Outlineoffungi.org - Note 1440 *Perilachnea*

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Perilachnea Van Vooren

Van Vooren et al. (2021) introduced *Perilachnea* under *Pyronemataceae* (*Pezizales, Pezizomycetes, Pezizomycotina, Ascomycota*) to accommodate *Perilachnea hemisphaerioides* (Mouton) Van Vooren as the type species based on morphological characteristics and phylogeny (using a combined sequence of RPB2, TEF1, LSU, and ITS). There are six recognized species in this genus (Van Vooren et al. 2021; Van Vooren et al. 2022). This genus includes two species that were already recognized: *Trichophaea hemisphaerioides* and *Trichophaea* flavobrunnea. The type species is the new combination of *Trichophaea hemisphaerioides* Mouton. The type species is frequently discovered on burned soil and charcoal, occasionally on nutrient-rich soil, and is extensively spread throughout Europe, particularly in mountainous regions. Beyond Europe, it has been documented in Canada, Israel, Kazakhstan, Turkey, and the United States. In the sexual morph, the ascomata are epigeous, apothecial, sessile, and deeply cupuliform or discoid, with the external surfaces covered by sparse brown hairs. The margin is hairy. The excipulum is two-layered. Hairs are superficial and septate with a simple base. Asci are operculate, narrowing toward the base, arising from croziers, inamyloid, and eight-spored. Paraphyses are slender and contain small lipid bodies. Ascospores are uniseriate, ellipsoid, hyaline, bi- or pluriguttulate, and smooth or finely dotted (Van Vooren et al. 2021). The species are saprobic, thriving on conifer litter and woody debris or on enriched or burnt soil. The asexual morph is unknown, but germinating ascospores have been observed in *Perilachnea hemisphaerioides* and *Perilachnea flavobrunnea*. *Perilachnea* is similar in appearance *to Humaria hemisphaerica* and some species, with ascospores that may have two or more oil droplets and a surface that is either smooth or very finely dotted. In contrast to species of *Trichophaea* sensu stricto, all *Perilachnea* species have paraphyses that contain small lipid bodies, primarily located in the top cell. Six species are accepted in this genus (Van Vooren et al. 2021).

References

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