***Jobellisia luteola* (Ellis & Everh.) M.E. Barr PDD 90058 (= AEB 964); U.S. National Fungus Collections (BPI), Catalog #: BPI 878351**
https://scd.landcareresearch.co.nz/Specimen/PDD%2090058
See also *Jobellisia nicaraguensis* (Ellis & Everh.) M.E. Barr PDD 92313 (= AEB 971)

Substrate: dead, downed, wet, decorticated black ash (*Fraxinus nigra*) log; **Collection date:** 29 August 2006
Collection site: United States, Minnesota, West of the USFS lease lot cabin group on Snowbank Lake, roughly 20 miles NE of Ely and 15 miles S of the Canadian border at the edge of the Boundary Waters Canoe Area Wilderness, Black ash bog west of the Snowbank Trail and south of the Flash Portage; Latitude/Longitude: 48.107522 -91.561753 +-13946m.
Collectors: Ann Bell & Dan Mahoney
Identifier: Andrew Miller
Voucher materials: dried herbarium specimen from 29 August 2006 accompanied by 2 Shear's mounting fluid (SMF) semi-permanent microscope slides; Dan's dissecting and compound microscope photos from fresh living material; references consulted.

References consulted: Presently (Dec. 2025), Index Fungorum recognizes 8 species of Jobellisia: *Jobellisia barrii*, *Jobellisia fraterna*, *Jobellisia guangdongensis*, *Jobellisia luteola*, *Jobellisia nicaraguensis*, *Jobellisia peckii*, *Jobellisia saliciluticola*, & *Jobellisia viridifusca*. *Jobellisia rhynchostoma* is now recognized as *Bellojisia rhynchostoma* (Höhn.) Réblová 2008

1. Barr M.E. 1993. Redisposition of some taxa described by J.B. Ellis. Mycotaxon 46: 45–76. She described the new genus *Jobellisia.* See the next page for her comments on the genus and her description & illustrations of *Jobellisia luteola*.
2. Huhndorf S.M., Fernandez F.A. & Lodge D.J. 1999. Neotropical Ascomycetes 9. *Jobellisia* species from Puerto Rico and elsewhere. Sydowia 51(2): 83–196. Two new species are described (*J. barrii* & *J. fraterna*). See their description and illustrations of *J. luteola* on the page after next.
3. Liu F., Hu D-M., & Cai L. 2012. *Conlarium duplumascospora* gen. et. sp. nov. and *Jobellisia guangdongensis* sp. nov. from freshwater habitats in China. Mycologia 104(5): 1178–1186. Aside from their new species, they also provide a key to 7 species that include *Jobellisia viridifusca* C.K.M. Tsui & K.D. Hyde and *Jobellisia saliciluticola* P. Leroy described in 2001 & 2006 resp.
4. Untereiner W.A. et al. 2013. Molecular phylogeny of Boliniales (Sordariomycetes) with an assessment of the systematics of *Apiorhynchostoma*, *Endoxyla* and *Pseudovalsaria.* Mycologia 105(3): 564–588. Includes *Jobellisia peckii* (Howe) Unter. & Réblová, comb. nov., the most recent species described in the genus. It most closely resembles *J. fraterna* Huhndorf, Lodge & F.A. Fernández.
5. Mycoportal: 14 records mostly by Andrew Miller from the Smokey Mts. (These do not include the earlier records in Barr 1993).

The most recent publications that briefly review current knowledge of the sequencing and morphology of the family Jobellisiaceae, genus *Jobellisia* and its species are noted below:
6. Luo Z.L., Hyde K.D., Liu J.K. et al. 2019. Freshwater Sordariomycetes. Fungal diversity 99, 451–660.
7. Huang S.K., Hyde K.D., Mapook A. et al. 2021. Taxonomic studies of some often over-looked Diaporthomycetidae and Sordariomycetidae. Fungal Diversity 111, 443–572.
8. Chethana K.W.T., Niranjan M., Dong W. et al. 2021. AJOM new records and collections of fungi – 101-150. Asian Journal of Mycology 4(1), 113–260.

Barr, M.E. 1993. Redisposition of some taxa described by J.B. Ellis. Mycotaxon 46: 45–76. A new genus *Jobellisia* is described to accommodate *Letendraea luteola* and *Herpotrichia nicaraguensis*. Its brief description and portions that describe and illustrate the new species *Jobellisia luteola* are copied below.

