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Nigropunctata Samarak. & K.D. Hyde

Nigropunctata was established by Samarakoon et al (2022) with Nigropunctata bambusicola Samarak. & K.D. Hyde as the type species. Nigropunctata bambusicola was found on the dead culm of bamboo (Poaceae) as a saprobe in Thailand. Only the sexual morph is known in this genus (Samarakoon et al. 2022). Nigropunctata is characterized by immersed ascomata, centric or eccentric ostioles, a periphysate ostiolar canal covered with a black, thick clypeus, yellow to brown ectostroma and long, filamentous, septate, rarely branched, numerous, paraphyses, constricted at septa. Asci are embedded in a gelatinous matrix, 8-spored, unitunicate, cylindrical, short pedicellate, apically rounded with a discoid, or inverted, hat-shaped ring. Ascospores are uniseriate or overlapping uniseriate, brown to dark brown, cylindrical to broadly ellipsoidal, aseptate, covered with a thick mucilaginous sheath or sheath lacking, germ slit on the ventral side, straight, along. the entire spore length Asexual morph is undetermined. Morphologically, Nigropunctata is similar to Anthostomella, however, it can be distinguished from Anthostomella in having immersed ascomata with a thick clypeus, white or yellow ectostroma, short pedicel, apically rounded asci with J+, discoid or inverted, hat-shaped, apical ring and broadly ellipsoidal, aseptate, ascospores with a germ slit. Phylogenetic evidence also supports Nigropunctata as distinct from Anthostomella and placed it independently in Xylariales. It forms an independent phylogenetic clade in Xylariales and has unique morphological characters from similar genera. The other accepted species in Nigropunctata are Nigropunctata bambusicola Samarak. & K.D. Hyde, Nigropunctata nigrocircularis Samarak. & K.D. Hyde and Nigropunctata thailandica Samarak. & K.D. Hyde (Samarakoon et al. 2022). Based on the evidence of combined ITS, LSU, rpb2, tub2, and tef1-a sequence data and the distinct morphological characters the taxonomic placement of Nigropunctata is in Xylariaceae, Xylariales, Sordariomycetes.

Reference

Samarakoon MC, Hyde KD, Maharachchikumbura SSN, Stadler M, Gareth Jones EB, Promputtha I, Suwannarach N, Camporesi E, Bulgakov TS, Liu JK. – 2022 Taxonomy, phylogeny, molecular dating and ancestral state reconstruction of *Xylariomycetidae* (*Sordariomycetes*). Fungal Diversity 112(1), 1–88.https://doi.org/10.21203/rs.3.rs-935829/v1

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