
Carex capilliculmis (Cyperaceae), a New Name for
Carex filamentosa

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ABSTRACT. The new name *Carex capilliculmis* S. R. Zhang is proposed to replace the later homonym *Carex filamentosa* K. T. Fu. *Carex capilliculmis* belongs to section *Digitatae* and is found in western China.

Key words: *Carex capilliculmis*, *Carex filamentosa*, China, Cyperaceae.

While preparing the taxonomic treatment of the genus *Carex* (Cyperaceae) for the *Flora of China*, the author found that *Carex filamentosa* K. T. Fu was an illegitimate later homonym, and a new name was necessary for the species. *Carex filamentosa* K. T. Fu was published in volume 1(1) of the *Flora Tsinlingensis* (Anonymous, 1976) and has been accepted by other Chinese botanists (Dai et al., 2003; Li, 1994, 2000). According to the protologue, this species is closely related to *C. lanceolata* Boott. It differs, however, in its more slender culms (ca. 0.5 mm wide), very distant spikes, leafy bracts with short blades (to 5 cm) and long sheaths (to 3 cm), a long and filiform peduncle of the lowest spike, and smaller glumes (3–4 mm), and should be recognized as a distinct species. In *C. lanceolata*, the spikes are relatively congested, the bracts are spathe-like with or without setaceous blades at the top and with short sheaths (ca. 1 cm), and longer glumes (5–6 mm). *Carex filamentosa* K. T. Fu is distributed in western China from Gansu, Qinghai, Shaanxi, Sichuan, and Yunnan, whereas *C. lanceolata* is found in Anhui, Gansu, Guizhou, Hebei, Heilongjiang, Henan, Jiangsu, Jiangxi, Jilin, Liaoning, Nei Mongol, Shaanxi, Shandong, Shanxi, Sichuan, Yunnan, and Zhejiang (Li, 2000). The distributions of the two species overlap in Gansu, Shaanxi, Sichuan, and Yunnan in China.

Unfortunately, the name *Carex filamentosa* was previously published by Petrie (1916). The homonym *Carex filamentosa* K. T. Fu (1976) belongs to section *Digitatae* (Fries) Christ (Bull. Soc. Bot. Belg. 24(2): 13. 1885), which is distributed in Europe, temperate Asia, and temperate North America (Egorova, 1999), while the earlier name *C. filamentosa* Petrie belongs to a rather different section

Echinochlaenae T. Holm (Amer. J. Sci. 16: 462. 1903), which is distributed in Australia, New Zealand, and South America (Kükenthal, 1909). The species *Carex filamentosa* Petrie is endemic to New Zealand and recognized in the *Flora of New Zealand*, volume 3 (Healy & Edgar, 1980). Thus, the name *Carex filamentosa* K. T. Fu is an illegitimate later homonym, and should be replaced by a new name. Here, *Carex capilliculmis* S. R. Zhang is proposed to replace *C. filamentosa* K. T. Fu.

Carex capilliculmis S. R. Zhang, nom. nov. Replaced name: *Carex filamentosa* K. T. Fu, Fl. Tsinling. 1(1): 254, fig. 221. 1976, non Petrie, Trans. & Proc. New Zealand Inst. 1915 (48): 191. 1916. TYPE: China. Shaanxi: Ping-an Temple, Mt. Taibai, on slopes, 2850 m, 12 June 1959, *J. X. Yang 907* (holotype, WUK not seen; isotype, PE).

Distribution and habitat. China (Gansu, Qinghai, Shaanxi, Sichuan, and Yunnan; the distribution in Yunnan was recorded by Li, 1994, 2000). In forests, among thickets, on rocky cliffs, slopes, and alpine meadows; 1100–4350 m.

Pin-Yin name. Si gan tai cao.

Specimens examined. CHINA. **Gansu:** Jonê, *Tao River Expedition 3256* (PE). **Qinghai:** Haiyan, *P. C. Tsong 8352, 8391* (PE). **Shaanxi:** Mt. Taibai, Ping-an Temple, *J. X. Yang 907* (PE). **Sichuan:** Dawu, *S. Jiang 9652* (PE); Jiulong, *C. T. Kuan 270211* (PE); Kangding, *K. L. Chü 7032* (PE); Yajiang, *Anonymous 5453* (PE), *C. T. Kuan 510158* (PE).

Because its terminal spike is staminate, its lateral spikes are pistillate, and its utricles are pubescent with tapered bases and short beaks, *Carex capilliculmis* belongs to section *Digitatae* (Fries) Christ. The species also resembles *C. cardiolepis* Nees and *C. crebra* V. Kreczetowicz of the same section. *Carex cardiolepis* is distributed in Qinghai, Sichuan, Tibet, and Yunnan in China, and also in the Himalayas, Kashmir, and Afghanistan, while *C. crebra* is found only in Gansu, Qinghai, Sichuan, Tibet, and Yunnan in China (Li, 2000). These three

species together with *C. lanceolata* can be distinguished with the following key.

KEY TO *CAREX CAPILLICULMIS* AND RELATED SPECIES
IN CHINA

- 1a. Bracts spathe-like, sheaths short and loosely embracing culms, without blades or only the lowest one with setaceous blade.
- 2a. Leaf blades flat, margins not involute; pistillate glumes 5–6 mm; utricles much shorter than glumes, ca. 3 mm *Carex lanceolata* Boott
- 2b. Leaf blades filiform, margins involute; pistillate glumes 4.5–5 mm; utricles slightly shorter than glumes, 3.5–4.5 mm *Carex crebra* V. Kreczetowicz
- 1b. Bracts leafy, sheaths long and tightly embracing culms, with short leafy blades.
- 3a. Culms ca. 1 mm wide; spikes larger, staminate one 15–20 × 2–2.5 mm, pistillate ones 10–20 × 3 mm, with many pistillate flowers; pistillate glumes more than 4 mm; utricles not longer than glumes, with 2 lateral keels and several fine veins *Carex cardiolepis* Nees
- 3b. Culms ca. 0.5 mm wide; spikes smaller, staminate one 7–10 × 1.5–2 mm, pistillate ones 7–10 × 2–3 mm, with few pistillate flowers; pistillate glumes less than 4 mm; utricles slightly longer than glumes, only with 2 lateral keels and no fine venation *Carex capilliculmis* S. R. Zhang

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