

***Nectria pseudotrichia* Berk. & M.A. Curtis with its anamorph *Tubercularia lateritia* (Berk.) Seifert – AEB 747 (= PDD 76454)**

Collection occasion and site: Occasion: 15th New Zealand Fungal Foray. **Site:** Urewera Nat. Pk. (as of 2014 a New Zealand protected area known as Te Urewera), Lake Waikaremoana. Along the Tawa Track which is an approx. 30 minute loop track.

Collection date: 10 May 2001

Substrate: dead tawa (*Beilschmiedia tawa*) bark

Collectors: Dan Mahoney, Ann Bell and Toni Atkinson

Identifier: Dan Mahoney

Voucher material: Good herbarium material [AEB 747 (= PDD 76454)] accompanied by 2 Shear's mounting fluid (SMF) microscope slides; Dan's various in-situ scanned projection slides of ascomata and microscopic detail; Dan's brief description & comments.

Brief description and comments:

ASCOMATA: orange to darker orange with age (red in digital scans of the projection slides), globose to subglobose without any neck, ostiole apparent as a smallish darker orange (or red) area at the upper extremity through which whitish (to yellowish) masses of ascospores were seen exuding, scattered but often close to each other over the surface of the bark (seemingly not clustered in small bunches or 'piled together'), drying to cupulate bodies but quickly swelling when placed in a moist chamber. Peridium a pseudoparenchyma of thick-walled, angular, isodiametric cells. Ascomata mostly 350–500 µm in diameter. No color changes in Melzer's. **ASCI:** cylindrical to cylindrically clavate, with 8, or frequently fewer, dictyosporous ascospores arranged obliquely uniseriately or irregularly biseriately. One measured 138 × 23 µm. **STERILE ELEMENTS:** distinctly cellular and branching. **ASCOSPORES:** dicytosporous, hyaline to yellowish, variously shaped -- asymmetric ellipsoid to elongate-clavate, occasionally somewhat bent, with numerous cells (no attempt made to count the cells or to describe the number of transverse or longitudinal septa), variable in size 25–40(–48) × 8–12 µm (n=25). No ascospores seen budding within the asci.

ANAMORPH: Numerous but dried out. See descriptions of both teleomorph and anamorph in Seifert K.A. 1985. A monograph of *Stilbella* and some allied hyphomycetes. Studies in Mycology, 27: 1–238 (for *Nectria pseudotrichia* see pages 118–127).

