

***Bombardia bombardia* (Batsch) J. Schröt. PDD 101954 (= AEB 1121) – for further comments on *Bombardia bombardia* see Lundqvist 1972, pp. 74–80. His description & illustrations are reproduced on the next page.**

**Substrate:** dead wet firm decorticated wood

**Collection site:** Clouston Park, Akatarawa Road, Tararua Mts.

**Collection date:** 15 April 2010; **Collector & identifier:** Ann Bell

**Voucher materials:** Dried herbarium specimens (AEB 1121) accompanied by 2 semipermanent Shear's mounting fluid (SMF) slides; Dan Mahoney's photos of in-situ ascomata (Zeiss dissecting microscope) and digital microscopic detail (Olympus BX51 microscope).

**Dan's comments:** Measurements and most other details closely fit the Lundquist description on the next page. Dan's AEB 1121 photos and legends on the pages after that detail what was seen in this collection.

Several ascospore features that differ from those Lundqvist describes and illustrates are worth noting: 1. His brown-black upper cell was not pigmented in AEB 1121 as viewed in water or SMF. Otherwise, its size, shape, truncate base, apical germ pore and smooth surface were the same. The second AEB 1121 in-situ photo of a cluster of ascoma bears evidence to the colorless ascospores as they exude from the ascoma ostiole. In our experience this is often seen in many species of the related genus *Cercophora* where pigmentation of the apical cell occurs late or randomly in the asci, after release or not at all depending on the collection, its stage of development, its location, substrate, etc. 2. The hyaline lower cell or pedicel was usually strongly geniculate (bent) in its lower portion (rather than "somewhat geniculate") and frequently appear faintly septate (although these 'septations' are actually spaces separating variously sized guttules.).

For Ann's other collections of this species see PDD 76461 (= AEB 754) & PDD 92350 (= AEB 1008)

Also for descriptions and illustrations of Ann's 3 collections of *Bombardia bombardia* (AEB 754, 1008 & 1121) see pp. 62, 64 & 65 in her publication 'Bell A. 2005. An Illustrated Guide to the Coprophilous Ascomycetes of Australia. CBS Biodiversity Series No. 3, Centraalbureau voor Schimmelcultures, Utrecht, the Netherlands, 172 pages.

Lundqvist N. 1972. Nordic Sordariaceae s. lat. *Symbolae Botanicae Upsalienses* 20: 1-374.  
 Portions of pages 78 & 79 with a description and illustrations of *Bombardia bombardia* are reproduced below.

*Stromata* 1000–1900 × 430–550  $\mu$ , with a light brown basal byssus and a 60–110  $\mu$  thick, hyaline to yellowish or pink cartilaginous layer composed of 1–1.5  $\mu$  thick, ramified hyphae. Perithecial contents hyaline. *Asci* 300–390 × 13  $\mu$ , with an up to 240  $\mu$  long stipe, a 3.5  $\mu$  wide apical ring, and a  $\pm$  smooth, round subapical globulus. *Spores* 2–3-seriate, at first hyaline, one-celled, vermiform, somewhat geniculate in the lower part, 39–42 × 3.5–4.5  $\mu$ , filled with one series of c. a dozen or more, large oil drops, then two-celled; upper cell brown-black, 11–15 × 7–9.5  $\mu$ , ellipsoidal to ovoid or ampulliform, equilateral, with a truncate base and an apical germ pore; pedicel c. 20–25 × 4–5  $\mu$ . A *gelatinous cauda* attached to each end of the spore, tapering, persistent, solid, c. 12 × 2  $\mu$ .

