

A NEW SPORIDESMIUM FROM INVERNESS-SHIRE

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ABSTRACT. A new hyphomycete, *Sporidesmium hourniense* B. C. Sutton, is described from *Rhododendron* leaves in leaf litter samples from Inverness-shire.

Samples of decomposing *Eucalyptus* leaf litter, collected by Dr David Minter from Kinloch Hourn, Inverness-shire, were found to be mixed with various other types of plant debris when examined critically upon return to the laboratory. Amongst this material, several leaves of *Rhododendron* yielded a species of *Sporidesmium* which has not been described in the several modern accounts of this genus (Ellis, 1971, 1976; Hughes & Illman, 1974; Matsushima, 1971, 1975; Sutton 1973).

The first dichotomy used by Ellis (1976) in providing a key to 59 species is a distinction between euseptation and pseudoseptation (distoseptation, Luttrell, 1963) of the conidia. The new species, *S. hourniense*, is clearly euseptate and therefore should be compared with species showing similar septation. Of the euseptate species with more or less cylindrical dark brown conidia, several are characterised by very short conidiophores in comparison to their long conidia. Such species are *S. anglicum* (Grove) M. B. Ellis, *S. hormiscioides* Cda, *S. paludosum* M. B. Ellis, *S. raphiae* M. B. Ellis, *S. larvatum* Cke & Ell. and *S. harknessii* (Sacc.) M. B. Ellis. None match Dr Minter's Scottish collection which has conidiophores of similar length to the conidia. Of the remaining species, *S. valdivianum* (Speg.) M. B. Ellis and *S. cambrense* M. B. Ellis have a paler cell at the end of the conidia, in *S. socium* M. B. Ellis there is a paler cell at the conidial apex but the whole conidium is distinctly fusiform rather than cylindrical, *S. nodipes* (Penz. & Sacc.) Hughes shows distinctive nodulose swelling along the conidiophore, and *S. rubi* M. B. Ellis has gradually tapered rather than cylindrical conidia. These features distinguish such taxa from the *Sporidesmium* on *Rhododendron*. None of the species described from Papua New Guinea and Japan by Matsushima (1971, 1975) or from Canada by Sutton (1973) and Hughes & Illman (1974) are closely related to the new species. Several other *Sporidesmium* species have been described in isolated accounts but these are mostly species with either very short conidiophores, distoseptate conidia, or other peculiarities that distinguish them from *S. hourniense*.

Sporidesmium hourniense B. C. Sutton, sp. nov., Fig. 1.

[etym. (Kinloch) Hourn et-ense suff. geogr.]

Coloniae effusae, diffusae, dispersae. *Mycellium* partim immersum, plerumque superficiale, ex hyphis ramosis, septatis, brunneis, laevibus, anastomosantibus, 2-4 μ m crassis compositum. *Conidiophora* macronematosa, mononematosa, ex mycelio superficiali oriunda, erecta, nonramosa, recta, atrobrunnea, laevia, 6-7-septata aequidistantia, 115-165

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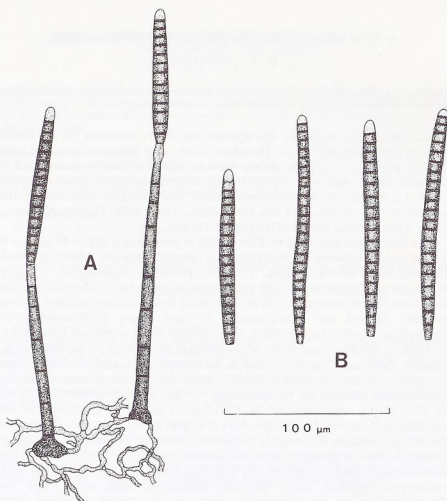


FIG. 1 *Sporidesmium hourniense*. A, conidiophores with attached conidia; B, mature conidia.

μm longa, basim versus $6\ \mu\text{m}$ crassa, apicem versus gradatim diminuta et $5\ \mu\text{m}$ crassa; cellula basalis irregulariter dilatata, usque ad $20\ \mu\text{m}$ crassa. Cellulae conidiogenae holoblasticae, monoblasticae, terminales, determinatae, conidio apicali singulo producentes. Conidia $105\text{--}139 \times 8\text{--}9\ \mu\text{m}$, solitaria, sicca, recta vel leniter curvata, laevia, atrobrunnea, $17\text{--}24$ -septata prominentia aequidistantia, atriora; cellula apicalis pallidiora, obtusa, et cellula basalis truncata.

Type. In foliis emortuis *Rhododendri* sp., Kinloch Hourn, Inverness-shire, Westerness, Scotland, 23 vi 1978, D. W. Minter, IMI 229554 (holo. IMI, iso. E).

Colonies effuse, diffuse and scattered, barely visible to the unaided eye. Mycelium partly immersed but mostly superficial, composed of irregularly branched, septate, brown, smooth, frequently anastomosing hyphae $2\text{--}4\ \mu\text{m}$ wide. Conidiophores macronematous, mononematous, formed from

the superficial mycelium, erect, unbranched, straight, dark brown, smooth, with 6-7 equidistant septa, 115-165 μm long \times 6 μm wide near the base, gradually tapered towards the apex which is 5 μm wide; basal cell irregularly enlarged, up to 20 μm diam. Conidiogenous cells holoblastic, monoblastic, terminal, determinate, producing a single apical conidium. Conidia 105-139 \times 8-9 μm , solitary, dry, straight or slightly curved, smooth, dark brown, with 17-24 prominent, darker, equidistant eusepta; the obtuse apical cell is paler than the rest of the conidial cells, and the basal cell is truncate.

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