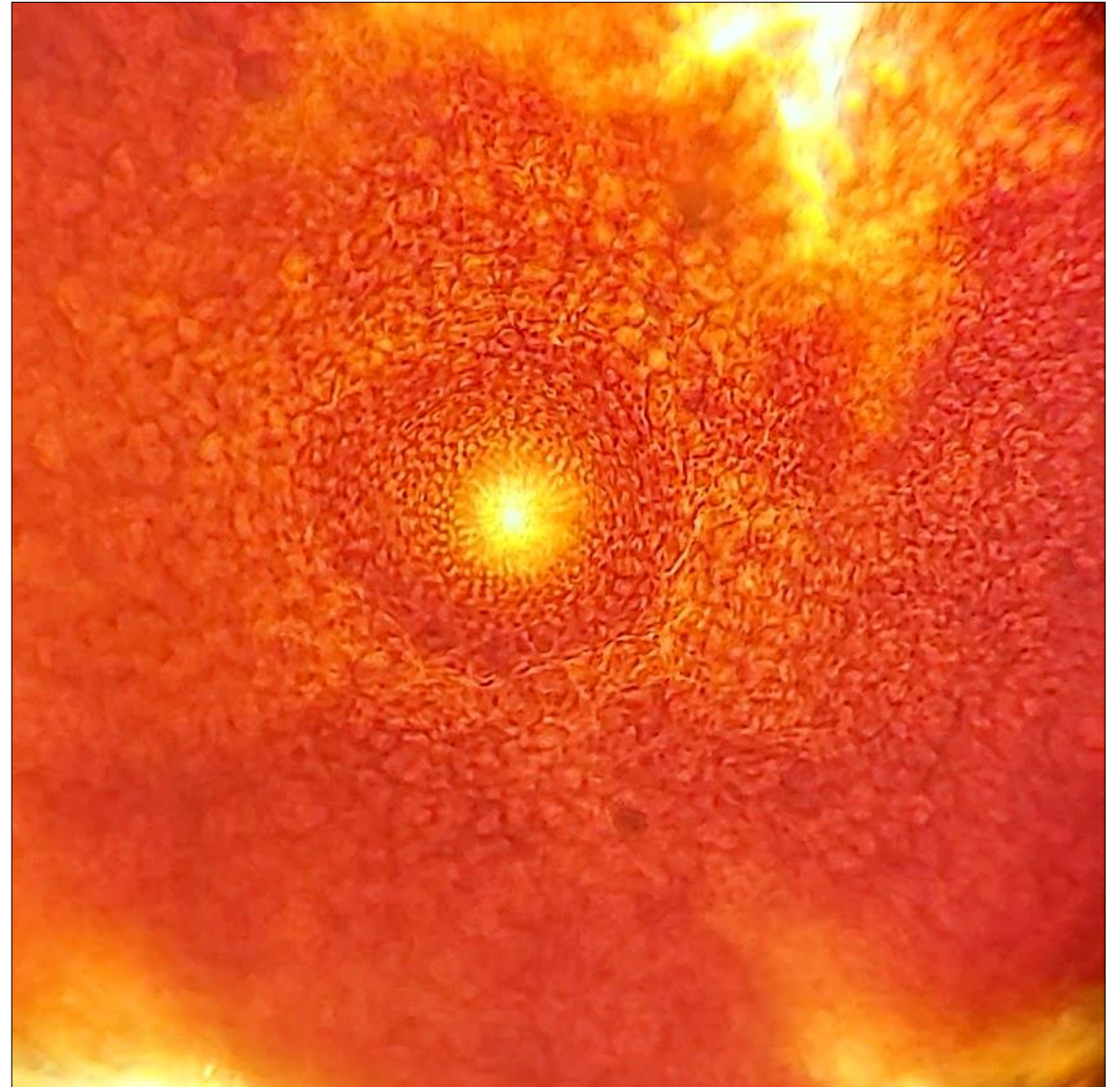


← 500 μm →

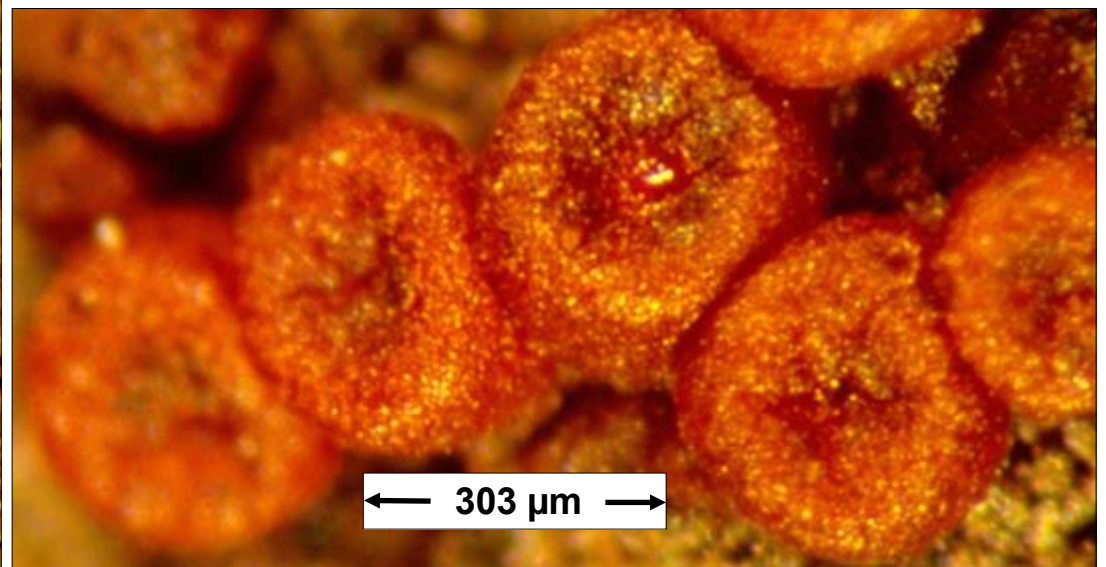
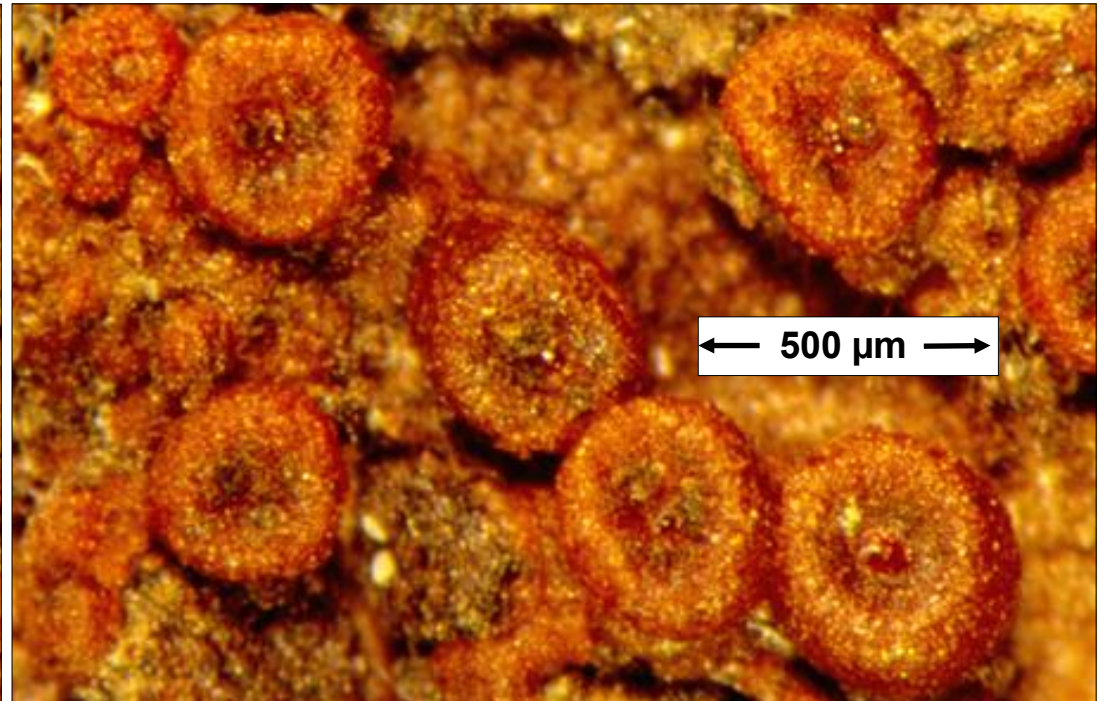
