

A new combination in *Genianthus* (Apocynaceae – Secamonoideae)

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ABSTRACT

The new combination *Genianthus micranthus* (Roxb.) I.M.Turner is proposed to replace ‘*Genianthus laurifolius* (Roxb.) Hook.f.’, the supposed basionym of which (*Asclepias laurifolia* Roxb.) is an illegitimate later homonym. A lectotype is designated for *Asclepias laurifolia* Roxb. to replace an earlier erroneous selection.

KEYWORDS: lectotype, names, Roxburgh, *Secamone*.

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INTRODUCTION

Klackenberg (1995) revised the genus *Genianthus* Hook.f. to include 16 species of shrubby twiner found in India, mainland South-East Asia (including Thailand) and Malesia as far east as the Philippines and Sulawesi. Later, however, Klackenberg (2004) went on to express doubt over the distinctness of the four genera of the subfamily Secamonoideae (viz. *Genianthus*, *Goniostemma* Wight, *Secamone* R.Br. and *Toxocarpus* Wight & Arn.) found in Asia, and proposed that they should all be reduced to *Secamone*. The most recent major revision of the classification of the Apocynaceae (Endress *et al.*, 2014) has not followed this suggested amalgamation of genera, and maintains recognition of *Genianthus*. I will, therefore, follow suit here.

In studying the plant taxa described by William Roxburgh (1751–1815), it became clear that there was a nomenclatural problem with a name in *Genianthus*. *Genianthus laurifolius* Hook.f. has been used as the accepted name for a species found in India, Vietnam and Thailand, which Klackenberg (1995) effectively designated as the lectotype of the generic name *Genianthus*. Unfortunately, the supposed basionym, *Asclepias laurifolia* Roxb. is a later homonym of a name used for a North American species by Michaux, and it is therefore illegitimate. However, following Wight (1834) and Klackenberg (1995), there is a synonym available that can provide

a combination in *Genianthus*. This is another Roxburgh name, *Asclepias micrantha* Roxb. There would seem to be no pressing case for a conservation proposal to maintain the availability of the name *Genianthus laurifolius*. Firstly, the species is not particularly well known and apparently has no noteworthy economic, cultural or ecological significance. Secondly, given the lack of consensus on generic delimitation in Asian Secamonoideae, instability in nomenclature in the short term may be unavoidable anyway. Therefore, I make the combination in *Genianthus* for *Asclepias micrantha*.

Klackenberg (1995) typified both Roxburgh names. For *Asclepias laurifolia*, he selected a specimen under the catalogue number 8241 in the East India Company (Wallich) Herbarium (K-W) annotated with ‘*Asclepias laurifolia* R.’ in what Klackenberg believed was Roxburgh’s hand. The relevant label is reproduced in Figure 1. It is not written by Roxburgh, but by Nathaniel Wallich. The date at the bottom of the label, September 1817, is an immediate indication that it is not a Roxburgh specimen as he died in 1815. The specimen originates from material grown in the Calcutta Botanic Garden, but there is nothing to link it, or accompanying sheets, directly to Roxburgh. I therefore reject Klackenberg’s choice as lectotype. It would stand as a neotypification, but there is unquestionable original material available for the name. There does not appear to be any Roxburgh

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herbarium material extant for this name (Klackenberg, 1995; Forman, 1997), but there is Roxburgh's drawing number 1814. I, therefore, here designate the copy of this drawing in the Kew collection (Fig. 2) as lectotype. For *Asclepias micrantha*, Klackenberg (1995) selected a specimen currently in the herbarium of the Natural History Museum London (BM) as lectotype. It has an original label with the name in Roxburgh's handwriting.

