

***Chaetoscypha palmicola* (P.R. Johnst.) Baral & P.R. Johnst. – AEB 1111 (= PDD 102712)**

Synonym: *Pirottaea palmicola* P.R. Johnst.

Substrate: dead nikau palm (*Rhopalostylis sapida*) frond

Collection site: Remutaka Forest Park (Wainuiomata nearest town) about 30-minutes walk from the car park at the entrance to the Orongorongo Valley track.

Collection date: 4 January 2007

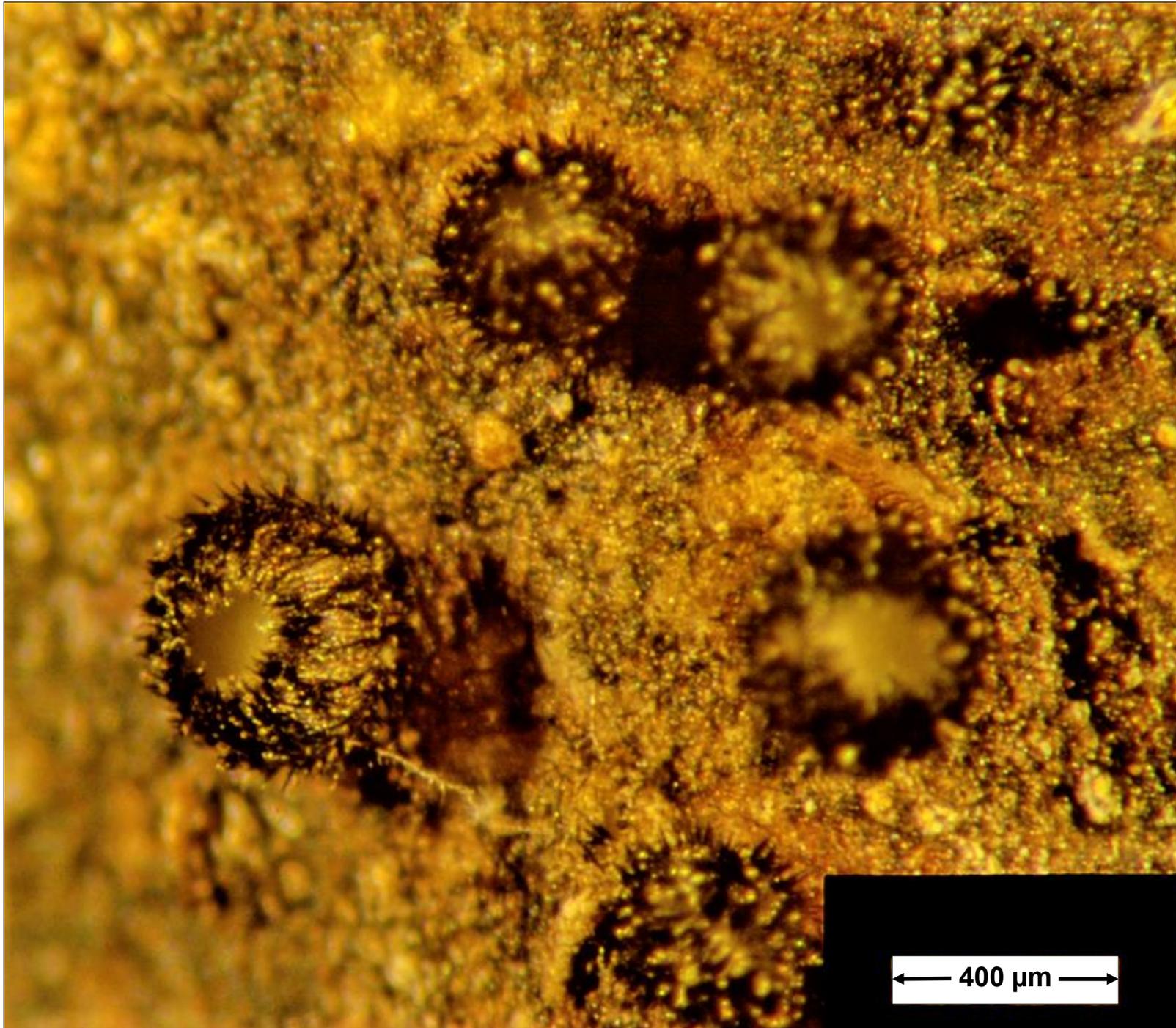
Collector: Ann Bell; **Identifier:** Dan Mahoney