Page 60: *Jobellisia* Barr, gen. nov. Species typicus *Letendraea luteola* Ellis & Everh.

Page 61: The new genus is required to accommodate a group of species having brown, ellipsoid, one-celled or one-septate ascospores that usually contain terminal germ pores. Asci are typical of the Clypeosphaeriaceae and ascomata are gregarious or separate, papillate or beaked, immersed in or erumpent from the substrate. Stromatic tissues form a closely adhering crust around erumpent ascomata or beaks of immersed ascomata.

Jobellisia luteola (Ellis & Everh.) Barr. comb. nov. – Figs. 2 n, o

Letendraea luteola Ellis & Everh. Proc. Acad. Nat. Sci.

Philadelphia 47: 415. 1895

Ascomata closely gregarious, superficial, globose, 385–735 µm diam; apex light reddish, abruptly papillate, ostiole periphysate; peridium reddish-brown, ca. 40–45 µm wide, compressed rows of cells, surrounded by layer of dull yellowish cells and granular matter, up to 30 µm wide. **Asci** p. sp. 45–80 × 5–7.5 (–9) µm, stipe 20–40 µm long, cylindric, unitunicate; apical ring narrow, nonamyloid, pulvillus refractive, chitinoid, up to 3.5 µm high. **Paraphyses** narrow. **Ascospores** 9 –12(–16) × 4–5(–6) µm, reddish-brown, ellipsoid, straight or inequilateral, 1-septate; wall smooth, two terminal germ pores; one globule per cell; uniseriate in the ascus.

On rotten wood. Ohio: J.P. Morgan 1109, holotype (NY). Additional material of this species includes: as *L. luteola*? *Populus* decorticated wood, Ontario: Lake Temagami, Temagami For. Reserve, 7 Aug, 1931, H.S. Jackson & S.M. Pady, UT 2605 (BPI); as *L. luteola*, Iowa: Iowa City, 4 Jun 1936, G.W Martin (slides FH, NY); as *Neopeckia diffusa*, old wood, New York: Old Forge, Adirondacks, 22 Aug 1934, R.F. Cain 3277 (GA 7883).

This fungus had been assigned to the Hypocreales because of bright pigmentation and soft texture (Seaver 1910), but an annotation by A. Rossman on the sheet bearing the holotype suggested that it could belong in the Amphisphaeriaceae. The globose ascomata and well-developed pulvillus in the ascus are characteristics that indicate its position in the Clypeosphaeriaceae. *Letendraea* is a genus of bitunicate fungi in the Tubeufiaceae (Pleosporales) (Samuels 1973, Barr 1987b).

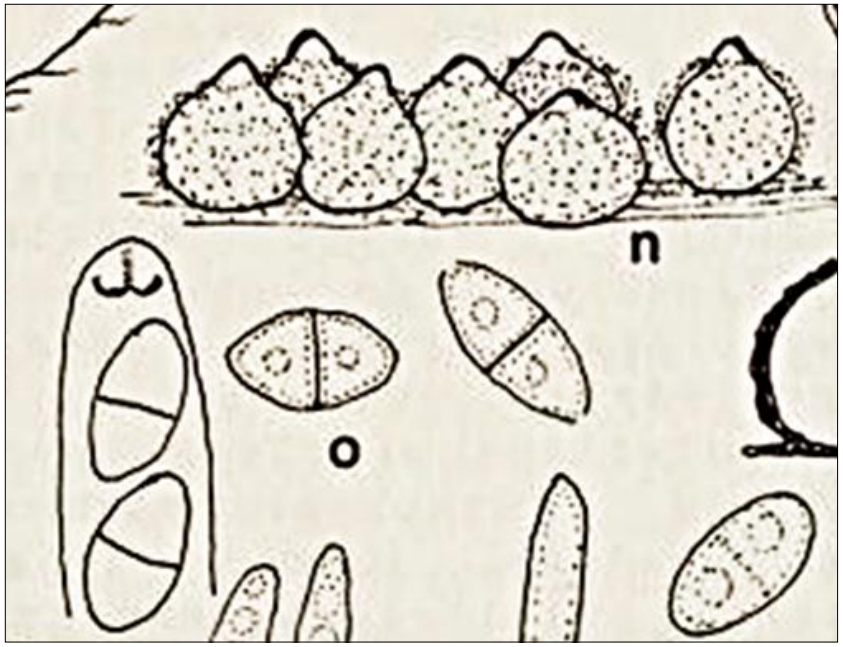


Fig. 2. n, o. *Jobellisia luteola*. n. habit of ascomata, o. ascus apex and ascospores

