Outline of fungi - Note 1008 *Holwayaceae*

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Holwayaceae Quijada, Matočec & I. Kušan

The family *Holwayaceae* was introduced within *Thelebolales* by Quijada et al. (2022), with *Holwaya* Sacc. designated as the type genus. The family is distinguished by its pulvinate-turbinate to discoid or cup-shaped apothecia, ectal excipulum comprising hyaline to olive-brown cells arranged in a *textura globosa-angularis* to *textura prismatica*, and the capitate paraphyses, which are comprised of hyaline or partly olive-brown cells, sometimes exhibiting pigmentation in the form of refractive globules. Asci exhibits an enhanced spore discharge mechanism due to the presence of a restrictive, ring-like apical apparatus. The hyaline ascospores are smooth to ornamented and range from aseptate, ellipsoid, ovoid, fusoid to acicular, cylindrical, fusiform, with more than ten septa and sometimes capable of producing conidia. The only known anamorph of this family is *Holwaya* (Seifert et al. 1985), characterized by determinate synnemata, featuring shiny black stipes and grey fertile heads, comprising branched, hyaline conidiophores with phialides, and producing aseptate, ellipsoidal, hyaline, smooth conidia in a slimy mass. The conidia frequently germinate by budding to form microconidia. *Holwayaceae* encompasses three genera (*Holwaya, Patinella,* and *Ramgea*), each exhibiting diverse morphological and ecological diversities (Quijada et al. 2022). *Holwaya* and *Ramgea* consist of two species each, while *Patinella* has approximately 25 species (Wijayawardene et al. 2020). To date, only saprobes have been reported from Holwayaceae. *Holwaya* species are predominantly found in the northern hemisphere, specifically in Palearctic and Nearctic regions, where they thrive on fallen trunks of *Tilia*, and other hardwood hosts like *Acer, Castanea, Fagus, Fraxinus, Magnolia, Quercus,* and *Ulmus.* This genus prefers old-growth forests, environments with high atmospheric humidity, and anamorphs are more frequently found in nature than teleomorphs. *Patinella* has been observed in climates and vegetation conditions similar to those favored by Holwaya. *Ramgea* was found in pheasant dung in the Netherlands and on bat dropping in the Croatia. In the mutli-gene phylogeny of the combined ITS, LSU, TEF and RPB2 sequences, *Holwayaceae* was positioned basally within *Thelebolales* (Quijada et al. 2022). This family shares certain morphological characters, such as paraphysate apothecia with actively discharging asci, similar to other *Thelebolales* taxa.

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