



1, Ascocarps ($\times 25$); 2, ascocarp initials; 3, cross section of ascocarp peridium; 4, surface view of ascocarp peridium; 5, vegetative hyphae; 6, ascogenous hyphae and very young asci; 7, asci; 8, ascospores (top two rows showing side view and lower two rows showing face view). (2-8, $\times 1500$).

Connersia rilstonii (Booth) Malloch, comb. nov.

■ *Pseudeurotium rilstonii* Booth, Mycol. Pap. C.M.I. 83: 10. 1961.

COLONIES on corn meal agar attaining a diameter of 30-45 mm in 21 days at room temperature, arachnoid to subfloccose, thin, colourless, black-dotted with groups of ascocarps in certain areas, with reverse colourless or very pale yellowish at the immediate centre. HYPHAE hyaline or occasionally very pale yellowish, smooth, branched, mostly rather remotely septate, sometimes with a series of ampulliform swellings on the larger cells, frequently anastomosing, 1.0-6.5 μ in diameter. ASCOCARP INITIALS represented by swollen side branches of the vegetative hyphae, becoming surrounded by swollen cells arising from neighbouring hyphae. ASCOCARPS 130-380 μ in diameter, gregarious and superficial on the natural substrate, usually covered by a common arachnoid hyphal layer, individually arachnoid-tomentose with undifferentiated hyphae, very fragile and easily broken at maturity, subglobose to globose, dull grayish olive at first but soon black, opaque, opening irregularly.

ASCOCARP PERIDIUM dark brown, composed of two distinct tissue types, as thick as 28μ when young but only one cell deep at maturity and about $1.5-2.5 \mu$ thick. Peridial cells of the outer layer dark brown, thick-walled, brittle at maturity, forming a regular pseudoparenchyma in surface view, flattened in cross section, $2.5-8.0 \mu$ in diameter, $1.5-2.5 \mu$ in cross section. Peridial cells of the inner layer hyaline to yellowish, thin-walled, $3.0-8.0 \times 1.5-5.0 \mu$, forming a layer about 8 cells deep at first, entirely evanescent at maturity. ASCOGENOUS SYSTEM arising from the innermost peridial layers and growing into the centrum, interwoven and tangled, branched, sometimes with what appear to be clamp connections. ASCI arising from simple or proliferating croziers at the highly branched tips of the ascogenous system, often appearing to occur in helicoid chains when borne on proliferating croziers, irregularly disposed, clavate to ovoid, subglobose just prior to dissolution, 8-spored, evanescent, $7-9 \times 4.6-6.0 \mu$. ASCOSPORES narrowly bean-shaped in side view, elliptical in face view, not markedly compressed in any plane (thus round in radial section), hyaline, pure white in mass, smooth, without appendages, lacking germ pores, 1-celled, not dextrinoid, swelling considerably upon germination, $3.7-5.7 \times 1.7-2.3 \mu$. CONIDIA lacking.

SUBSTRATE: On underside of bark of dead poplar and on plywood.

DISTRIBUTION: Ontario.

COLLECTION: Ont., Thunder Bay Dist., Black Sturgeon Lake, on underside of bark of dead standing poplar, 9.IX.1973, DAOM 145387 (Malloch).

NOTES: This is the first report of *C. rilstonii* outside of England, where it was first described. Booth, in his original diagnosis, described the spores as light brown at maturity, but I was unable to confirm this with either the Canadian collection or a portion of the holotype deposited at TRTC. Since it has hyaline ascospores, lacks conidia, and occurs on wood, it should not be maintained in the genus *Pseudeurotium*. The other genera of cleistothelial ascomycota are also unsuitable and I therefore propose the following new genus, named in honor of Ibra Connors to whom this fascicle of Fungi Canadenses (Nos. 21-40) is dedicated.

CONNERSIA Malloch, *gen. nov.*

Ascocarpe subglobosae ad globosae, ad olivaceis nigrae, nonstiolatae, tomentosae. Asci irregulariter dispositi, ad subglobosi clavati, evanescentes, octospori. Ascosporae nonseptatae, laeves, hyalinae, sine poris, reniformes. Conidia nulla.

Typus nominis generis: Pseudeurotium rilstonii Booth.

There are two other genera of cleistothelial ascomycetes with hyaline, bilaterally symmetrical ascospores: *Europhium* Parker and *Eremomyces* Malloch & Cain. *Europhium* species are essentially nonstiolate species of *Ceratocystis* and are characterized by *Leptographium*-type conidial structures and by ascospores with prismatic gelatinous envelopes. *Eremomyces* is a loculoascomycete and hence unrelated.

C. rilstonii is one of several species of cleistothelial ascomycetes occurring under the bark of dead deciduous trees. I have collected *Fragosphaeria purpurea* Shear and *Cryptendoxyla hypophloia* Malloch & Cain in this habitat as well as species of *Ceratocystis*. Like *Fragosphaeria* and *Cryptendoxyla*, *Connorsia* appears to be a member of the Pseudeurotiaceae.

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