It should be noted that if *Genianthus* is reduced to *Secamone*, the correct name for the species would be *Secamone laurifolia* (Hook.f.) K.Schum. because the epithet 'micrantha' is pre-empted in *Secamone* by *Secamone micrantha* (Decne.) Decne., a different species. In the protologue of *Toxocarpus laurifolius* Wight (1834), he cited *Asclepias micrantha* in synonymy, making *Toxocarpus laurifolius* illegitimate (ICN (McNeill et al., 2012) Art. 52) but based on the type of *Asclepias laurifolia* (Art. 7.5) as indicated by the use of the same epithet. Hooker (1883) did not cite *Asclepias micrantha* so *Genianthus laurifolius* Hook.f. is a legitimate replacement name for

Asclepias laurifolia Roxb. Schumann (1895) did not cite Hooker's name, but, as *Secamone laurifolia* would otherwise be validated by the diagnosis provided by Schumann's key, the name should be treated as a new combination (Art. 41.4) based on *Genianthus laurifolius* Hook.f.

Genianthus micranthus (Roxb.) I.M.Turner, **comb. nov.**— *Asclepias micrantha* Roxb., Fl. Ind. 2: 50. 1832.— Type: *W. Roxburgh s.n.*, 1813 (lectotype **BM** [BM001014099], designated by Klackenberg (1995: 424)).

— *Asclepias laurifolia* Roxb., Fl. Ind. 2: 49. 1832, *nom. illeg.*, non *A. laurifolia* Michx. (1803).— *Toxocarpus laurifolius* Wight, Contr. Bot. India: 61. 1834, *nom. illeg.* (superfl).— *Genianthus laurifolius* Hook.f., Fl. Brit. India 4: 16. 1883.— *Secamone laurifolia* (Hook.f.) K.Schum., Nat. Pflanzenfam. 4(2): 263. 1895.— Type: [unpublished illustration] Icones Roxburghianae 1814 (lectotype **K**, designated here). Fig. 2.

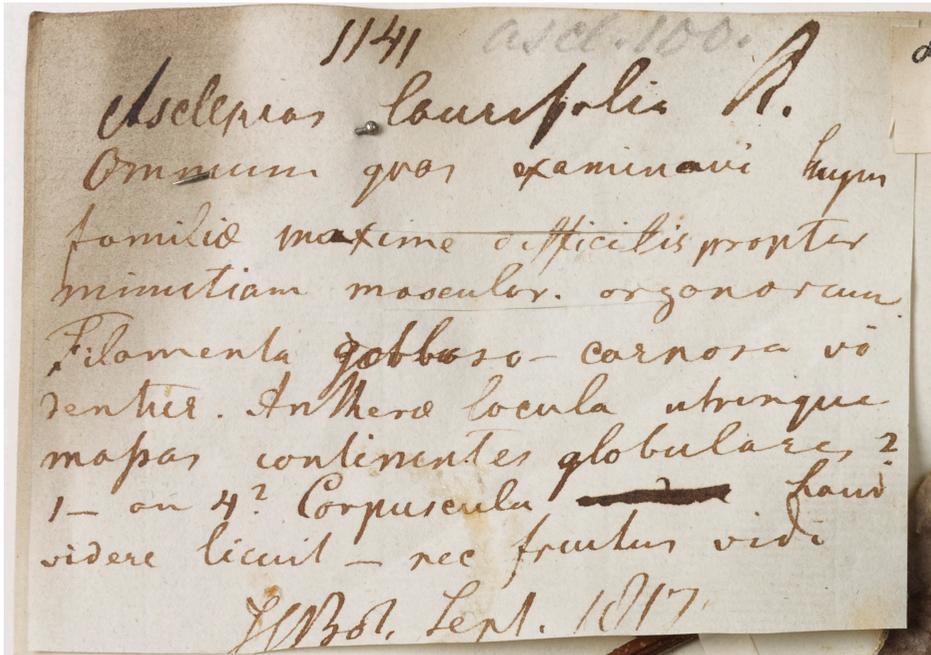


Figure 1 Label from one sheet (K001125013) of *Genianthus micranthus* in the East India Company Herbarium (K-W) under catalogue number 8241 that was selected as lectotype of *Asclepias laurifolia* Roxb. by Klackenberg (1995).