Huhndorf S.M., Fernandez F.A. & Lodge D.J. 1999. Neotropical Ascomycetes 9. *Jobellisia* species from Puerto Rico and elsewhere. Sydowia 51(2): 183-196. Pages 190 & 191 are reproduced here.

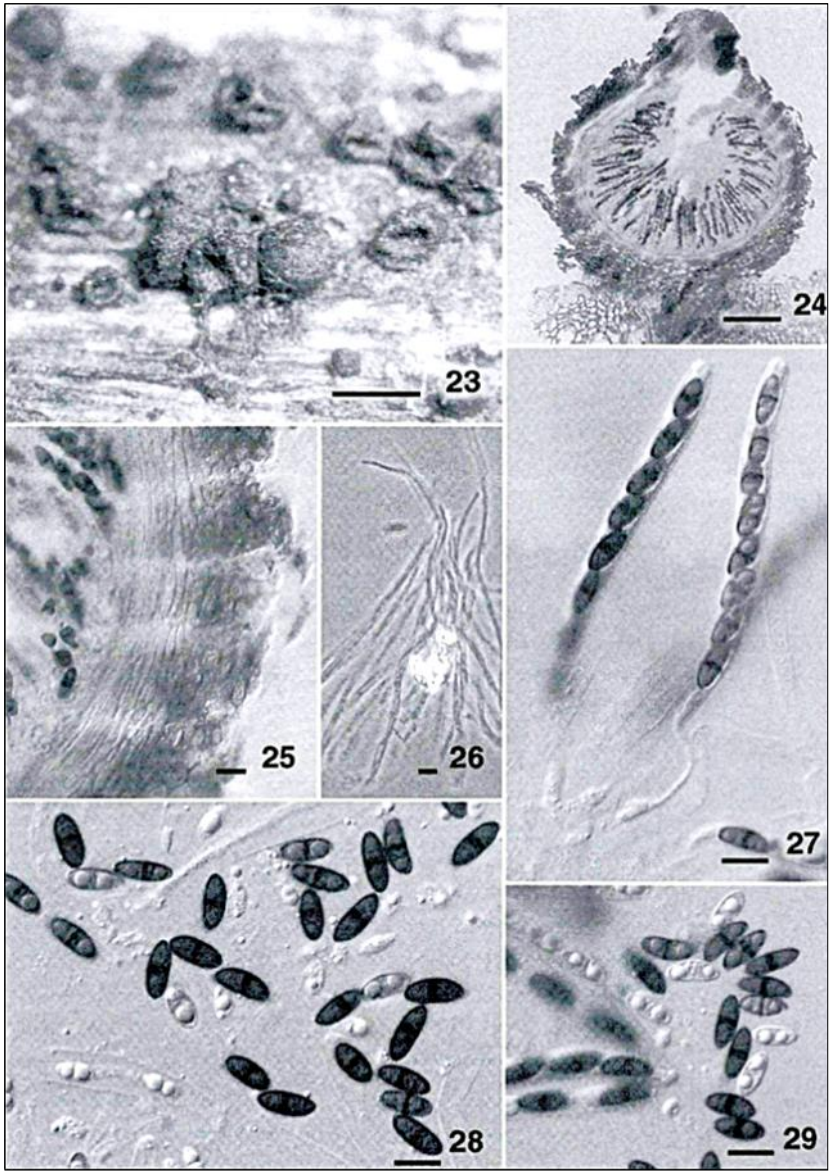
Jobellisia luteola (Ellis & Everh.) M. E. Barr. - Figs. 23-29.

