Outlineoffungi.org - Note 1495 *Ijuhyaceae*

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Ijuhyaceae R.H. Perera, E.B.G. Jones, Maharachch. & K.D. Hyde

Ijuhyaceae was erected by Perera et al. (2023) to accommodate *Ijuhya* Starbäck as the type genus based on morphology and phylogeny using the concatenated sequence dataset of ITS, LSU, *rpb2, tef1* and *tub2* of *Hypocreales*. Another genus is *Kallichroma* Kohlm. & Volkm.-Kohlm. The members of this family colonize wood and herbaceous debris, thriving on fresh plant material. They sometimes act as fungicolous or parasitic agents on nematodes. In the sexual morph, ascomata form perithecial structures, appearing solitary or grouped, often astromatic. They develop a thin basal subiculum, presenting a superficial, globose to subglobose shape that does not collapse or pinch laterally upon drying. Colors range from white to pale yellow, sienna, dull orange, orange-yellow, or brownish-orange. The ascomatal apex may appear faintly or acutely papillate, typically fat and discoid; the disk consists of intertwined hyphae that evolve into triangular fasciculate hairs, creating an apical crown, though some may lack hairs or present short, sinuous forms. The peridium can consist of a single stratum or occasionally three strata. The hamathecium comprises septate, branched, filamented apical paraphyses that merge with periphyses, appearing evanescent. Asci contains 6–8 spores, are unitunicate, and range from clavate to widely fusiform, appearing evanescent with rounded apices and lacking an apical ring. Ascospores arrange irregularly in biseriate or multiseriate patterns, forming fasciculate structures that vary from clavate to fusiform to long fusiform shapes. They can be one- to multiseptate or muriform, appearing straight to slightly curved, guttulate, hyaline, and smooth-walled to striate or spinulose, occasionally exhibiting strong cyanophilous properties. In the asexual morph, the fungi adopt a hyphomycetous, Acremonium-like form. Conidiophores arise from somatic hyphae, appearing monophialidic and mononematous, straight with one basal septum, hyaline, and smooth-walled. Conidia occur either solitary or aggregated at the phialide tip, presenting ellipsoidal to cylindrical shapes, aseptate, with or without a visible abscission scar, guttulate, hyaline, and smooth-walled. Microsclerotia rarely form, but when they do, they often appear ellipsoidal to cylindrical oblong or occasionally globose, displaying orange to brownish-orange or brick-red hues. The family *Ijuhyaceae* is classified under *Hypocreales*, *Sordariomycetes*, *Pezizomycotina*, and *Ascomycota* (Perera et al. 2023).

Reference

Perera RH, Hyde KD, Jones EBG, Maharachchikumbura SSN, et al. 2023 – Profile of *Bionectriaceae, Calcarisporiaceae, Hypocreaceae, Nectriaceae, Tilachlidiaceae, Ijuhyaceae* fam. nov., *Stromatonectriaceae* fam. nov. and *Xanthonectriaceae* fam. nov. Fungal Diversity 118, 95–271.

Entry by

Maryam Tavakol Noorabadi, Innovative Institute for Plant Health, Zhongkai University of Agriculture and Engineering, Guangzhou 510225, People's Republic of China

(Edited by **Kevin D Hyde**)

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