Voucher material: dried herbarium material [AEB 1111 (= PDD 102712)] accompanied by a Shear's mounting fluid (SMF) semi-permanent slide mount; several projection slides taken under the dissecting and compound scopes; Dan's brief description and comments.

Brief description: **Apothecia** scattered, numerous, with receptacles clothed with prominent dark setae and hymenia creamy white; < 500 µm in diam., on the basal blade portion of a fallen, dead, decaying nikau palm frond. **Setae** rigid 75–110(–150) X 5–6 µm – n=25, smooth, septate, dark brown under transmitted light, straight to somewhat curving [narrower and somewhat lighter basally, then increasing gradually to 5 µm wide (often bent below this point) and from there gradually tapering to a point apically]. **Ectal excipulum** of light to darker brown textura prismatica from which the setae arise. **Meddullary excipulum** of textura intricata. **Paraphyses** cylindrical, simple, smooth, hyaline. **Asci** cylindrically clavate, with a short stipe and 'plugged' apex through which a narrow channel could be faintly seen (this was very faintly blue to lacking in Melzer's because my mounts weren't mounted first in KOH and then transferred to Melzer's), 8-spored with spores arranged uniseriately overlapping to irregularly biseriately, the few asci measured were 66–69 µm long. **Ascospores** smooth, hyaline, fusoid with rounded ends, slightly broader in the upper half, usually one-celled (but some with a faint central to slightly off-center septum? – edges of 2 prominent polar vacuoles in some mounts also seemed septa-like); ascospores mostly 8–10 X 2.5–3 µm – n=25.

