

About *Lasiosphaeria s. l.* (3) *Lizonia sphagni* Cooke collected in Europe

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Summary: Recent collections of a lasiosphaeriaceous species on *Sphagnum* showed to be conspecific with *Lizonia sphagni* Cooke for which the new combination *Hilberina sphagni* (Cooke) Declercq was recently made.
Keywords: Ascomycota, Sordariomycetes, Hilberina, Sphagnum.

Résumé : de récentes récoltes d'une espèce à l'aspect de *Lasiosphaeria* sur *Sphagnum* ont montré leur conspécificité avec *Lizonia sphagni* Cooke pour lequel la nouvelle combinaison *Hilberina sphagni* (Cooke) Declercq a été récemment réalisée.

Mots-clés : Ascomycota, Sordariomycetes, Hilberina, Sphagnum.

Introduction

During the year 2013, a Dutch collection of a *Lasiosphaeria*-like species on *Sphagnum* was sent to me. The species apparently did not fit with any *Lasiosphaeria* species described up to now on *Sphagnum*. Checking recent literature, I only found DÖBBELER's (1997) illustrations of bryophilous Ascomycetes ascospores a similar ascospore shape, assigned to *Lizonia sphagni* Cooke but without giving further information.

Examination of the holotype [K(M) 190779] confirmed that *Lizonia sphagni* and the collected species were conspecific.

In the meantime, the species has been collected in Belgium, too.

Due to the typical ascomata and ascospores, the species has been transferred to the genus *Hilberina*.

Taxonomy

Hilberina sphagni (Cooke) Declercq, *Index Fung.*, 174: 1 (2014) – Fig. 1-4.

Basionym: *Lizonia sphagni* Cooke, *Grevillea*, 18 (88): 86 (1890).

Synonym: *Lizoniella sphagni* (Cooke) Sacc. & D. Sacc., *Syll. fung.*, 17: 661 (1905).

Ascomata erumpent to superficial, subglobose to ovoid, papillate, 0.4–0.45 mm diam., 0.50–0.55 mm high, covered by setae, black, basal part covered by a poorly developed blackish mycelium.

Asci narrowly clavate, 194–210 × 20–23 µm, with broadly rounded apex and long tapering stalk, 8-spored, apical ring 3 × 1 µm and IKI-. **Ascospores** geniculate in the lower quarter, with narrowly rounded upper end and attenuate basal end, 52–62 × 5–5.5 µm, smooth, hyaline, filled with minute lipid bodies; senescent ascospores 1–3-septate (one ascospore observed with 6 septa) and pale brown. **Paraphyses** 2–3 µm diam., septate, obtuse at the top. **Perithecial surface** composed by a dark brown *textura angularis*. **Hairs** slightly tapering, with an obtuse apex, up to 120(200) × 7–10 µm, thick-walled, 2–3-septate, dark brown, with subglobose, thick-walled basal cell.

Habitat: on living and dead thalli of *Sphagnum* spp.

Material studied: USA: Maine, Westbrook, on thallus of *Sphagnum* sp., *sine die* (K(M) 190779), holotypus. THE NETHERLANDS: Tilburg, Kaaistoep, 51°32'42.67" N, 5°1'35.39" E, on *Sphagnum denticulatum*, 15-06-2013 (LR 13-046). Tilburg, Kaaistoep, on *Sphagnum denticulatum*, 02-07-2013 (BD 13/042, GENT). BELGIUM: Mol, Buitengoor, 51°13'3" N 5°10'45" E, on *Sphagnum* sp., 21-06-2014 (BD 14/049, GENT).



Biotope of the collection LR 13-046

Discussion

Although most *Hilberina* species are lignicolous, some are foliicolous, herbicolous, graminicolous or even bryophilous. *Hilberina sphagnorum* (P. Crouan & H. Crouan) A.N. Mill. & Huhndorf is another species occurring on *Sphagnum*. This species clearly differs from *H. sphagni* by its smaller slightly bent ascospores, with narrowly rounded ends, measuring only 33–40 × 6–8 µm. A distinction based on ascospore septation only is unadvisable because, although MILLER *et al.* (2014) describe *H. sphagnorum* with one-celled ascospores, SVRČEK (1971) mentions the ascospores being 1-5-septate when mature.