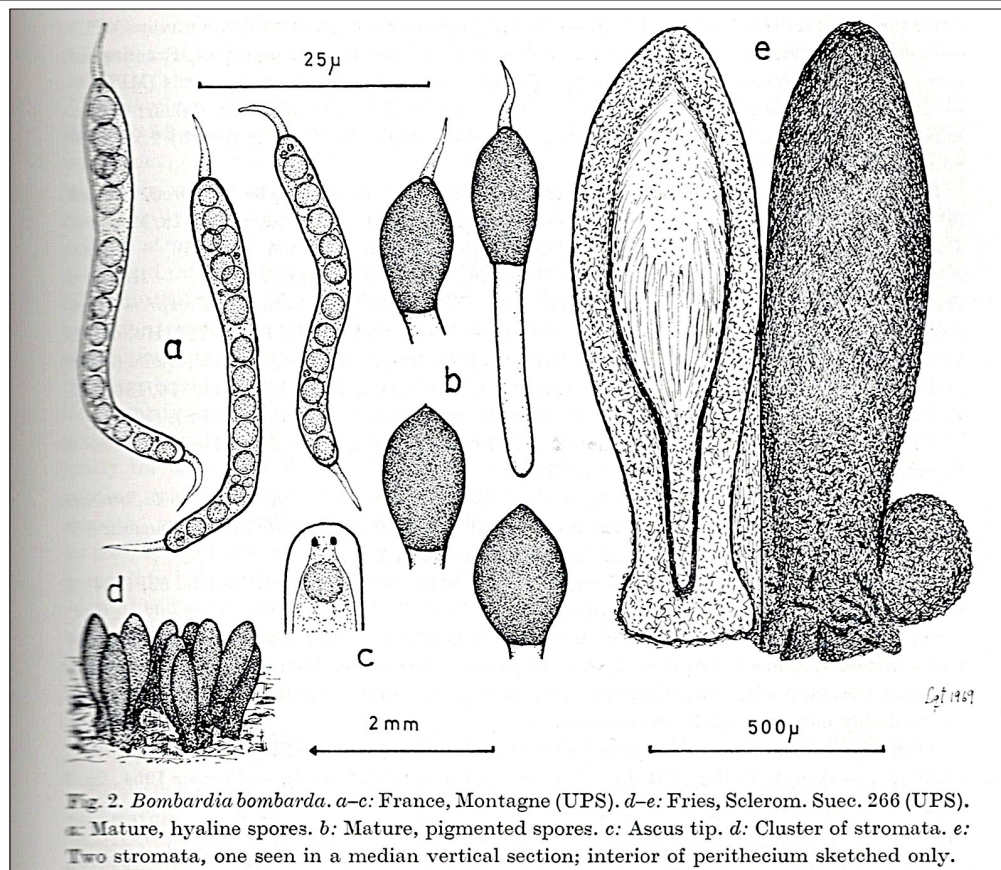
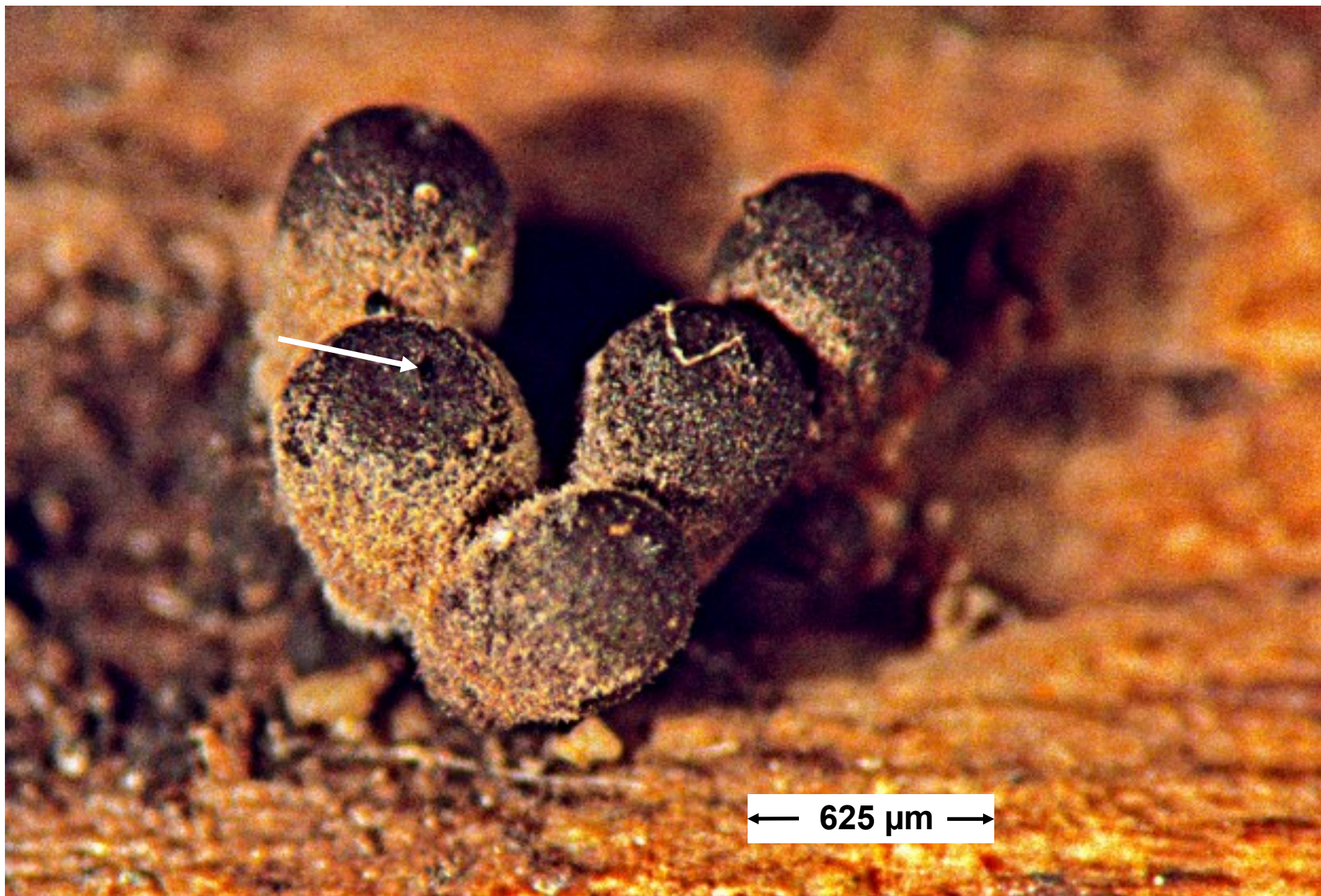