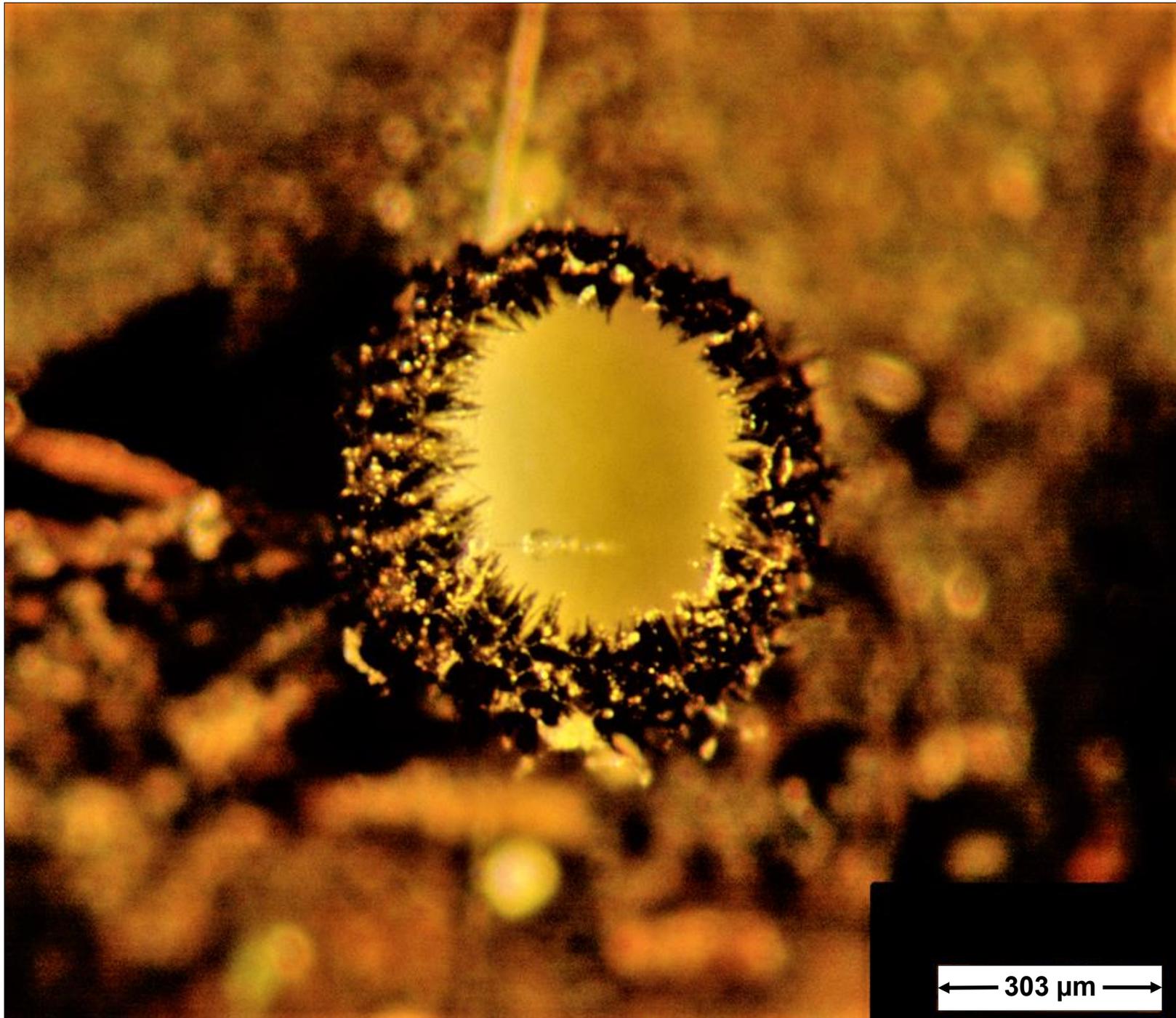
Comments: Initially, AEB 1111 was mis-identified as *Torrendiella madsenii* [now *Hymenotorrendiella madsenii* (G.W. Beaton & Weste) P.R. Johnst., comb. nov.]. However, in New Zealand *H. madsenii* is found only on *Nothofagus* wood [Johnston & Gamundi. 2000. (as *Torrendiella madsenii*) NZJ Botany 38(3): 493–513] and *C. palmicola* only on dead *Rhopalostylis sapida* fronds.

Having examined AEB 1111 again, after observing the 2016 collection [AEB 1264 (= PDD 111248)], its true identity is now obvious. The two collections represent the same species and both were collected on dead nikau palm fronds in Remutaka Forest Park. The publications consulted and the presently accepted nomenclature are detailed in my pdf prepared for the 2016 collection.



