

Fimbristylis pubisquama (Cyperaceae), a new record for the Flora of Thailand

KAMOLHATHAI WANGWASIT*, KHANIT WANGWASIT** & PRANOM CHANTARANOTHAI***

ABSTRACT. *Fimbristylis pubisquama* Kern is newly recorded for Thailand. A description illustration of this taxon are provided. An emended portion of the key to *Fimbristylis* in the Flora of Thailand account of this genus is proposed.

KEY WORDS: *Fimbristylis*, Flora of Thailand, key, taxonomy

INTRODUCTION

During fieldwork in north-eastern Thailand, *Fimbristylis sieboldii* Miq. ex Franch. & Sav. and a closely allied species were collected. The former was misidentified in the Flora of Thailand Cyperaceae account (Simpson & Koyama, 1998) as *F. ferruginea* (L.) Vahl (Zhang et al., 2010). The latter was identified as *F. pubisquama* Kern and is new to Thailand. With the discovery of *F. pubisquama* and an earlier discovery of *Fimbristylis alata* E.-G. Camus by J F Maxwell (Maxwell 2002) the total number of *Fimbristylis* species in Thailand now stands at 62.

TAXONOMY

Fimbristylis pubisquama Kern, Blumea 8: 131. 1955.— *F. compressa* Boeck. in Linnaea 38: 387. 1874. (non Roem. et Schult. 1817).— Type: India, Wight 2902 (holotype **P**; isotype **L**). Figs. 1–2.

Annual. Culms tufted, 20–80 cm by 0.8–3 mm, $\pm$ biconcave, smooth. Leaves basal, blade narrowly linear, 2–30 cm by 0.5–2 mm, abruptly obtuse to acute, base canaliculate, glabrous; sheath up to 20 cm long, pale brown; ligules with a fringe of short hairs ca. 0.5 mm long. Involucral bracts 3–4, leaf-like, longest 6–13 cm long, as long as or longer than inflorescence. Inflorescence simple to

compound, open, 5–10 by 2–10 cm; primary branches 4–8, 0.5–7 cm long. Spikelets 12–100 per inflorescence, usually solitary or clusters of 2, ellipsoid to ovoid, 4–8 by 1.5–2.5 mm. Glumes many per spikelet, spirally arranged, 1.8–2 mm by 0.8–1.2 mm, acute or mucronate, densely pubescent, upper part dark reddish- (rusty) brown, margin ciliate, 1-nerved. Stamens 2; anthers 0.5–0.6 mm long. Stigmas 2. Nutlets obovoid, biconvex, 0.7–0.9 mm by 0.6–0.8 mm mature dark brown, $\pm$ smooth, with indistinct hexagonal or polygonal epidermal cells.

Thailand.— NORTH-EASTERN: Maha Sarakham [Kantarawichai, 7 Sept. 2010, Ka. Wangwasit & K. Wangwasit 028 (**KKU!**); Nadoon, 7 Sept. 2010, Ka. Wangwasit & K. Wangwasit 042 (**KKU!**); EASTERN: Roi Et [Pathumrat, 7 Sept. 2010, Ka. Wangwasit & K. Wangwasit 053 (**KKU!**)].

Distribution.— Southern India, Sri Lanka, Myanmar, Cambodia, Vietnam, northern Australia.

Ecology.— Open wet grassy fields, spreading into paddy fields, on saline soil.

Note.— *Fimbristylis pubisquama* Kern closely resembles *F. sieboldii* Miq. ex Franch. & Sav. Nevertheless, it is distinguishable from the latter by its annual habit, the absence of a shortly creeping woody rhizome and smaller nutlets.

* Department of Biology, Faculty of Science, Mahasarakham University, Kantarawichai District, Maha Sarakham 44150, Thailand. Email: K_Phulphong@yahoo.com