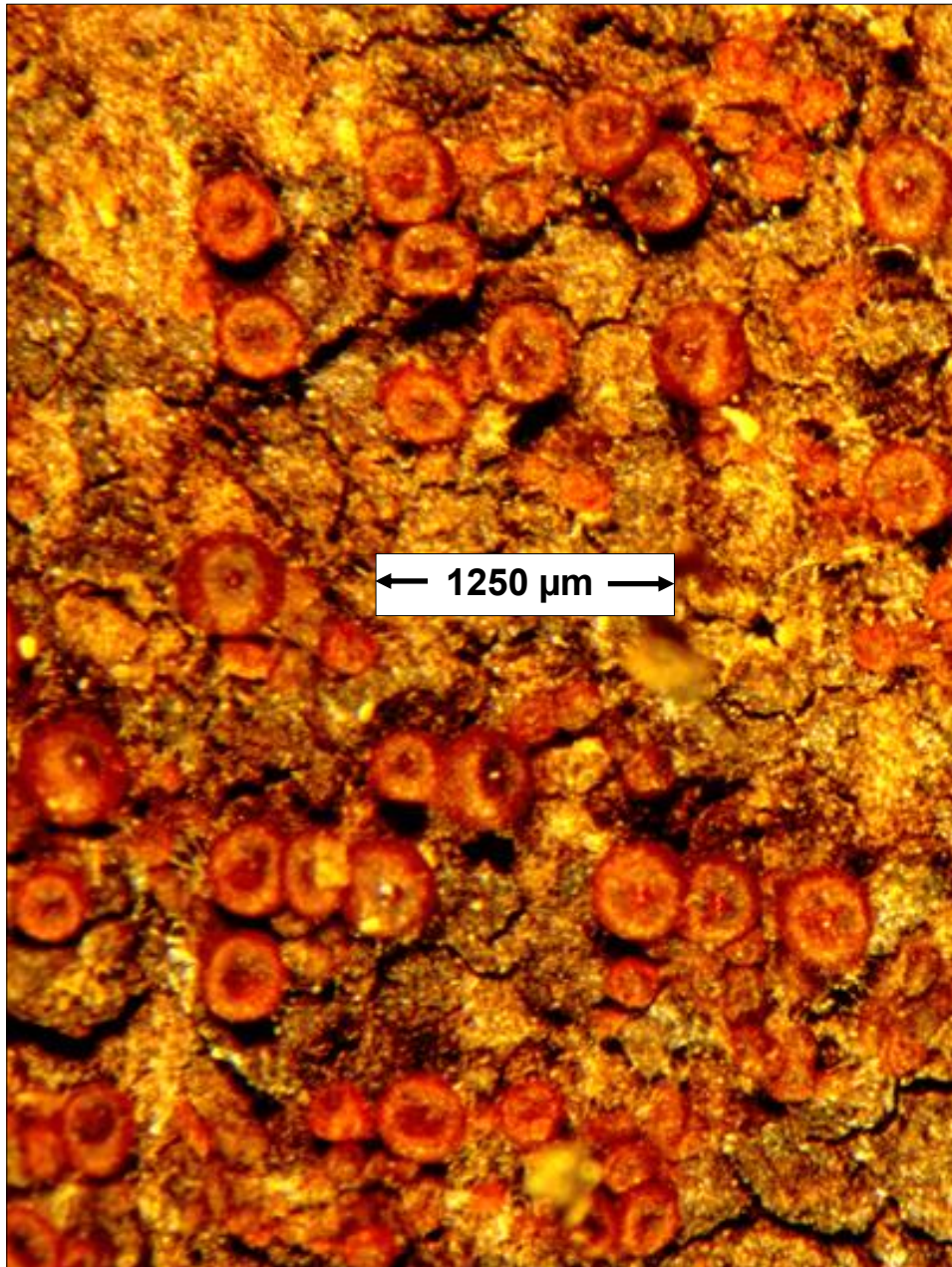
AEB 747. In-situ view of fresh moist ascomata on the bark of a downed reasonably large tawa trunk/branch.



