# Uraria pseudoacuminata, a new species from Thailand

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**ABSTRACT**: A new species of the genus *Uraria*, *U. pseudoacuminata*, is described from Thailand. It differs from *U. acuminata* in having shorter racemes, hooked hairs on the lower part of its pedicels, and glabrous ovaries with only 2, rather than 4(5) ovules. It also tends to be shorter and have shorter leaves and leaflets. A detailed description and illustrations are provided.

KEYWORDS: Papilionoideae, Fabaceae, legume family

### **INTRODUCTION**

The genus *Uraria* Desv. (Leguminosae-Papilionoideae) comprises approximately 20 species and has a centre of diversity in India to Indo-China<sup>1</sup>. The first attempt to enumerate the species in this genus was made by Craib & Kerr<sup>2</sup>, who listed 11 species in Thailand. During the fieldwork and herbarium studies aimed at completing a revision of this genus for the Flora of Thailand, a new species was discovered which is described and illustrated here.

#### MATERIALS AND METHODS

#### Morphological study

Field collections and herbarium material were studied. The morphological characteristics of the specimens described herein as *U. pseudoacuminata* sp. nov. were compared with those of the similar species, *U. acuminata* Kurz. Voucher specimens are deposited at KKU. Additional materials have been examined and consulted from the following herbaria (abbreviations according to Ref. 3): AAU, BCU, BK, BKF, BM, C, CMU, K, KKU, P, PBM, PSU, QBG, TCD, and Herbarium of the Department of Biology, Chiang Mai University, Thailand.

# **DESCRIPTION OF THE SPECIES**

*Uraria pseudoacuminata* W. Tokaew & Chantar., *sp. nov.*— Figs. 1, 2c–e. Affinis *Urariae acuminatae* sed ovarium 2-ovulatum, legumina segmentis 2, glabris, pedicellis pilis inferioribus sparsis glandulis multicellularis et glochidiis raro rectis differt.— Typus: *W. Tokaew & P. Chantaranothai 403* (holotype KKU),



**Fig. 1** Uraria pseudoacuminata: (a) habit, (b) bract, (c) calyx, (d) keel, (e) wing, (f) standard, (g) stamen and pistil, (h) fruit. (W. Tokaew & P. Chantaranothai 403 (KKU)) - Drawn by Worachat Tokaew.

Thailand, Bueng Kan province, Bungkhla, Phu Wua Wildlife Sanctuary, deciduous forest, alt. 240 m, 21 October 2007.

Unbranched shrubs 40-60 cm high. *Leaves* (3–) 5–7-foliolate; petioles 6–10 cm long, with both unicellular, hooked hairs and straight hairs; stipules deltoid, acuminate, 7–8 by 2–3 mm. *Leaflets* slightly coria-



**Fig. 2** Comparative morphological characters of *Uraria acauminata* and *U. pseudoacauminata*. *U. acauminata* (a) habit and inflorescence, (b) fruits; *U. pseudoacauminata* (c) habit and inflorescence, (d) flowers, (e) fruits.

ceous, bright green, lanceolate or narrowly lanceolate, 7-12 by (1-) 2-3.5 cm, base obtuse, apex acuminate, margin entire, upper surface glabrate, lower surface pubescent, both surfaces with both unicellular, hooked hairs and straight hairs; petiolules 1.5-2 mm long, with unicellular, straight hairs; stipels narrowly lanceolate, acuminate, 1.5-2 by 1 mm. Inflorescences racemose, terminal, erect, 10-15 cm long. Flowers densely packed on the axis; bracts lanceolate, 12-14 by 1–2 mm, pale purple or pale green; pedicels 8-10 mm long, with unicellular, hooked hairs and multicellular, glandular hairs, rarely with unicellular, straight hairs. Calyx pale purple, with unicellular, straight hairs and multicellular, glandular hairs; tube ca. 2 mm long; upper lobes 2, ca. 2.5 mm long; lower lobes 3, thread-like, ca. 4 mm long. Corolla pale violet; standard 10-12 by 9-10 mm, claw ca. 2 mm long; wings 8-9 by 3-3.5 mm, claw ca. 1 mm long; keels 8-9 by 3-3.5 mm, claw 2-2.5 mm long. Ovary 2-ovuled. Legumes with 2 segments, each segment orbicular, 4-5 by 3-4 mm, connected on the transverse side of each segment, pale brown, glabrous. Seeds reniform, 2–3 by 2 mm, pale brown.

Distribution.— Thailand.

Habitat and ecology.— In dry evergreen and deciduous forests, alt. 300–1000 m. Flowering August**Table 1**Differences between Uraria acuminata andU. pseudoacuminata.

Characters	U. acuminata	U. pseudoacuminata
Height of shrub	50–150 cm	40–60 cm
Leaflet number	(3-) 5-9	(3–) 5–7
Leaflet shape	lanceolate, rarely	lanceolate to nar-
	elliptic or narrowly oblong	rowly lanceolate
Petiole length	10–15 cm	6–10 cm
Petiolule length	2–3 (–4) mm	1.5–2 mm
Raceme length	25–40 cm long	10-20 cm long
Bract colour	pale pink or pale	pale purple or pale
	purple	green
Calyx colour	pale pink	pale purple
Corolla colour	pink or purple	pale violet
Hairs on upper	unicellular hooked	unicellular hooked
part of pedicel	hairs and rarely	hairs and rarely
	multicellular	multicellular
	glandular hairs	glandular hairs
Hairs on lower	dense unicellular	sparse multicellular
part of pedicel	straight hairs and	glandular hairs,
	rarely multicellular	unicellular hooked
	glandular hairs	hairs, and rarely uni-
		cellular straight hairs
Ovule number	4 (-5)	2
Pod segments	3-4, with straight	2, glabrous
	hairs	

September. Fruiting September–December.

Etymology.— The specific name refers to its similarity to *Uraria acuminata*.

Notes.— Uraria pseudoacuminata is superficially very similar to U. acuminata Kurz, a common species in mainland S.E. Asia. It can be distinguished easily by its glabrous pod which has 2 segments, each with 1 ovule, and pedicels that have both multicellular, glandular hairs and hooked hairs, but rarely straight hairs, on the lower part (Table 1).

Specimens examined. — NORTH-EASTERN: Udon Thani [Nong Saeng, W. Sidajium 54 (BKF)], Bueng Khan [Phu Wua Wild Life Sanctuary, I.C. Nielsen, C. Niyomdham, T. Jonganulak, N. Hemrath & J. Rithipheth 1580 (AAU), W. Tokaew & P. Chantaranothai 403 (KKU)], Khonkaen [Phu Khieo, G. Murata, C. Phengklai, S. Mitsuta, H. Nagamasu & N. Namtasan T-41860 (BKF)]; EASTERN: Chaiyaphum [C.F. van Beusekom, C. Phengklai, R. Geesink & B. Wongwan 9167 (BKF)], Nakhon Ratchasima [Sakae Rat, C.F. van Beusekom, Chan Wid & R. Geesink 3299 (BKF, C, K), S.N. 374 (BKF 46328)]; SOUTH-EASTERN: Chanthaburi [Pongnamron, B. Sangkhachand s.n. (BKF 13174)].

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