

Outlineoffungi.org - Note 686 [Metacapnodium](#)

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[Metacapnodium](#) Speg.

[Metacapnodium](#) was introduced by Spegazzini (1918) and is typified by *M. juniperi* (W. Phillips & Plowr.) Speg. Species of this genus are widespread in tropical regions ([Kirk et al. 2008](#)). Collections were mostly found in New Zealand, and some were also found in Australia, Austria, Canada, Ecuador, Germany, Japan, Malaysia, Poland, Portugal, Spain, the UK, and the USA ([Sugiyama et al. 2020](#); [Index Fungorum 2022](#)). The genus is characterized by distinctive hyphae recognized by superficial, glossy, moniliform, widely branched, dark brown walls, strong constrictions at the septa, except for the cells of synnematus asexual morphs, which are progressively narrower and longer, usually tapered towards the apex at the ends ([Hughes et al. 2012](#); [Hyde et al. 2013](#); [Hongsanan et al. 2020](#)). All [Metacapnodium](#) species produce capnophialophora phialides, but some species may produce *Capnobotrys*, *Capnocybe* or *Capnosporium* asexual states ([Hughes 1966, 1976, 1981](#); [Hughes & Seifert 2012](#); [Chomnunti et al. 2013](#)). However, the genera *Capnocybe*, *Capnophialophora*, *Capnosporium* and *Hormiokrypsis* were synonymized under [Metacapnodium](#) by [Hyde et al. \(2013\)](#) and [Rossman et al. \(2016\)](#). [Metacapnodium](#) is the generic type of *Metacapnodiaceae*. This family was placed in *Capnodiales* (*Dothideomycetes*) for more than a decade based on its sooty molds characters. Some species in *Metacapnodiaceae* were discovered in fossil ambers and were used as a representative from *Capnodiales* in divergence time estimates. [Hawksworth & Boluda \(2020\)](#) provided the first sequence data of *M. ericophilum* (Link) D. Hawksw. & S. Hughes and indicated that *M. ericophilum* formed within *Chaetothyriales sensu lato* in the class *Eurotiomycetes* ([Hawksworth & Boluda 2020](#)). Later, [Sugiyama et al. \(2020\)](#) provided the sequence data of *M. neesii* (S. Hughes) Sugiy. & Hosoya (= *Capnobotrys neesii* S. Hughes, the type species of *Capnobotrys*), and their phylogenetic tree revealed that *Metacapnodium neesii* formed at the base of *Chaetothyriales*, but they could not confirm its basal position due to the lack of representative strains used in the analysis. The placement of [Metacapnodium](#) at the basal of *Chaetothyriales* (*Eurotiomycetes*) is another example of a sooty mold species which found to be member of *Chaetothyriales* ([Hawksworth & Boluda 2020](#)). We suggest to transfer *Metacapnodiaceae* to *Eurotiomycetes* based on molecular data provided by [Hawksworth & Boluda \(2020\)](#) and [Sugiyama et al. \(2020\)](#). However, the relationship between *M. ericophilum* and *M. neesii* needs to be confirmed and it is necessary to add more representative sequence data of *Chaetothyriales* and its sister orders in further phylogenetic analysis to consider the placement of *Metacapnodiaceae* within *Chaetothyriales*. [Metacapnodium](#) is often found in the same specimen with species of *Euantennariaceae* (no sequence data is available for this family). Thus, fresh collections and sequence data for [Metacapnodium](#) and species of *Euantennariaceae* are needed.

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