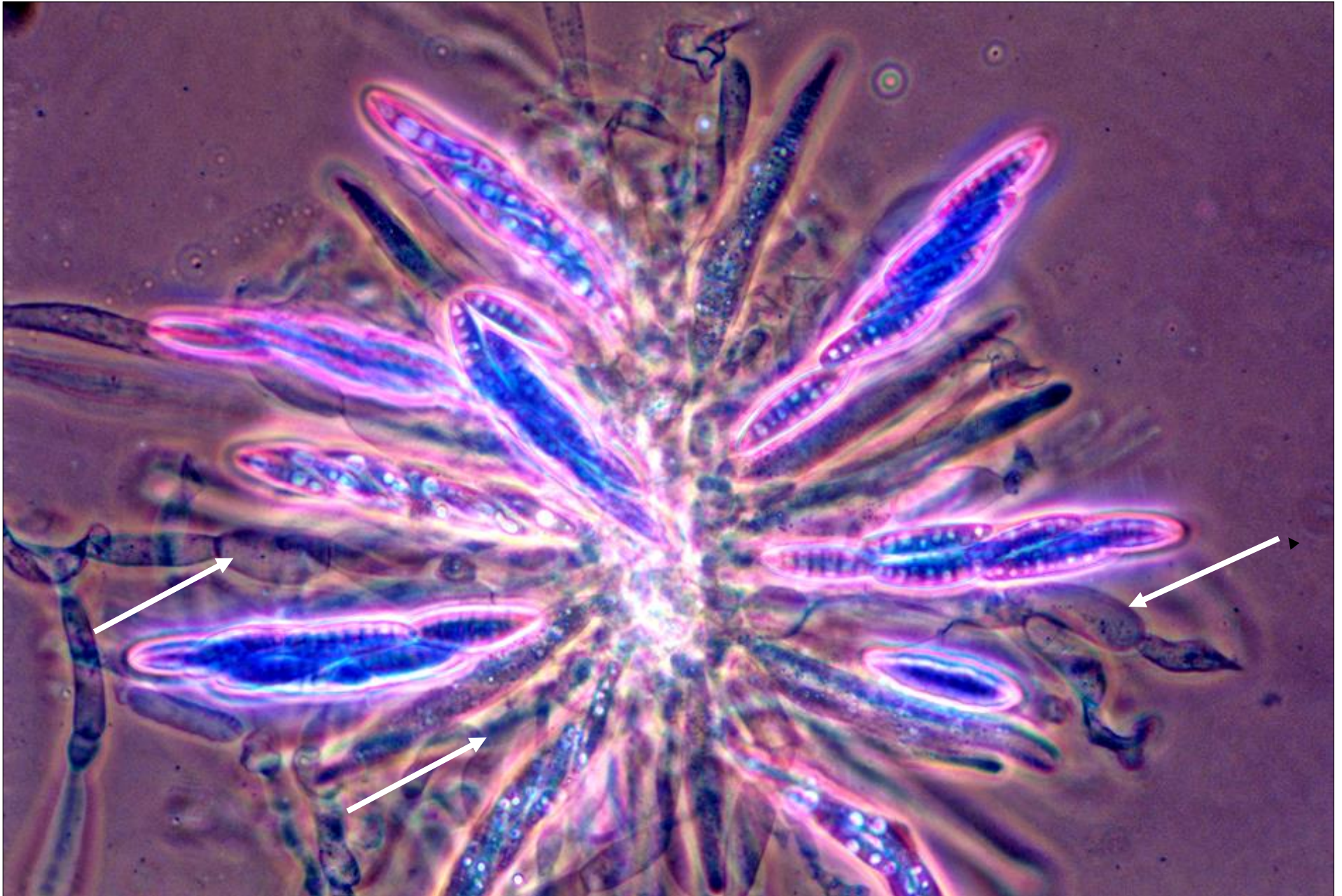
AEB 747. In-situ close-up view of fresh moist ascomata from a nearby area of the bark pictured on the previous page. Note the ostioles (solid-arrowed) with warts nearby and the numerous warts on the peridium (especially on the far-right ascoma, dotted curve).