Ascomata obpyriform, short-beaked, collapsing when dried; 450–575 µm diameter, 350–450 µm high; numerous; gregarious; superficial; surface roughened; orange-yellow-brown with slightly darker beak, appearing dark brown when dried. Ascomal wall of *textura angularis-globosa* in surface view; in longitudinal section 2-layered, inner layer 20–25 µm thick, composed of 10–12 layers of elongate to flattened, hyaline, pseudoparenchymatic cells, outer layer 30–35 µm thick, composed of 10–12 layers of polygonal to globose, brown, pseudoparenchymatic cells, breaking and rupturing on the ascomal surface. Ascomatal apex conical, short beaked, 125–215 µm high, 115–150 µm wide, wall 2-layered, ostiole circular, 40–50 µm wide, with periphyses. **Paraphyses** 4–4.5 µm wide, abundant, persistent, with gelatinous coating. **Asci** elongate clavate; 100–135 x 7.5–8 µm, long stipitate, spore-bearing part 75–90 µm long; numerous; basal and lateral, lining the peripheral wall of the centrum; unitunicate; apex rounded, with large, refractive, two-layered ring, 3–3.5 µm high, 4.5–5.5 µm wide; with 8, uniseriate ascospores. **Ascospores** ellipsoid; 11–14 x 4.5–5.5 µm; straight to slightly curved; reddish brown with darker pigment at the septum; wall smooth with single terminal germ pores; 1-septate; without sheath or appendages.

Habitat. - On decaying wood.

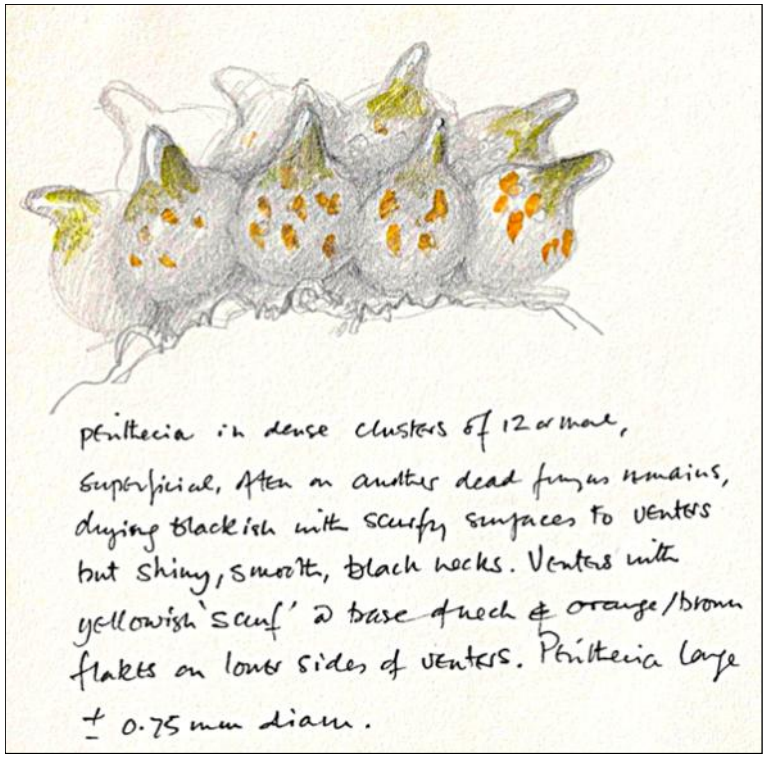
Known distribution. - Canada, U.S.A. (Iowa, Michigan, New York, North Carolina, Ohio) (Barr 1993).

Material examined. - U.S.A. North Carolina, Macon Co., Highlands, Whiteside Mountain, 35" 01' 09" N, 83° 16' 25" W, 1000 m, 7 Oct 1996, on 15 cm log, SMH 2753 with Q. X. Wu, J. C. Wei, G. M. Mueller, B. Strack, & FF. Michigan, Marquette Co., Huron Mountain Club, Mountain Lake, lakeside, end of road, 46° N, 87" W, 17 Aug 1997, on 25 cm log over the water, SMH 3349, with M. Huhndorf (F).

