, ca 0.1 mm long. Ovary of two separate carpels, subinferior, with numerous ovules. Style absent. Style head projecting above the staminal column; upper narrower part about as long as the lower broader part, ca 0.5 mm long, broadened at the apex and slightly bilobed.

Follicles 2.0-3.0 × 0.3-0.4 mm, narrowly ovoid, thin-walled, glabrous or with sparse reddish hairs, recurved ± 90°. Seeds not seen.

Distribution and habitat: Secamone marsupiata is known only from the Ambohitra Mt (Montagne d'Ambre) in the far north of Madagascar. It has been collected in flower in January.

Secamone marsupiata is characterized by its ferruginously pubescent stems, and by its small valvate corollas that have slightly pitcher-shaped tube and triangular lobes with thick margins. It has short more or less rectangular corona lobes and dilated as well as protruding style head. The leaves are rather stiff with raised venation at both sides when dry.

The species epithet "marsupiata" alludes to the pouch-like structures along the anther wings.

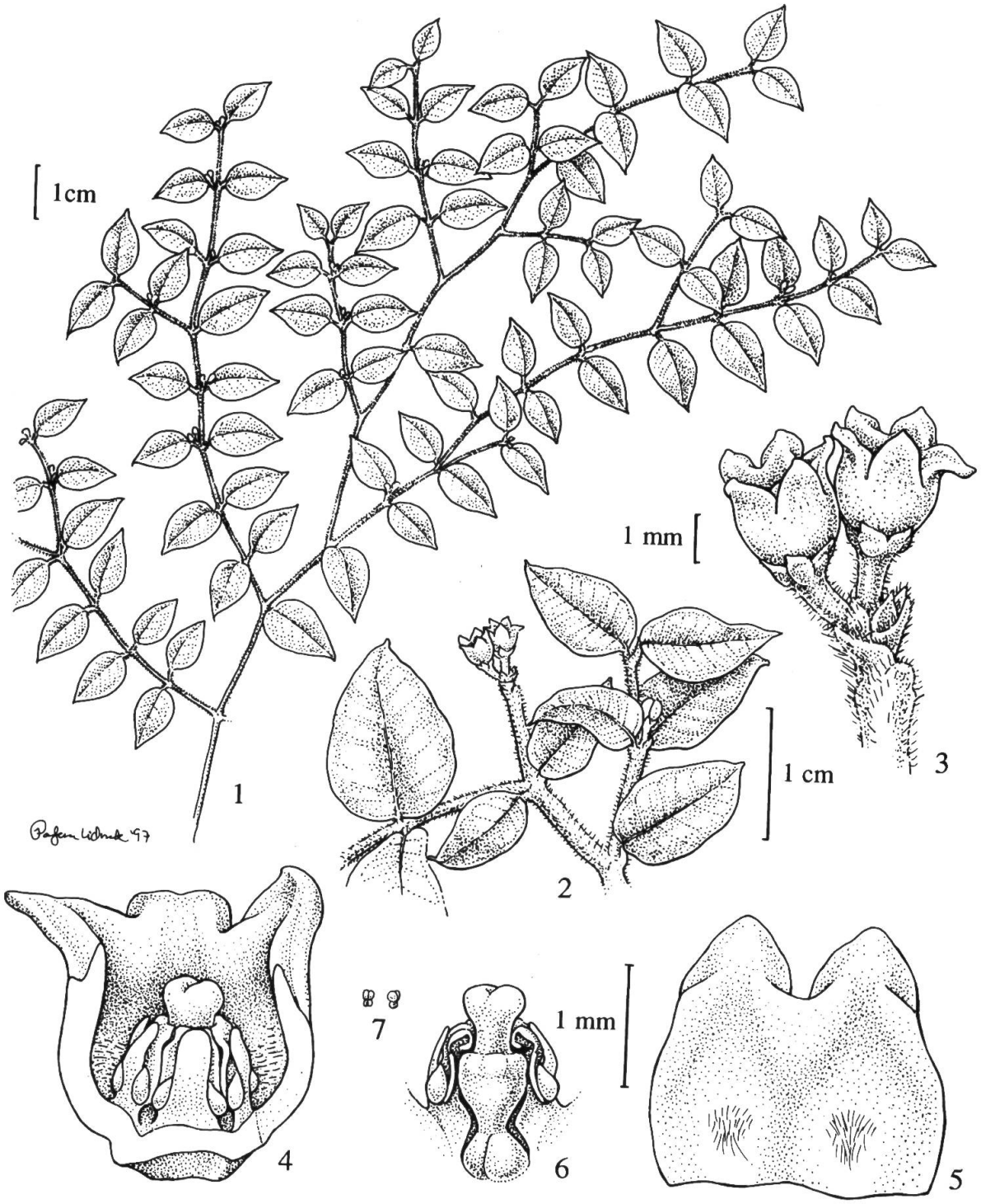

Fig. 1. – *Secamone marsupiata* Klack.
1, Habit. **2**, Flowering branch. **3**, Inflorescences. **4**, Flower with calyx and two corolla lobes removed. **5**, Portion of corolla from within. **6,** Gymnostegium with two anthers removed. **7,** Pollinaria. **1-6,** *Leeuwenberg & al. 14293* (**2-6** from spirit material) . Drawn by P. Lidmark, Stockholm.

Paratypes: **MADAGASCAR, Antsiranana** (Diego Suarez), Montagne d'Ambre, several kilometers N of Les Roussettes, alt 785 m, 1993, *van Nek 1864* (WAG); ibid., road to Grand Cascade, alt 850 m, 1993, *van Nek & Andrianantoanina 1777* (WAG).

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