ISOPTERYGIOPSIS

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Isopterygiopsis Z.Iwats., J. Hattori Bot. Lab. 33: 379 (1970); refers to its similarity to the genus Isopterygium.

Type: *I. muelleriana* (Schimp.) Z.Iwats.

Dioicous or autoicous. Plants small to medium-sized, glossy. Stems creeping, irregularly pinnately branched; epidermal cells in cross section of stem often large and hyaline; outer walls thin or slightly thickened; central strand indistinct. Rhizoids papillose and axillary. Pseudoparaphyllia absent. Leaves erect to widely spreading and weakly to distinctly complanate, narrowly triangular, acuminate, entire, ecostate; leaf base not decurrent. Gemmae, when present, forming axillary fascicles of filamentous propagules 2–7 cells long.

Seta elongate. Capsules suberect; annulus differentiated; operculum bluntly low-conical.

Isopterygiopsis was segregated from *Isopterygium* due to the absence of stem pseudoparaphyllia in the former, the occurrence of larger, hyaline or thin-walled epidermal cells in stems, axillary papillose rhizoids, filamentous propagules and a differentiated annulus (Iwatsuki, 1970). The pseudoparaphyllia and propagules are similar to those of *Plagiothecium*, but Isopterygiopsis differs in having non-decurrent leaf bases (Iwatsuki, 1987).

The genus has been variously placed in the Plagiotheciaceae (Iwatsuki & Ramsay, 2009) or, as currently, in the Hypnaceae (Goffinet et al., 2012).

This small genus of three species occurs in Europe, North America, Africa, Asia as far north as Japan, with a single species in Australasia. Epiphytic on tree or tree fern trunks, fallen logs or, less commonly, on rocks or in rock crevices.

References


1 c/- National Herbarium of New South Wales, Royal Botanic Gardens and Domain, Mrs Macquaries Road, Sydney, New South Wales 2000, Australia.


Autoicous. Plants small and slender, forming flat bright green or yellow to greyish green mats. Stems mostly unbranched, several arising from the bases of perichaetia; stem in cross section with large epidermal cells; cortical cells with the outer wall thin or slightly thickened. Branches numerous, often ascending. Leaves usually not crowded, often secund at the tips, 0.7–1.2 mm long, less than 0.2 mm wide at the base. Mid-laminal cells linear, 35–70 × c. 5 μm; cells scarcely differentiated at the basal angles. Gemmae occasional, fusiform or cylindrical, 2–5 cells long.

Seta 8–16 mm long, initially orange or yellow, becoming orange-red. Capsules oblong-cylindrical, c. 1.5 mm long; annulus of 2 rows of cells; operculum with a short beak; Endostome with non-perforate segments; cilia 1 (–2). Spores 9–13 μm diam.

Rare in south-eastern Qld, more common in N.S.W. Vic. and Tas.; grows mainly on tree fern trunks but also on exposed rocks, cliffs, in rock crevices or on bark. Also in Europe, North America, central and northern Asia and New Zealand.