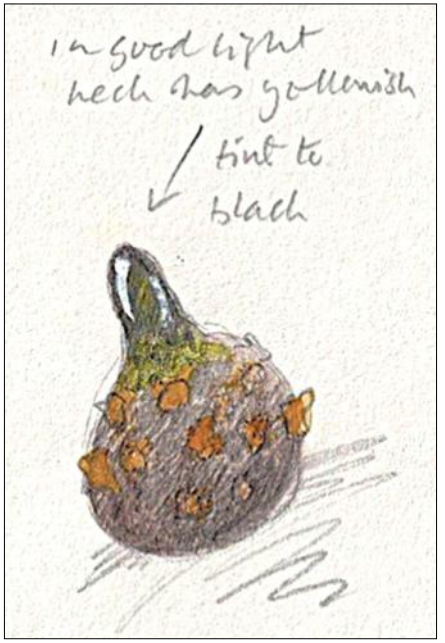


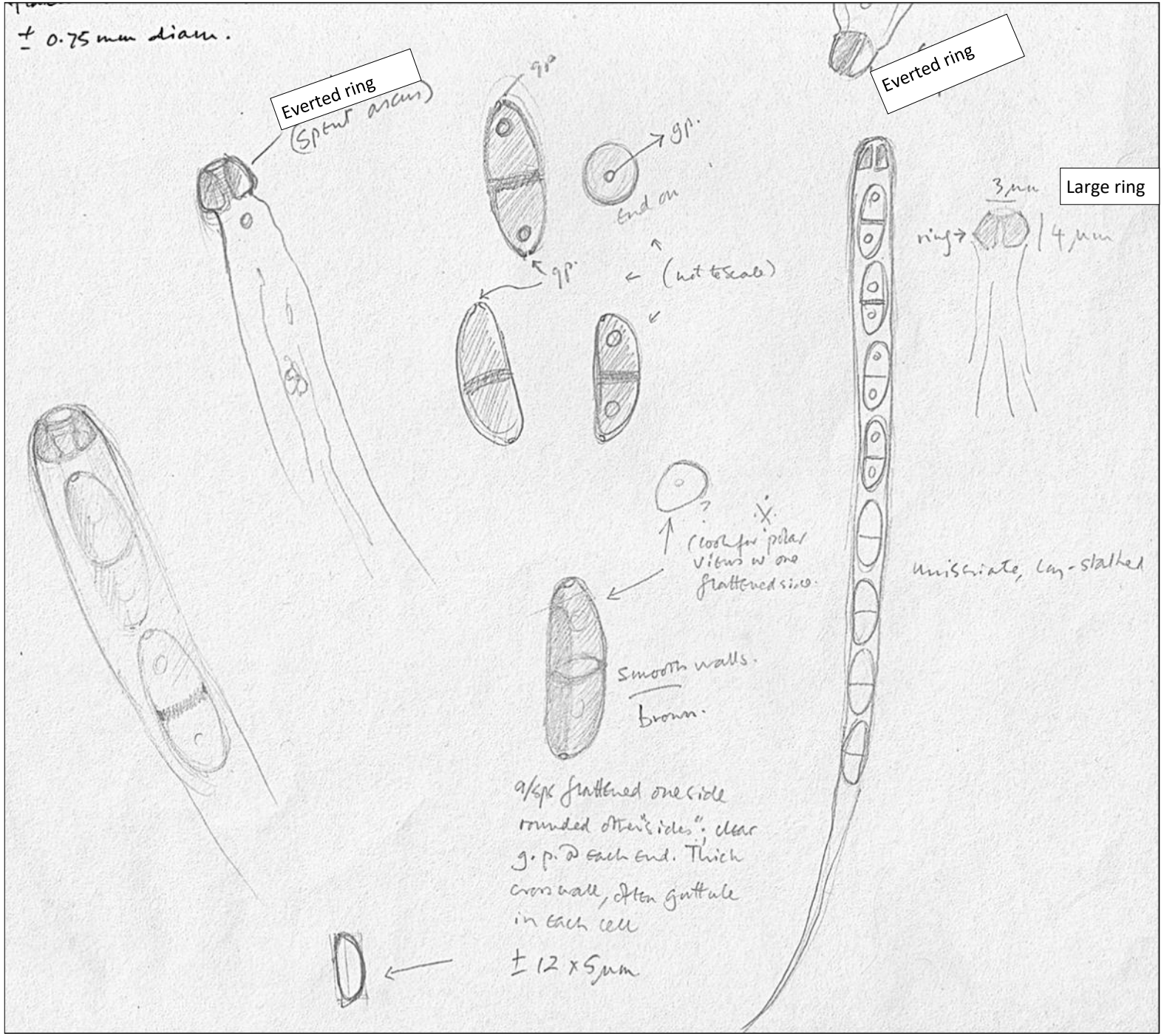
Figs. 23–29. *Jobellisia luteola.* 23. Ascomata on substrate. 24. Longitudinal section through ascoma. 25. Longitudinal section through ascomatal wall. 26. Paraphyses. 27. Ascus. 28, 29. Ascospores.
Fig.23 = macroscopic view; 24 = BF; 25, 27–29 = DIC; 26 = PH.
Scale bars: 23 = 0.5 mm; 24 = 100 µm; 25–29 = 10 µm
Figs. 23–25, 28 from SMH 2753; 26, 27, 29 from SMH 3349.

