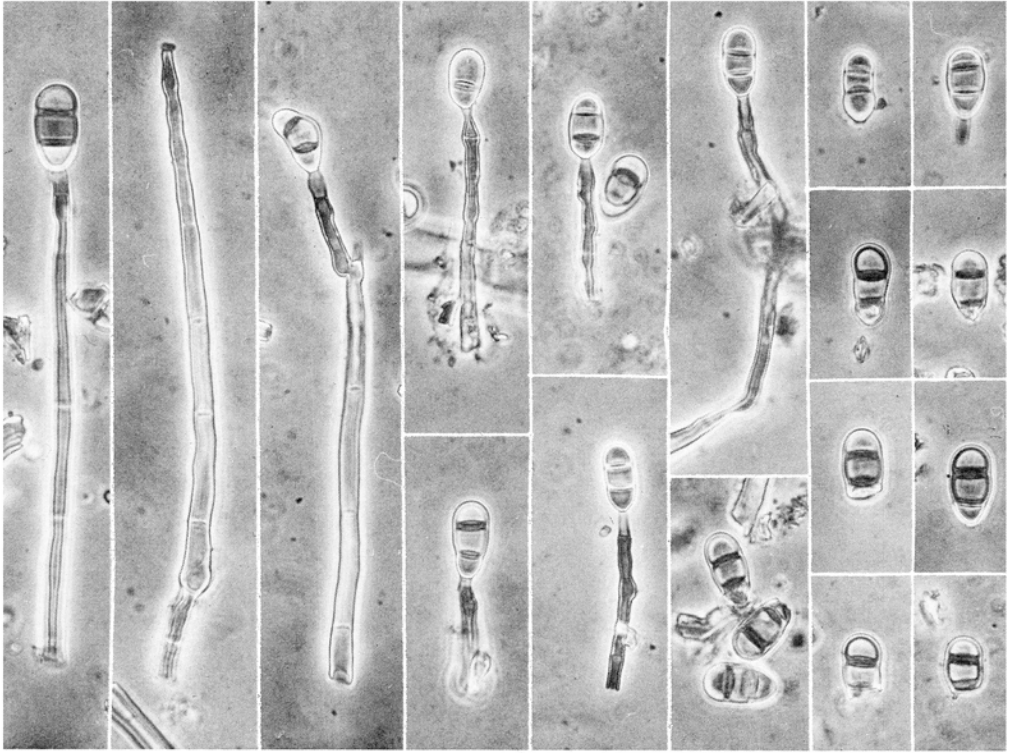


ENDOPHRAGMIELLA COLLAPSA



Conidiophores and conidia. $\times 640$. From DAOM 28657.

Endophragmiella collapsa (Sutton) comb. nov.

\equiv *Endophragmia collapsa* Sutton, Mycological Papers 132: 54. 1973.

COLONIES effuse, thin, brown. MYCELIUM immersed and superficial, composed of branched, septate, subhyaline to golden brown to pale brown hyphae $1.5\text{-}3.5\mu$ wide. CONIDIOPHORES scattered or in groups of up to 3, erect, arising as branches of superficial or immersed hyphae: they are simple, rarely with a lateral branch, mostly straight or flexuous, occasionally irregularly bent, subcylindrical, septate at $11\text{-}25\mu$ intervals, at first $20\text{-}90\mu$ long, $3.6\text{-}4.5\mu$ wide just above the base. Conidiophores are pale golden brown to brown for most of their length, distally subhyaline and $2\text{-}3.2\mu$ wide, and they terminate in a conidiogenous cell which produces a terminal blastic conidium. After conidium secession by a rupture below the apex of the conidiogenous cell, the penultimate cell proliferates by the extension of its distal septum into the old conidiogenous cell; the proliferation extends $3\text{-}9\mu$ beyond the open end. The circular base of the proliferated septum finally appears as an inwardly projecting ring; the wall of the old conidiogenous cell persists as a sheath around the basal part of the proliferation. A septum is formed in the proliferation to delimit a new conidiogenous cell which then produces a terminal blastic conidium. Up to 8 such successive, percurrent, conidiogenous proliferations have been seen in a single conidiophore, and the base of each proliferation is sheathed by the wall of the previous conidiogenous cell. Proliferated conidiophores reach a length of 160μ , the individual proliferations being more or less cylindrical to ovoid to obpyriform. CONIDIA are solitary, blastic, terminal on the slightly tapered end of the conidiogenous cell and of each successive percurrent proliferation. They are predominantly 2-septate (rarely 1- or 3-septate), obovoid to more or less ellipsoidal, and the base of seceded conidia bears a cylindrical, hyaline to subhyaline frill about $1\text{-}1.5\mu$ long and $1.5\text{-}3\mu$ wide, composed of a detached portion of the conidiogenous cell. Conidia are smooth, barely constricted at the septa, with the two distal cells pale brown to dark brown, thick-walled (up to

1.5 μ) with the septa up to 1.8 μ thick: the paler, thinner-walled basal cell is sometimes collapsed. Conidia measure 14.4-17(-20) \times 7.2-8.3(-9) μ .

SUBSTRATE: Decaying wood and bark of *Acer*, *Alnus*, and an unidentified hardwood tree: the fungus is associated with *Chloridium* sp. in two collections.

DISTRIBUTION: Quebec, Ontario, Manitoba.

COLLECTIONS: **Que.**, near Pink Lake, Gatineau Park, IX. 1952, DAOM 28783 (S.J.H.); **Ont.**, Merivale, VII.1952, DAOM 28657 (S.J.H.); **Man.**, Jessica Lake, Whiteshell Provincial Park, VII.1966, WINF(M) 6183c (B.C. Sutton) (type).

NOTES: *Endophragmiella collapsa* may be distinguished readily from *E. pallescens* (Fungi Canadenses No. 122). The latter has evenly pigmented conidia with thinner walls (up to 0.7 μ thick): in the former, conidia are thicker-walled (up to 1.5 μ), and the distal cells are more deeply pigmented than the basal one.

S.J. Hughes