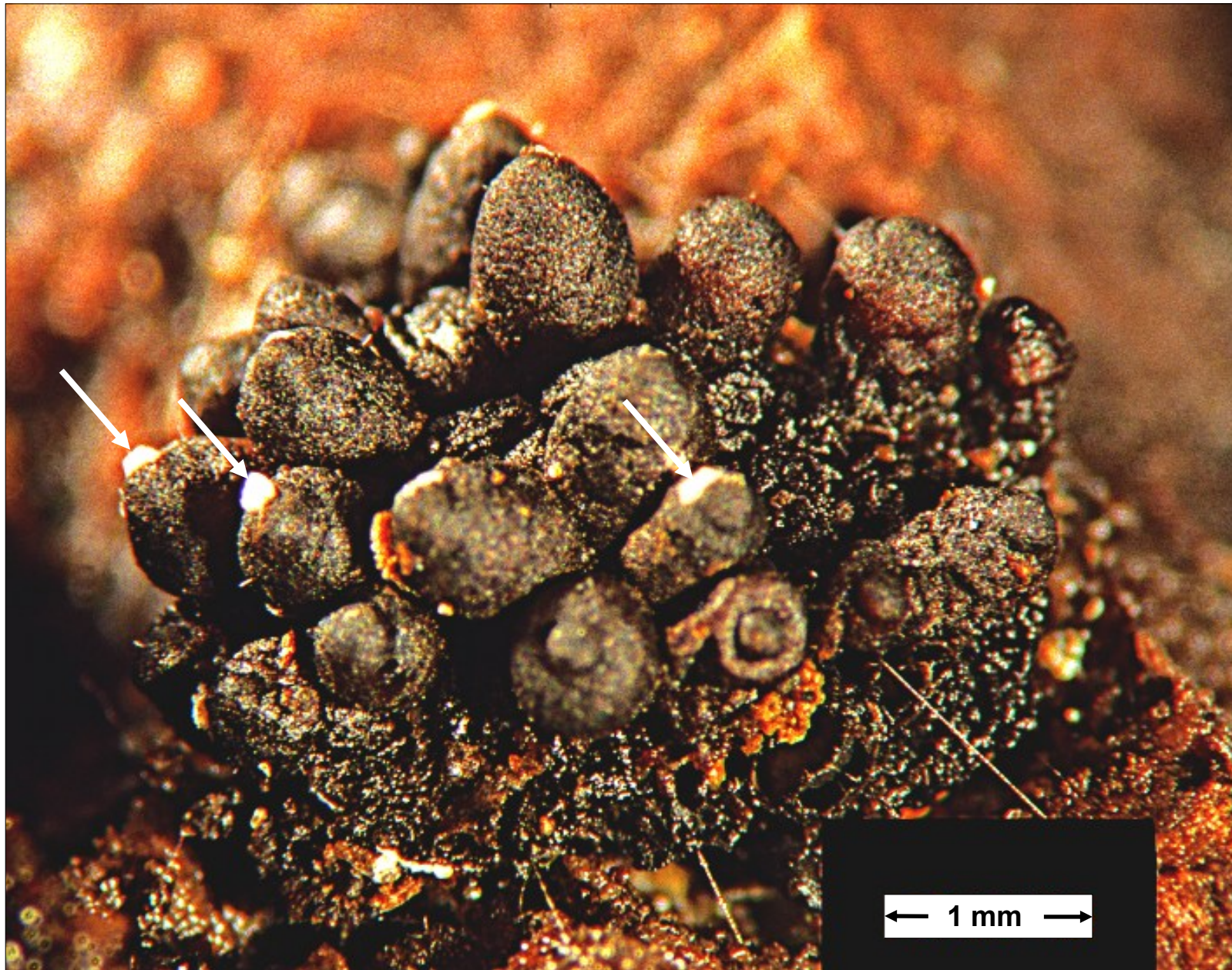
Fig. 2. *Bombardia bombardia*. a–c: France, Montagne (UPS). d–e: Fries, Sclerom. Suec. 266 (UPS).  
 a: Mature, hyaline spores. b: Mature, pigmented spores. c: Ascus tip. d: Cluster of stromata. e:  
 Two stromata, one seen in a median vertical section; interior of perithecium sketched only.