Description of AEB 964:



Ascomata (see Ann's drawings) superficial, clustered, numerous, with prominent necks (+/- 0.75 mm in diameter); venters blackish and covered with variable amounts of a yellow to yellow-orange scurfyness; necks smooth, short cone-shaped to elongate and 'rubbery'-looking, dull orangish-red to more often blackish. I believe the pigmented necks are present when the water there has taken up pigment from the adjacent yellow-orange scurfyness on the venter exterior. **Peridium** when young mostly orangish in squash mounts, thickish with cells arranged in a textura intricata pattern. Older perithecia with a reddish-black color replacing the yellow to yellow-orange. **Paraphyses** numerous, filamentous but robust, simple, septate, hyaline and attenuate. **Asci** ca 110 X 6 µm with 8 uniseriately arranged ascospores, a thick, prominent, nonamyloid apical ring and a moderately long stalk that tapers from the lowest ascospore to the ascus base. **Ascospores** 2-celled with a thick (double-lined) median transverse septum (no indentation at the septum), smooth, brown, narrow elongate and symmetrical in face view, somewhat plano/shallow convex in side view with a slight narrowing at the extremities, usually with a prominate guttule in each cell (this guttule larger and more like a deBary bubble in Melzer's reagent) & with a small germ pore at each end. Ascospores mostly 11–12.5 X 4–5 µm.





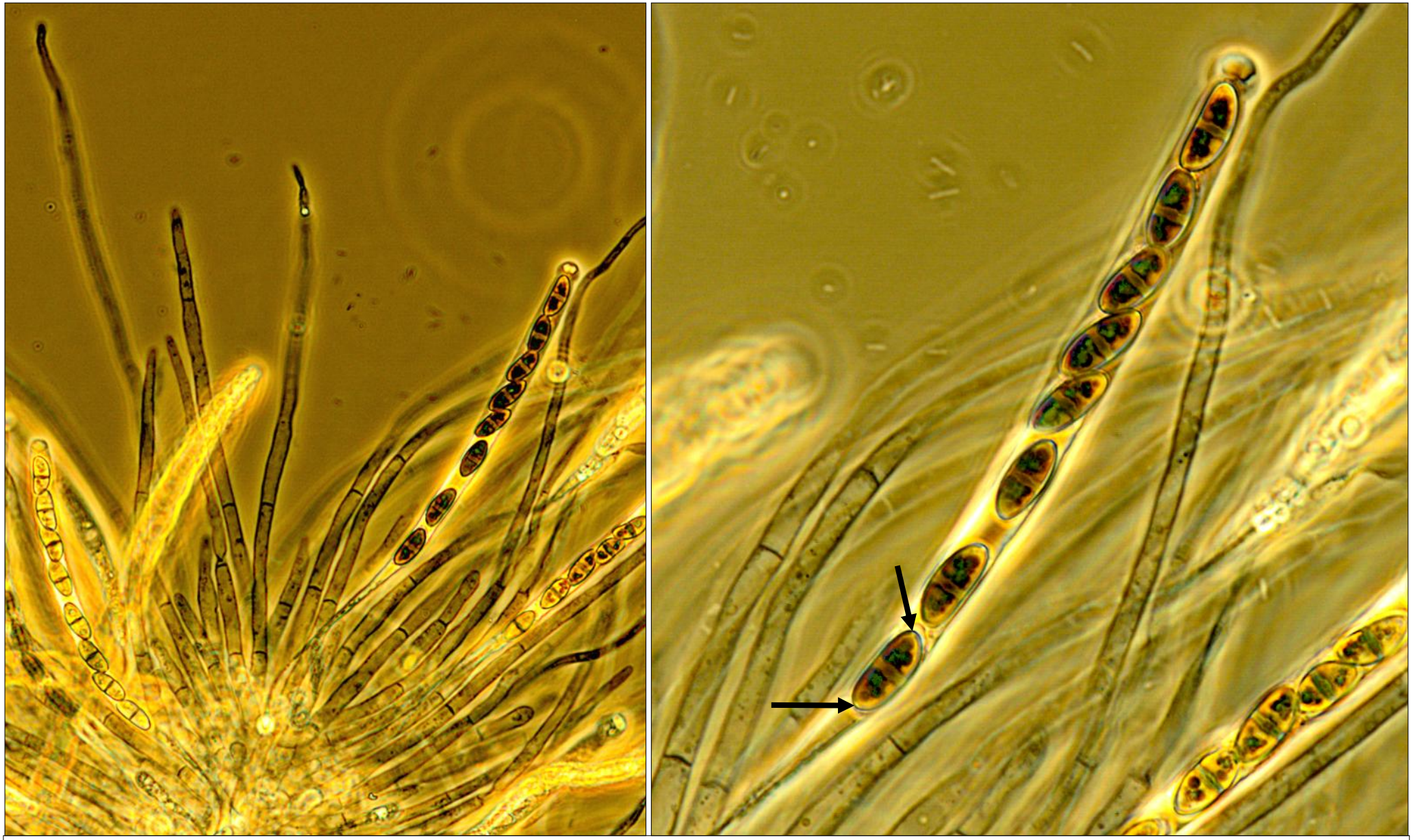
Ann's original notes from fresh material in 2006.