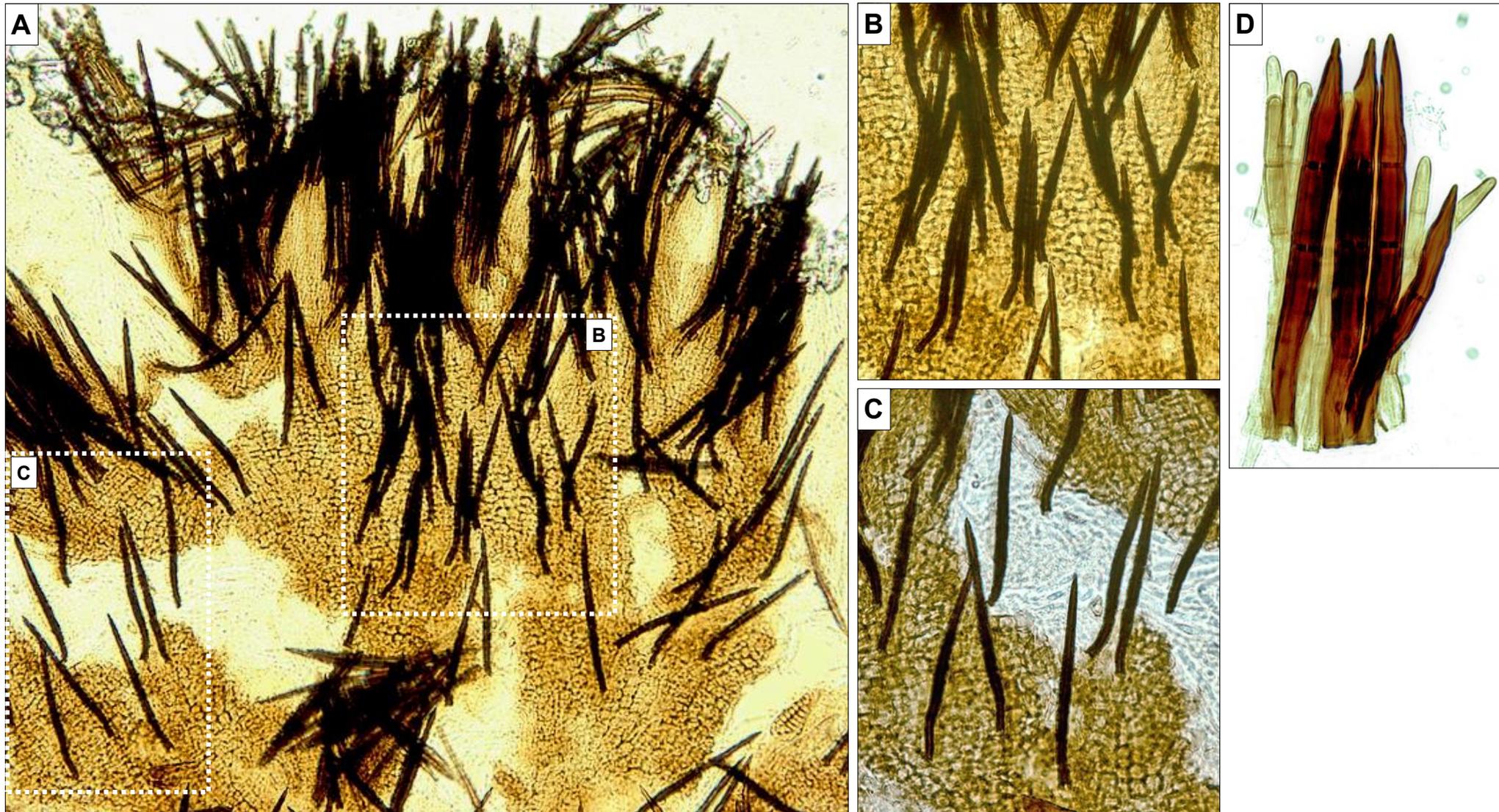
AEB 1111. Fresh apothecia in situ on the moist broad inner-fold at the base of a dead nikau frond.