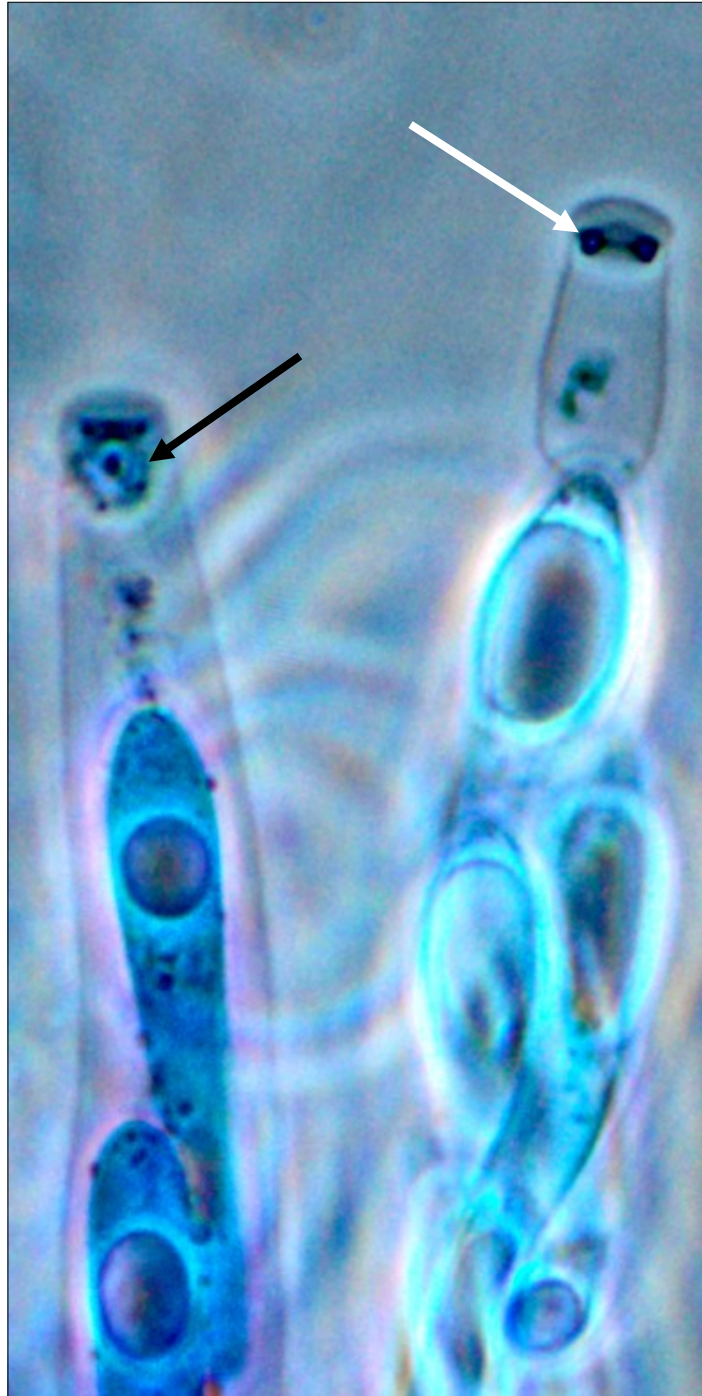
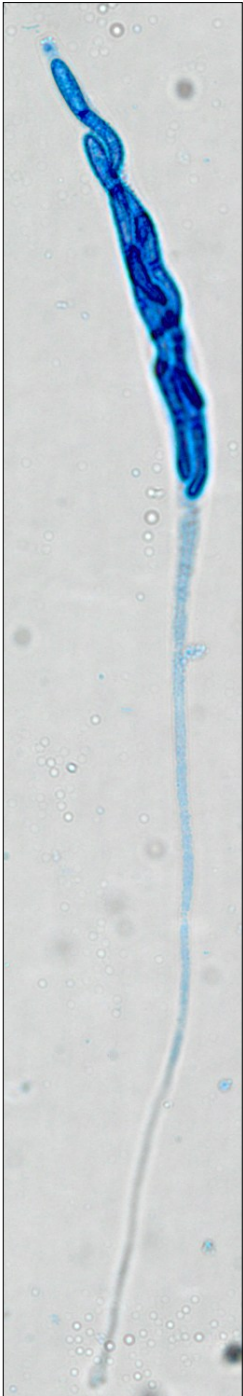
**AEB 1121. Fresh nearly mature ascomata in-situ on wet firm dead decorticated wood. Note the thin residual tomentum over each black ascoma and the apical ostiole (arrowed).**





