

Outlineoffungi.org - Note 1521 *Helicoscypha*

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Helicoscypha Baral

The monotypic genus *Helicoscypha* was erected by Baral (2023) to accommodate *Helicoscypha heterotricha* (Graddon) Baral and is classified under *Hyphodiscaceae* (*Helotiales*, *Leotiomycetidae*, *Leotiomyces*, *Pezizomycotina*, *Ascomycota*). The type species was found on the leaves of *Deschampsia caespitosa* in Great Britain. The apothecia are gregarious. They have a flat, whitish to greyish disc, bordered by approximately 70–120 black spiny hairs and a similar number of brown, twisted hairs. The apothecia can be sessile or possess a short stalk and sit on a web of branched spiny and whip hairs. The spiny hairs are 4–6-celled and have discernible septa. They appear deep red-brown in water and blackish-brown in KOH, with a slightly paler tip. The whip hairs are also 4–7-celled and more abundant at the margin. They are hyaline with a helicoidal upper part that can form 1–5 turns and feature tubercles that stain lilac in Cresyl blue (CRB). The ectal excipulum is pale ochraceous, approximately 20 µm thick with thin-walled cells, containing dark brown exudate. The surface cells are smooth and vary in color toward the upper flanks and margin. Overall, the structure exhibits distinctive hair arrangements and cellular characteristics. Asci range from (61–)68–80 × (11.5–)12–13 µm, with a cylindrical-clavate shape and a short stalk. The apex is medium conical, with a deep blue apical ring in iodine (IKI) staining. The ascus wall is inamyloid, and the base originates from croziers. Ascospores are ellipsoid-subfusoid, and are hyaline, 1-septate, and multiguttulate, with visible nuclei. They can appear light brown and 1–3-septate when overmature. The wall is smooth and typically unstained. Paraphyses are cylindrical, with uninflated or slightly tapering apices, and the terminal cells are only slightly wider than the lower cells, which are branched in the middle and lower regions. The upper cells contain loose, refractive granules and are KOH-inert. *Helicoscypha* differs from *Venturiocistella* not only in its distinct hairy subiculum but also in the structural composition of its hair types. In *Helicoscypha*, both the spiny hairs and whip hairs possess smooth walls that do not react to KOH, providing a key diagnostic feature. The spiny hairs have noticeable septa, indicating their segmented structure, while the whip hairs, positioned in situ, approximate the length of the spiny hairs. The whip hairs are characterized by a helicoidally twisted, whip-like upper section with a unique morphology; this upper part is hyaline and is adorned with coarse, KOH-soluble tubercles (Baral 2023).

Reference

Baral HO. 2023 – *Venturiocistella gaylussaciae*, *V. ulicicola*, *V. uliginosa* (*Hyphodiscaceae*, *Helotiales*) and *V. heterotricha* (*incertae sedis*) redescribed from the types. *Ascomycete.org*, 15 (2), 63–75.

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