← 400 μm →

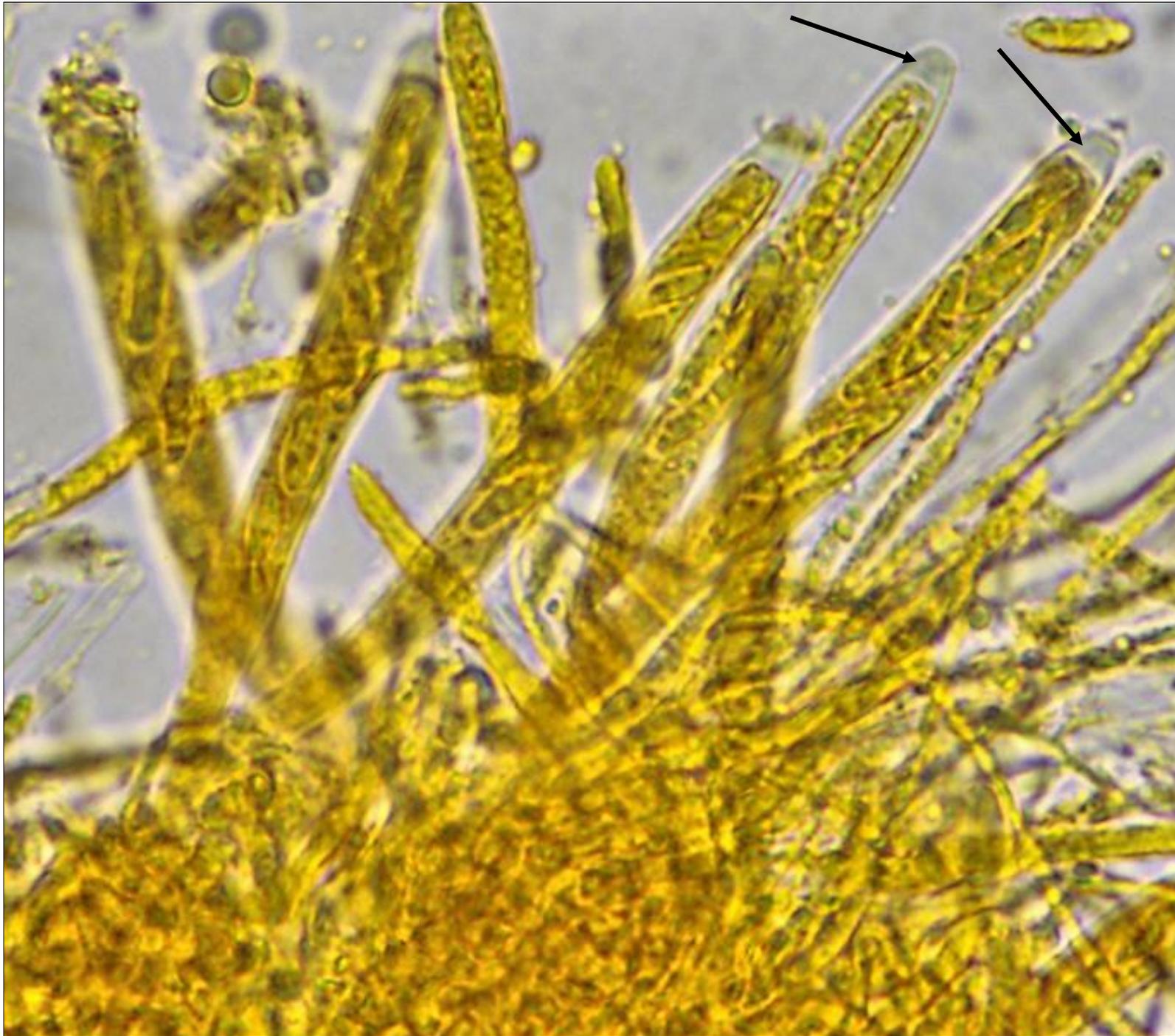


AEB 1111. Fresh apothecium in situ on the moist broad inner-fold at the base of a dead nikau frond.

← 303 μm →



A–D. AEB 1111. A–C. Apothecium ectal excipulum of textura prismatica from which simple, dark brown, smooth, septate setae arise. Mounted in SMF using brightfield microscopy. A. Photo under the X20 objective. B,C. Photos under the X40 objective. Note that these areas are outlined in photo ‘A’. D. Setae mounted in SMF, X100 objective, brightfield microscopy. The 3 longest dark-brown setae are $83 \times 7 \mu\text{m}$.



AEB 1111. Asci & ascospores in Melzer's reagent, photographed under the X100 objective using brightfield microscopy. Note the ascus apical plug (arrowed). Unfortunately, the asci were not mounted first in KOH so little or no bluing is seen in the plug although a faint central passageway is visible there.



A–C. AEB 1111. Asci and ascospores photographed under the X100 objective. A,B. Photos with young ascospores from mounts in SMF using phase microscopy. Note the large bipolar vacuoles and the slightly swollen upper portion of many ascospores. A. Ascus $66 \times 9 \mu\text{m}$ with ascospores $9\text{--}10 \times 3 \mu\text{m}$. B. Largest ascus $69 \times 9 \mu\text{m}$ with ascospores $10 \times 3 \mu\text{m}$. C. Photo with mature ascospores in Melzer's (without first mounting in KOH) using brightfield microscopy.