** Muang Phon Khon Kaen Botanic Garden, The Botanical Gardens Organization, Phon District, Khon Kaen 40120, Thailand.

*** Applied Taxonomic Research Center, Faculty of Science, Khon Kaen University, Khon Kaen 40002, Thailand.

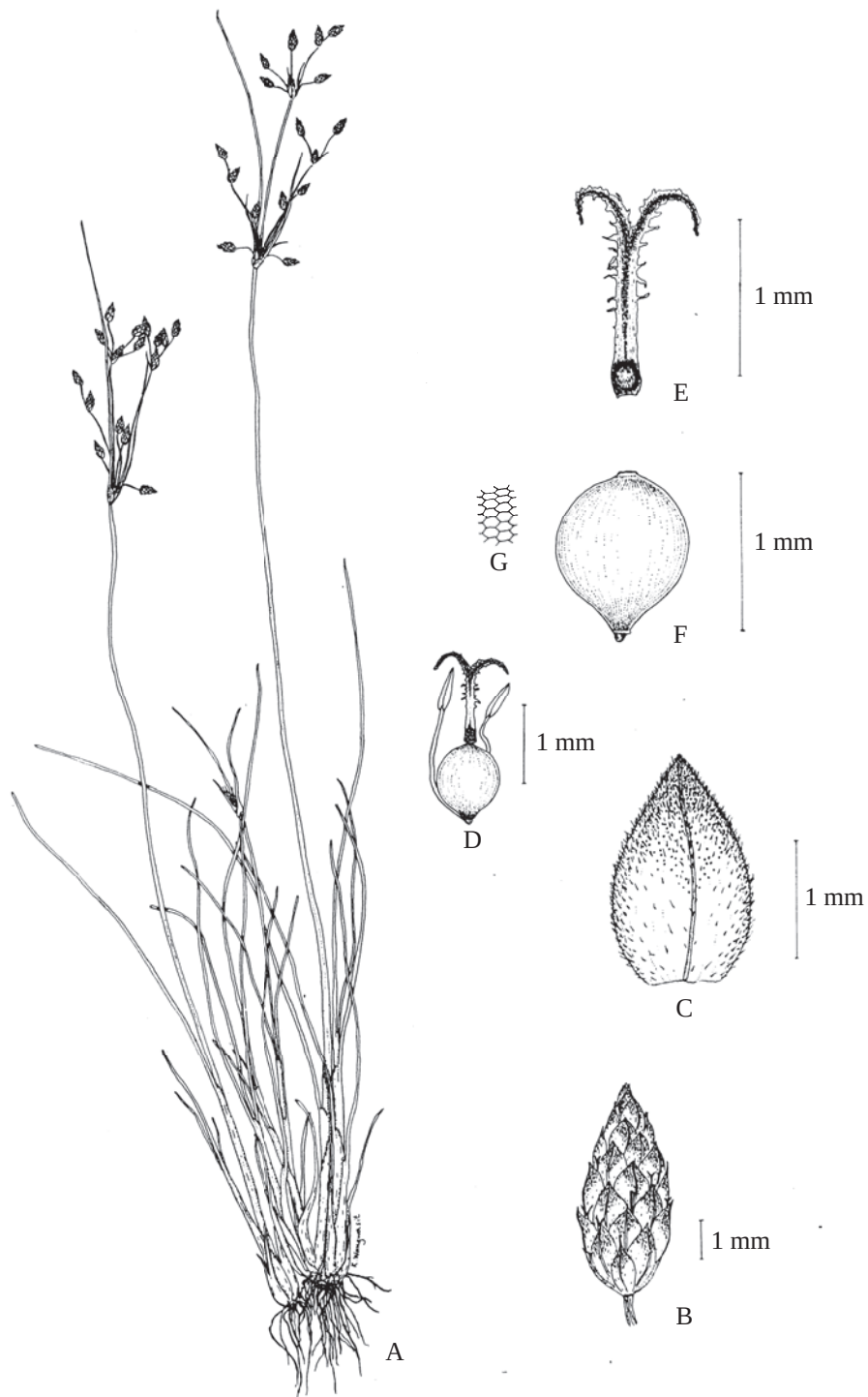


Figure 1. *Fimbristylis pubisquama* Kern: A. habit; B. spikelet; C. glume; D. stamen and nutlet with style and stigma; E. style and stigma; F. nutlet; G. nutlet surface. Scale bars = 1 mm. All from Ka. Wangwasit & K. Wangwasit 028 (KKU). Drawn by K. Wangwasit.

An emended portion of the key to *Fimbristylis* in the Flora of Thailand (Simpson & Koyama, 1998) is proposed below.

41. Glumes hairy at least in the apical part

41 a. Culms usually crowded along a somewhat creeping rhizome. Leaf blades up to 10 cm long. Involucral bract usually shorter than inflorescence. Glumes sparsely pubescent **F. sieboldii**

41 b. Culms tufted. Leaf blades up to 30 cm long. Lowest involucral bract usually overtopping the inflorescence. Glumes densely pubescent **F. pubisquama**

41. Glumes glabrous

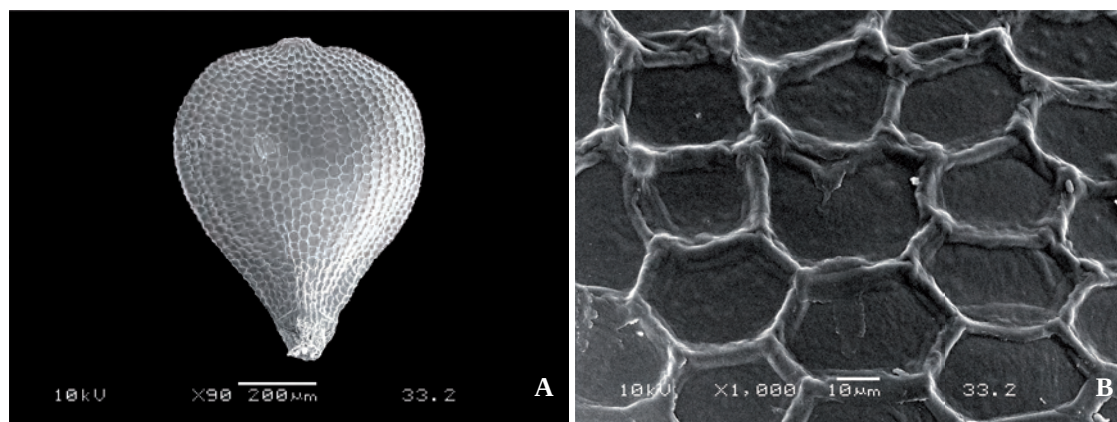


Figure 2. SEM micrographs of nutlet of *Fimbristylis pubisquama* Kern: A. shape; B. nutlet surface. All from Ka. Wangwasit & K. Wangwasit 028 (KKU).

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