AEB 964. Closely clustered young fresh ascomata exhibiting a mealy-looking yellow tomentum on the venter & a short black neck. Photographed in-situ on wet dead *Populus* wood. The next three pages reveal gradually older ascomata with a changing tomentum.

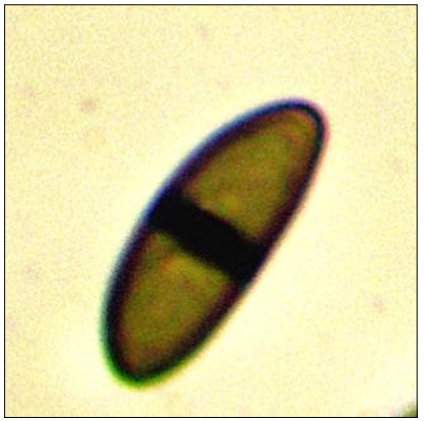
AEB 964. Another cluster of young fresh ascomata exhibiting a yellow tomentum on the venter & a relatively short black cone-shaped neck. Note that yellow areas are slowly disappearing to reveal black areas beneath. Photographed in-situ on wet dead *Populus* wood.

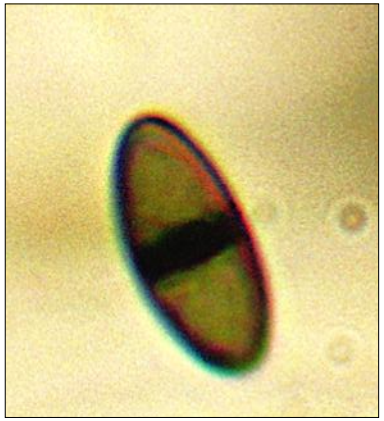
AEB 964. A cluster of older fresh ascomata exhibiting less of the mealy yellow tomentum on the venter & an ostiole atop the black cone-shaped neck. Black areas on the venter are now more obvious. Photographed in-situ on wet dead *Populus* wood.

AEB 964. Another in-situ cluster of older fresh ascomata with much of their yellow tomentum shed & their black necks coated with water and reddish with pigments from older, now orangish, tomentum fragments. Fully mature drier ascomata are mostly black.



AEB 964. Asci and paraphyses. Both photos the same field of view. Note especially the narrow, cylindrical ascus with 8 uniseriate 1-septate ascospores. Ascospores have a guttule in each cell and 2 apical germ pores (arrowed).





AEB 964. Left photo: Asci & ascospores. Note the prominent ascus apical rings & longish stipes. Right photos: 2-celled ascospores. Note their shapes, color, dark double-sided septa & guttules in each cell.