

A new species of *Uvaria* (Annonaceae) from Southeast Asia

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ABSTRACT

A new species, *Uvaria vietnamensis* C. Meade (Annonaceae), is described and illustrated. Resembling *U. calamistrata* Hance, this species is distinguished by its tomentose bearded fruit. The type material includes Poilane collections from Vietnam that were originally listed under “*Uvaria fauveliana* Pierre” by JOVET-AST (1938). The status of this latter taxon is also discussed.

KEY WORDS

Annonaceae,
Uvaria vietnamensis,
Vietnam,
new species.

RÉSUMÉ

Une nouvelle espèce d'Uvaria (Annonaceae) d'Asie du Sud-Est.

Une nouvelle espèce, *Uvaria vietnamensis* C. Meade (Annonaceae), est décrite et illustrée. Proche de *U. calamistrata* Hance, cette espèce se distingue par son fruit barbu et tomenteux. Le matériel type inclut les collections de Poilane provenant du Vietnam que JOVET-AST (1938) avait à l'origine énumérées sous le nom « *Uvaria fauveliana* Pierre ». Le statut de ce dernier taxon est aussi discuté.

MOTS CLÉS

Annonaceae,
Uvaria vietnamensis,
Vietnam,
nouvelle espèce.

INTRODUCTION

Uvaria L. is one of the larger palaeotropical genera in the Annonaceae and includes approximately 150 species (KESSLER 1993). The genus is most diverse in continental Southeast Asia and Malesia but it also occurs in the wet tropical regions of Africa, Madagascar, India and Northern Australia. *Uvaria* species are characterised by the presence of stellate hairs, valvate

sepals, partially or fully imbricate petals, numerous stamens and carpels, monadal inaperturate pollen and stipitate monocarps with one to many seeds arranged in two lateral rows (MEADE 2000). All members of *Uvaria* are climbers or scandent/scrambling shrubs that gain support by means of twining branchlets. The genus is most common and diverse in lowland tropical rainforest habitats and here certain species can climb to heights of 30 m or more. In continental

Southeast Asia *Uvaria* species are also frequently observed as many-branched opportunist climbers in disturbed evergreen forest or marginal riverine vegetation from 200 to 1100 m above sea level (MEADE 2000).

Uvaria vietnamensis C. Meade is described in part from fruiting material collected by POILANE (*Poilane 7326*) in Vietnam and originally ascribed to "*Uvaria fauveliana* Pierre" by JOVET-AST (1938) (*nom. illegit.*) and later *U. fauveliana* (Finet & Gagnep.) Pierre ex Jovet-Ast (1940). The type material for the basionym *Uvaria hamiltonii* Hook. f. & Thomson var. *fauveliana* Finet & Gagnep. is a Pierre collection from Phu-quoc Island which had flowers but no fruit, and this has been determined by MEADE (2000) to be *Guatteria rufa* Dunal. However, while the *Poilane 7326* material does show an indument, leaf, seed and monocarp structure that are all typical of *Uvaria*, the bearded epidermis on the fruit is unique and clearly distinguishes it from *G. rufa* and all other species in the genus. The flower is unknown.

The *Uvaria* species with the most similar fruit to *U. vietnamensis* is *U. calamistrata* Hance. Both have epidermal outgrowths on the monocarp, however in *U. vietnamensis* these outgrowths are covered with a dense, rufous indument, a feature absent in *U. calamistrata*. The stipe in *U. calamistrata* is short and broad, *c.* 3.5 mm long, while it is *c.* 45 mm long in *U. vietnamensis*. The leaves of *U. vietnamensis* exhibit the narrowly obovate shape seen in many other members of the genus, however multivariate analysis shows that it is distinct and in particular is very different from the broadly elliptical leaves of *U. calamistrata* (MEADE & PARNELL 2003).

***Uvaria vietnamensis* C. Meade, sp. nov.**

Uvaria fauveliana Pierre ex Jovet-Ast (1938): 64 (*nom. illegit.*) (*pro parte*).