**AEB 1121. Fresh mature ascomata in-situ on wet firm dead decorticated wood. The residual tomentum seen on the previous page is now gone. Note the white masses of exuded ascospores (arrowed).**





**AEB 1121. Fresh asci & ascospores – Dan's 2010 photos using aniline blue lactic acid slide mounts. Left 2 photos the same ascus: one using the X40 objective and emphasizing the long thread-like stipe, the other enlarged and attempting to show the apical ring and subapical globulus resp. (both arrowed). Right photo X100 objective: 2 asci showing their upper portions – left ascus with clearly seen subapical globulus (black arrow), right ascus with clearly seen apical ring (white arrow).**



**AEB 1121. Fresh ascospores taken from those exuding through an ascoma ostiole in the 2010 original collection (Dan's water slide mounts using the X100 objective). Top photo brightfield, bottom photo phase.**







**AEB 1121. Ascospores photographed using the X100 objective & phase microscopy on 7 December 2025 using Ann's SMF voucher specimen slide prepared in 2010. Measurements & comments: ascospores hyaline, smooth, upper cells aseptate, ellipsoidal  $15\text{--}18 \times 8\text{--}10 \mu\text{m}$  ( $n=25$ ), pedicels curving near their basal portion, seemingly 3 septate in one (arrowed) but this actually with large guttules,  $19\text{--}25 \times 4\text{--}5 \mu\text{m}$  ( $n=25$ ) (measured crosswise from upper cell basal truncate septum to pedicel base) and thread-like single caudae at upper cell apex & pedicel base.**