PSEUDOTAXIPHYLLUM MAEBARAE (SAK.) IWATS. (BRYOPSIDA, PLAGIOTHECIACEAE) DISCOVERED IN CHINA PSEUDOTAXIPHYLLUM MAEBARAE (SAK.) IWATS. (BRYOPSIDA, PLAGIOTHECIACEAE) BПЕРВЫЕ НАЙДЕН В КИТАЕ YI CHEN¹, TONG CAO^{1,*}, FENGYAN LIU¹ & HAIRONG QING¹ И ЧЕН¹, ТОНГ ЧАО^{1,*}, ФЕНГЯН ЛЮ¹ & ХАЙРОНГ ЦИНГ¹

Abstract

Pseudotaxiphyllum maebarae (Sak.) Iwats.previously known only from Japan, is reported from Zhejiang Province, China. Description and illustration of the species are provided.

Резюме

Pseudotaxiphyllum maebarae (Sak.) Iwats.paнee известная только из Японии, найдена в провинции Чжэязян, Китай. Приводятся описания и иллюстрации.

The genus *Pseudotaxiphyllum* Iwats. was segregated from *Isopterygium* based on the sect. Pseudotaxiphyllum (Iwatsuki,1970) by Iwatsuki in 1987. There are ten species recorded in the genus worldwide (Crosby et al., 1999) and four species in China (Redfearn et al., 1996). One of the main characters of *Pseudotaxiphyllum* is the presence of gemmiform propagules in the leaf axils (Iwatsuki & Deguchi, 1981). Recently, we collected a specimen from Yuhang Region, Zhejiang Province, which has brown, ovoid to spherical bulbils with stalks of several cells from leaf axils. The specimen was identified as Pseudotaxiphyllum maebarae (Sak.) Iwats., which was previously known only from Japan and is reported new to China here.

Pseudotaxiphyllum maebarae (Sak.) Iwat., J. Hattori Bot. Lab. 63: 449. 1987. Figs. 1-9.

Isopterygium maebarae Sak., J. Jap. Bot. 26: 202. 1951.

Plants small in size, foliation complanate or distichous, yellow-green, glossy. Stems creeping, 30-50 mm long, 1.5mm wide with leaves, sparsely branched, branches short. Leaves ovate, acute, asymmetric, about 1.0 mm long, 0.35 mm wide; margins erect, more or less serrulate above; costa indistinct. Upper and apex leaf cells shorter, 17-30 µm long, 3.0-4.0 µm wide, with somewhat thicker walls; middle cells linear, 60-85 µm long, $3.5-4.5 \,\mu$ m wide, thin-walled, with obtuse ends; basal cells short-rectangular to rectangular, 27-65 μ m long, $3.5-4.5 \,\mu$ m wide; alar cells scarcely differentiated but shorter. Bulbils in leaf axils, brown, irregularly ovoid to spherical, 0.10-0.15 mm, with stalks of two to several cells. Sporophytes not seen.

Pseudotaxiphyllum maebarae is easily distinguished by having: (1) stems creeping, with distichous to complanate foliation; (2) leaves ovate, asymmetric with indistinct costa; and (3) bulbils often found in leaf axils, ovoid to spherical, brown, with stalks of several cells.

Chinese specimens examined: Zhejiang Province, Yuhang Region, Pingyao valley, on soil under forest, 31°21.6'N 119°60'E, *Cao Tong* and *Zhou Ping*, March 2003.

Pseudotaxiphyllum maebarae (Sak.) Iwats. was described by Sakurai from Kumamato in 1951 and has been regarded as endemic species to Japan (Noguchi, 1994). Discovery of this species in East China extends its distribution and provides the new proof of close links of the flora between China and Japan.

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Figs.1-9.*Pseudotaxiphyllum maebarae* (Sak.) Iwats.1 - plant; 2-3 – leaves; 4 – upper leaf cells; 5 – middle leaf cells; 6 – basal leaf cells; 7-9 – bulbils. Scale bars: 1.5 mm for 1; 0.2 mm for 2-3, 7-9; 50 µm for 4-6. Drawn by Chen Yi.

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