Uvaria fauveliana (Finet & Gagnep.) Pierre ex Jovet-Ast, Notul. Syst. (Paris) 9: 87 (1940) (*pro parte*).

non est U. hamiltonii Hook. f. & Thomson var. *fauveliana* Finet & Gagnep., Bull. Soc. Bot. France 53 Mém. 4: 68 (1906) et Fl. Gén. Indo-Chine 1: 52 (1907), type: Vietnam, "Insulae île de Phu Quoc, hab. in montibus, Raong Chiao, 3/1874, Pierre 1787" (hololecto-, P!; isolecto-, BM!, E!, K!, P [2 sheets]!); *U. fauveliana* (Finet & Gagnep.) Pierre

ex Jovet-Ast, Notul. Syst. (Paris) 9: 87 (1940) (*pro parte*) = *Guatteria rufa* Dunal.

TYPUS. — *Poilane 7326* (holo-, P; iso-, E), Ba Na, 25 km NW of Đà Nang, Quang Nam Province, Vietnam, 24 July 1923.

Species fructu epidermidebarbato tomentosa a congeneribus magno differt.

Species with a tomentose bearded fruit epidermis very different from other members of the genus.

Habit climber or scrambling shrub. Young shoots sub-tomentose, hairs ferruginous with 2-5 *c.* 1 mm long multi-cellular branches, bark smooth becoming striate and sparse with occasional persistent larger hairs. Leaves elliptic to narrowly obovate, (70-)90-225 × (35-)40-75 mm, apex acuminate/acute, base narrowly cordate, subcoriaceous; veins 14-16; indument upper blade sparse to sub-tomentose, hairs simple, occasionally 2 branched, *c.* 1 mm long, midrib densely tomentose with erect 1 or 2+ branched hairs 0.75-1 mm long; lower midrib and blade sub-tomentose to sparse with 4-8 branched, *c.* 0.6-0.85 mm long stellate hairs. Petiole 3-5 × 1.5-2 mm, indument sub-tomentose, stellate, hairs fine and pale coloured or more thickly set and ferruginous. Inflorescence not known. Fruit monocarp *c.* 3-20+, spheroidal, diameter *c.* 20-30 mm, covered with distinctive branched *c.* 5 mm long outgrowths, each covered with ferrugino-tomentose indument, pericarp red at maturity, flesh pale white, bittersweet to taste, stipes to 45 × 2 mm, striate with sub-tomentose indument, seeds 4-8, shortly hemi-ellipsoidal, *c.* 11 × 5.25-7 × 2-3 mm, aril prominent, 4 × 2.5-3 × 3 mm, surface leathery, brown, ruminations visible. — Fig. 1.

NOTES. — A rare plant, occurring from central Vietnam through southern Laos into northeastern Thailand in mixed deciduous or dry evergreen forest habitats above 100 m altitude.

VERNACULAR NAMES. — Laos, Mây khe cân (*Poilane 11721*), Ngaw keuah (*Maxwell 98-1053*); Vietnam, Dâu cham cham (*Poilane 7326*). Distribution is shown in Figure 2.

OTHER MATERIAL EXAMINED. — LAOS. *Savanna-khet Province*, km 20 on the road from Savannakhet to