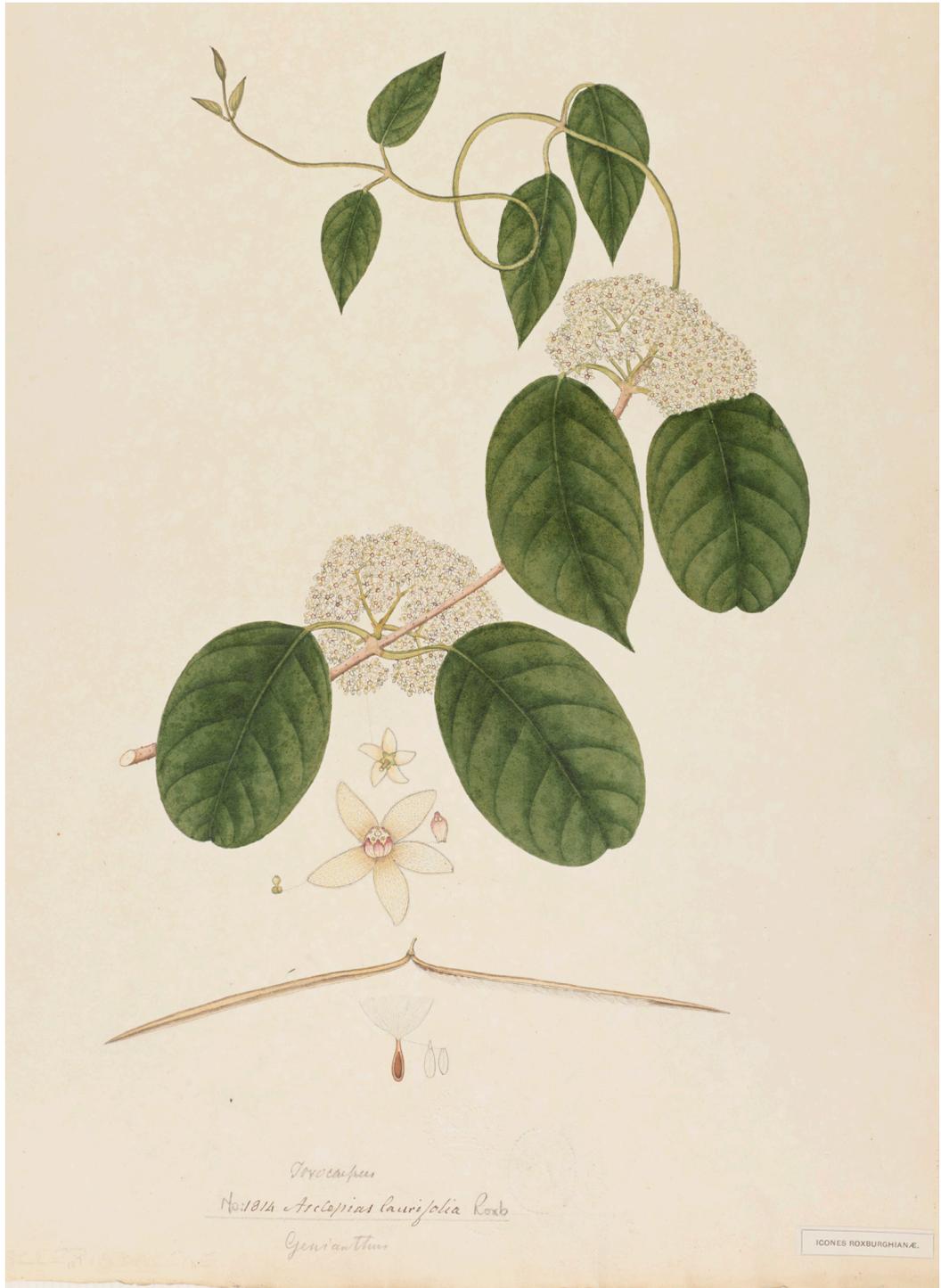


Figure 2. Roxburgh drawing number 1814 of *Asclepias laurifolia* Roxb. from the Kew collection that is here designated lectotype for the name. Reproduced with the kind permission of the Director and the Board of Trustees, Royal Botanic Gardens, Kew.

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