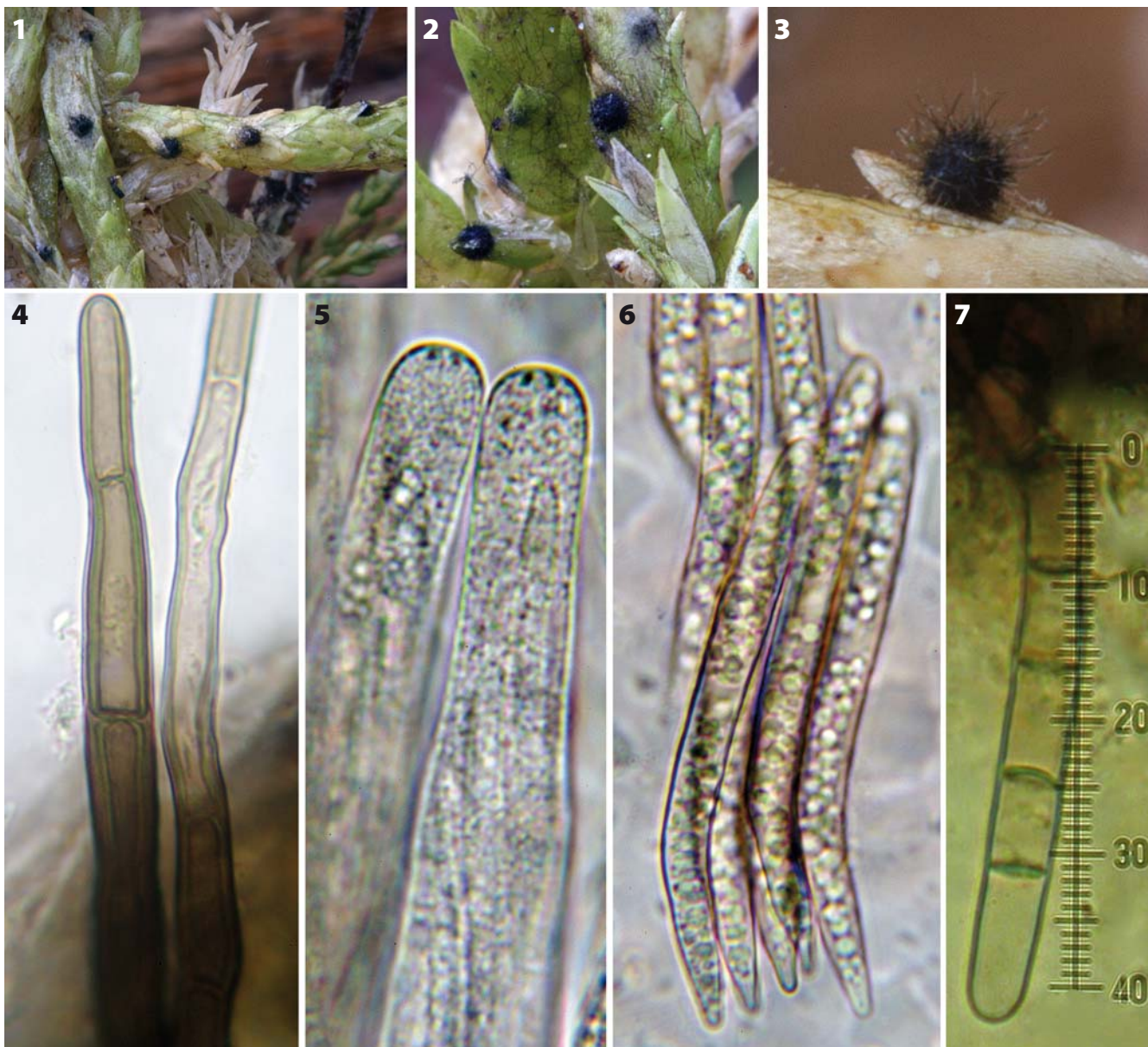
A close relationship between *H. sphagni* and *H. caudata* (Fuckel) Huhndorf & A.N. Mill. is suggested by similarities in ascomata and ascospores, but *H. caudata* has however slightly wider ascospores and hairs with an acute apex.

As known for several *Hilberina* species, some asci may contain only four mature ascospores. In these 4-spored asci, the ascospores can reach up a length of 70 µm.

The species was up to now only known from the type collection from the USA but could be common in Europe as well.

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Hilberina sphagni

1-3. Ascomata (LR 13-046). 4. Hairs (LR 13-046). 5. Asci (LR 13-046). 6. Young guttulate ascospores (LR 13-046). 7. Senescent ascospore (BD 14/049). Photos: 1-6 - L. Rommelaars; 7 - B. Declercq.

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