Families of Dothideomycetes

In loving memory of Majestic Bydla Hyde, (affectionately known as Mum or Maq), 29 August 1921–14 January 2013—without Mum’s determination, a degree never planned or envisaged, this treatise would never have been completed—K.B. Hyde


Abstract Dothideomycetes comprise a highly diverse range of fungi characterized mainly by ascospores with two wall layers (basidiospores) and often with distinctive dehiscence. Many species are saprobes, with many sexual stages comprising important plant pathogens. They also include yeasts, chytrids, fungi, molds, and lichenicolous fungi. They occur in terrestrial, freshwater and marine habitats almost everywhere on the planet. We accept 35 families in Dothideomycetes with the new families Astroglacliaceae, Bambusitrichaceae, Bistriisporaceae, Lichenocephalaceae, Microperonosporaceae, Paramucoraceae, Rhincaloraceae, Sclerisporaceae, Sinapsidellaceae and Thyviridiaceae introduced in this paper. Each family is provided with a description and notes, including sexual and asexual stages, and if more than one genus is included, the type genus is also characterized. Each family is provided with at least one figure plate, usually illustrating the type genus, a list of accepted genera, including sexual genera, and a key to generic characters. A phylogenetic tree based on four gene conserved analysis add support for 64 of the families and 22 orders, including the novel orders, Dyf kysophilales, Lichenococcales, Lichenocephalales, Monoblastiales, Natipitales, Phanortichales and Delgadasiales. The paper is expected to provide a useful tool document on Dothideomycetes which can be modified as new data comes to light. It is hoped that by illustrating types we provide additional interest and interest so that more work is carried out on this remarkable group of fungi.

Keywords Acomycotales - Astroglacliaceae - Bambusitrichaceae - Bistriisporaceae - Dyf kysophilales - Lichenocephalales - Monoblastiales - Natipitales - Phanortichales - Phyllophorales - Piperaliales - Sclerisporaceae - Sinapsidellaceae - Thyviridiaceae - Type species - Venturiales

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