

Neotypification of *Uvaria hirsuta* Jack (*Annonaceae*)

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Uvaria hirsuta Jack is one of the more common species of the genus *Uvaria* (*Annonaceae*) in the Malay Peninsula and Sumatra. The original type was destroyed in 1824, and any duplicates which may have existed are now lost. Wallich Herbarium Catalogue no. 6458b is proposed here as neotype for *U. hirsuta*. The specimen is of high quality, includes both flowers and fruits, and was collected at the type locality soon after Jack's original collections.

KEYWORDS: *Annonaceae*, nomenclature, Southeast Asia, *Uvaria hirsuta*, William Jack.

Uvaria hirsuta was described by William Jack from collections he made at Penang in 1819–1820. It was first published (Jack, 1820) in a small print run of the *Malayan Miscellany* in 1820, while Jack was based at Bencoolen on the West coast of Sumatra. This description was republished by Hooker in the *Botanical Miscellany* of 1831. Jack died of tuberculosis in 1822, and most of his herbarium (including type material and drawings) was lost when the ship “Fame” burned and sank off Bencoolen in 1824. Jack had sent some duplicates of his type collections to Wallich in Calcutta; Wallich's Catalogue, however, does not record any collections by Jack in the entries for 6458—the catalogue number for *U. hirsuta*. Additionally no *U. hirsuta* specimens could be found amongst other Jack specimens reported by Merrill (1952) to be present at Leiden and the Delessert Herbarium in Geneva.

Uvaria hirsuta is a common species, and has an instantly recognisable hirsute indumentum of stellate hairs, c. 2 mm long, which distinguishes it from other *Uvaria* species. The calyptrate calyx of *U. hirsuta* places it within *Uvaria* sect. *Grandiflora*, whereas the cordate, elliptical to obovate leaves and stipitate apocarpous fruit are typical of the genus as a whole (Meade, 2000). It is probably most closely related to *U. curtisii* King, which also occurs on the Malay peninsula and has a shorter, c. 1 mm long, indumentum, and also to *U. hamiltonii* Hook. f. & Thomp. (with a tufted indumentum) and *U. grandiflora* Roxb. ex Hornem. (with a short, c. 0.5 mm long, dense indumentum). In addition to the hirsute indumentum, *U. hirsuta* has red, ovate-acute petals c. 10 mm long, which should allow discrimination from *U. curtisii* (with white petals), from *U. hamiltonii* (with basally connate obovate petals), and from *U. grandiflora* (with ovate to oblong petals c. 30–45 mm long).

Because of the distinctive indumentum of *U. hirsuta* the taxon and taxon name are well recognised within the

botanical literature. As such it seems wise to confirm the application of the name with a new type. In the absence of an authentic type specimen the Catalogue 6458 specimens of Wallich and the colour plate of Blume (1830) are the premier reference points for most botanists. Wallich's 6458b specimen from Penang is here designated as neotype for *U. hirsuta*. According to the Catalogue at the Wallich Herbarium in Kew, the 6458b material was collected in Penang in 1822, three years after Jack's own type collection was made there. The 6458b specimen has both flowers and fruits, retains fully intact leaves, retains a good portion of the hirsute indumentum that is so characteristic of the species and is not in conflict in any way with Jack's description.

Uvaria hirsuta Jack, *Malayan Misc.* 1(5): 46 (1820), non Vell. (1829) (\equiv *Trigynaea oblongifolia* Schlecht.). – Type: [Malaysia: Penang:] “Pulo Pinang”, *W. Jack s.n.* (destroyed at sea, 1824). Neotype (designated here): [Malaysia:] Penang, 1822, *Wallich Cat.* 6458b (K!).

= *U. velutina* Roxb. ex Blume, *Bijdr. Fl. Ned. Ind.* 13 (1825). – Type: “in colliculis calcareis prope Kuripan regionis occidentalis Provinciae Buitenzorg”, *Blume s.n.* (BO, n.v.)

= *U. trichomalla* Blume, *Fl. Javae* 1: 42, t. 18 [fasc. 23–24] (1830). – Type: “in frutetis humilibus udis ad Tjikao”, Java, *Blume s.n.* (BO, n.v.)

= *U. pilosa* Roxb., *Fl. Ind.* 2: 665 (1832). – Type: Not designated (cited as: “native of Moluccas”).

Material examined. — Singapore. Bedoh, 1897, *Ridley s.n.* (SING); Changi, Feb 1894, *Ridley s.n.* (SING); 1892, *sine coll.* (SING); Garden's Jungle, 10 Dec 1882, *McCantley* (SING); 18 Oct 1929, *Nun s.n.*

(BK, NY); 1907, *Ridley s.n.* (BM); Palau Ubin, 15 Nov 1993, *Ibrahim & al. A1162* (SING); locality not specified, 1861, *Anderson 8* (BM, K), Sep 1867, *Maingay 2710* (No. 26, K), *Anonymous s.n.* (SING 1512).

Malay Peninsula. Johore, Sungi Batang, Labis FR, Bekok, 31 May 1970, *Shah & Samsuri MS 1704* (K, SING); Kota Baharu, Feb 1917, *Ridley s.n.* (BM); Negri Sembilan, Ulu reutan, 29 Dec 1923, *JND 11771* (SING); Penang, Back of N. Hill, Jun 1888, *Curtis 1212* (K, SING); Penang, locality not specified, 1822, *Wallich 6458b* (K), 1822, *Wallich 6458c* (2) (K), 1822, *Wallich 6458* (BM), 1890, *Curtis s.n.* (BM), *Curtis 1212* (SING), Feb 1928, *Haniff 225* (C); Perak, Larut, May 1891, *King's collector 5920* (SING); Larut, Feb 1883, *King's collector 3890* (SING, U); Larut, 1899, *Ridley s.n.*, (SING); Larut, Jul 1900, *Curtis s.n.* (SING); Perak, locality not specified: Dec 1885, *King 8350* (BM); 4 Nov 1961, *Yong s.n.* (SING); Selangor: Bukit Kudah, 22 Jun 1889, *Ridley s.n.* (SING); Selangor, locality not specified, 1889, *Ridley s.n.* (SING).

Indonesia. Java, Depok, 11 Jan 1933, *Helsfinden 17* (U); Sumatra, Bangka, prope Blienjoe, *Teijsmann s.n.* (U); locality not specified, *Teijsmann s.n.* (U).

Location Unknown. *Wallich 6458a* “*U. pilosa* Roxb.” (K).

Sinclair (1955) included Burma (Myanmar) in the distribution of this species; the present study has, however, failed to locate a single specimen or reference to a specimen for *Uvaria hirsuta* or its synonyms from north of the Thai-Malay border.

ACKNOWLEDGEMENTS

Thanks to the curatorial staffs of herbaria which provided material on loan. Sincerest thanks to L. Forman for his assistance with the Wallich Herbarium. Many thanks to Jill, Somran and Marcella and everyone at Trinity College Herbarium. Thanks also to the two reviewers for their insightful and constructive comments during the preparation of this paper. A visit to BK and SING was supported by the Trinity Trust, the D. A. Webb memorial fund, South Dublin County Council and the Oleg Polunin Trust.

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