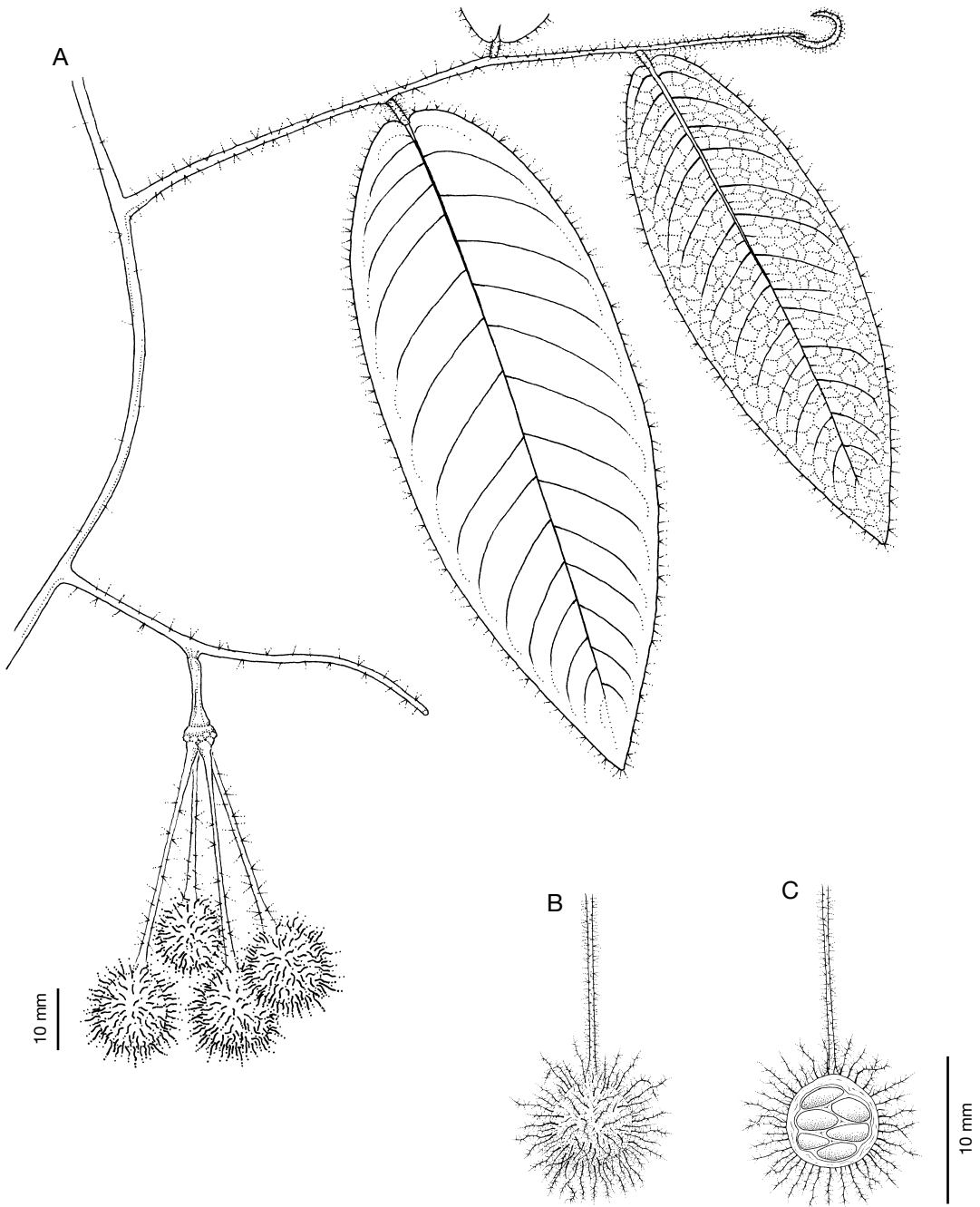


FIG. 1. — *Uvaria vietnamensis* C. Meade sp. nov.: **A**, general habit; **B**, monocarp showing tomentose bearded epidermis; **C**, section through monocarp showing seeds in two rows. All drawings from *Clemens* 3827.

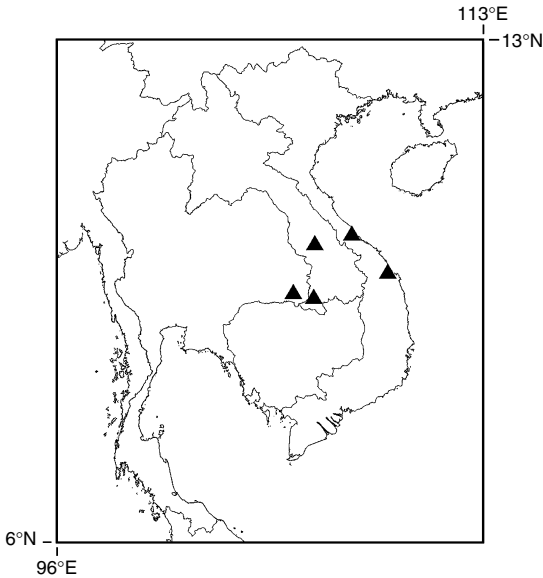


FIG. 2. — Distribution of *Uvaria vietnamensis* C. Meade sp. nov. (▲).

Quang Tri, 21 Jan. 1925, *Poilane 11721* (E, P); *Champasak Province*, summit of Hang Kohn Hill, southern tip of Khong island, Khong District, 20 Sept. 1998, *Maxwell 98-1053* (CMU).

THAILAND. *Ubon Ratchatani Province*, Soi Sawan Waterfall, 16 Oct. 1998, *Chalermglin & Meade 98-10-16-03* (TCD).

VIETNAM. “Annam, Massif de la Mère et l’Enfant”, Quang Tri Province, Vietnam, 24 May 1923, *Poilane 6699* (P); *Quang Nam Province*, May-July 1927, *J & M. S. Clemens 3827* (BM, NY, P, U).

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