Fargesia huizensis (Poaceae: Bambusoideae), a new species from Yunnan, China

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Fargesia huizensis M.S. Sun, Y.M. Yang & H.Q. Yang (Poaceae: Bambusoideae), a new species from central Yunnan, China, is described and illustrated. It resembles *F*. *fungosa*, and is known only from the Huize County in Yunnan.

Fargesia is one of the largest genera of woody bamboos, including ca. 80–100 species (Yi 1996, Yi *et al.* 2003, 2008, Li *et al.* 2006). It is mainly distributed in China, particularly in the alpine area of southwest China. *Fargesia* has been used for various purposes, from household weaving to agricultural tools, and for ornamental and soil-protection purposes. The shoots of many species are edible and are an important food item for the giant panda.

In October, 2009 we collected flowering specimens of a *Fargesia* sp. in the central Yunnan area, China. Identifying the specimens later, we found a species new to science.

Fargesia huizensis M.S. Sun, Y.M. Yang & H.Q. Yang, *sp. nova* (Fig. 1)

Fargesiae fungosae similis, culmi internodiis costa longitudinali conspicua, vagina internodio breviore, foliorum laminis glabris minoribus 4-10(-15) cm longis 0.4-1(-1.5) cm latis, rhachillae internodiis 0.8-1.5 cm longis, lemmate 2-3 cm longo, palea 1.5-2 cm longa differt. TYPE: China. Yunnan, Huize County, Jiache, 2100m, among shrubs on slopes, 19.X.2009 *Sun Mao-Sheng & Yang Han-Qi 098* (holotype SWFC; isotype KUN).

Rhizome a sympodium, neck 3–8 cm long. Culms 2-5 m, 0.6-2.5 cm in diameter. Internodes terete; 15-28 cm long, wall 1-3 mm thick, longitudinal ribs prominent, initially white powdery; sheath scar prominent, densely yellowbrown setose, with persistent remains of sheath base. Branches (3–)5–10 per node. Culm sheaths 10-18 cm long, tardily deciduous, yellow-brown, with dark spots, broad to narrowly triangular, shorter than internodes, leathery at proximal portion, papery at distal part, densely yellow-brown setulose, longitudinal ribs prominent, margins brown setose; auricles not developed except for oral setae 1–2 mm long; ligule truncate, ca. 1 mm high, ciliate; blade reflexed, linear-lanceolate, 5-10 cm long, glabrous. Leaf sheaths glabrous; ligule truncate, ca. 1 mm high; auricles sparsely hispid, 1-2 mm long; blades 2-4 per ultimate branch, glabrous, narrowly lanceolate, 4-10(-15) cm long, 0.4-1.5 cm wide, secondary veins 4–8, transverse veins obscure, base cuneate. Inflorescence a panicle with raceme-

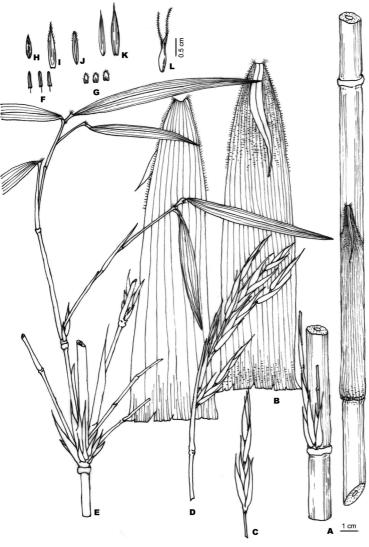


Fig. 1. Fargesia huizensis (from the holotype). — A: Culm with sheath. — B: Culm sheath, outer (right) and inner surface view. — C: Spikelet. — D: Part of flowering branch. — E: Node with branch complement and two leafy branches shown. — F: Stamens. — G: Lodicules. — H: Caryopsis. — I: Lemma. — J: Palea. — K: Glume. — L: Pistil with two stigmas. Scale: 1 cm for A–K, 0.5 cm for L.

like ultimate branches; spikelets 5–8, 3.5–6 cm long, rachilla internodes 0.8–1.5 cm long, white setose; florets 3–7, including sterile terminal floret. Glumes 1 or 2, papery; lemma 2–3 cm long, apex densely white-gray setose, margins ciliate; palea 1.5–2 cm long, 2-keeled, apex bifid, setose; lodicules 3; style 1; stigmas 2, plumose. Stamens 3; anthers yellow, 0.6–1cm long. Ovary ovoid, glabrous. Caryopsis narrowly cylindric, with a ventral groove, 1–1.5 mm in diameter, 1–1.5 cm long, dark-brown. Culm shoots sprouting in June–August. Flowering in June–October, fruiting in August–November. *Fargesia huizensis* morphologically resembles *F. fungosa* by having a white powdery covering on the surface of the internodes when young, prominent sheath scars and similar culm sheaths. However, there are several differences between the two species (Table 1).

Fargesia huizensis is known only from Jiache town, Huize County, at altitudes of ca. 2000–2300 m. It has been used for weaving, and, even more noteworthy, it is also an important plant for local soil-protection purposes.

	F. huizensis	F. fungosa
Longitudinal ribs of culm internodes	prominent	indistinct
Length of culm sheaths	shorter than internodes	longer than internodes
Lower surface of leaf blades	glabrous	proximally white-gray pubescent
Size of leaf blades (cm)	$4-10(-15) \times 0.4-1(-1.5)$	$(7-)10-16 \times 1-1.7$
Length of rachilla internodes (cm)	0.8-1.5	0.3-0.4
Length of lemma (cm)	2-3	(1.2-)1.7-2
Length of palea (cm)	1.5-2	0.9-1.4

Table 1. Summary of the key morphological differences between Fargesia huizensis and F. fungosa.

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