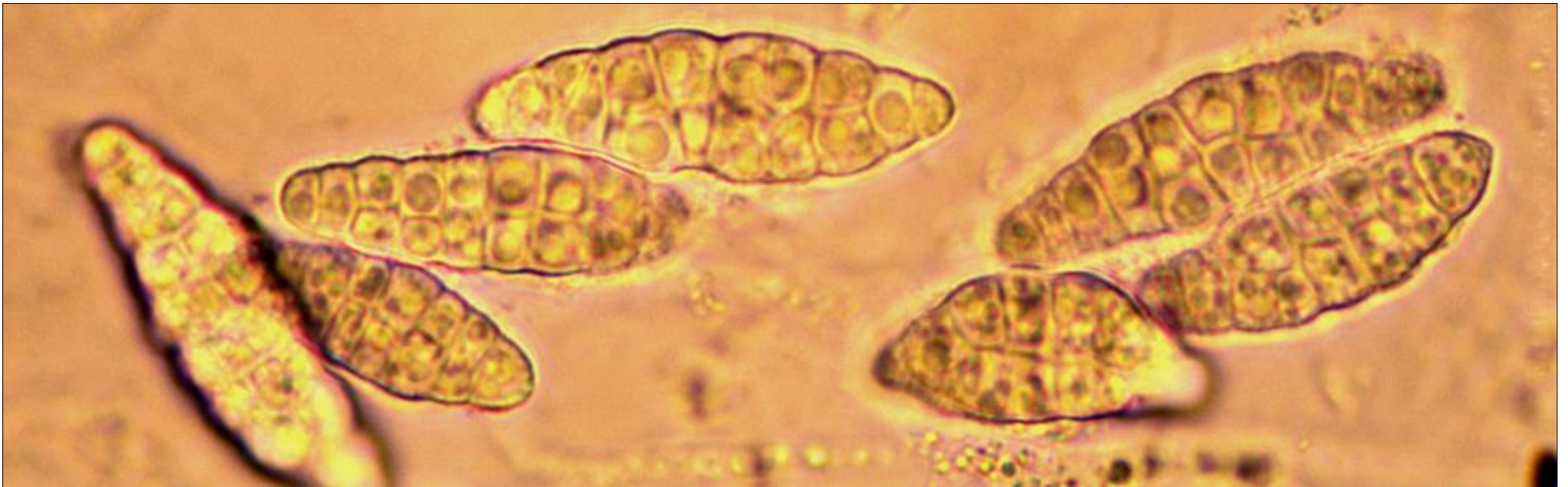
Ascomata fragments showing the ostiole & surrounding textura angularis peridium. Samsung Galaxy A70 smartphone photos from a 2001 Shear's mounting fluid slide using an Olympus BX51 microscope X20 objective, brightfield view.



AEB 747. In-situ views of increasingly magnified dry ascomata on the bark of a downed reasonably large tawa trunk/branch. Note that the previously globose ascomata have collapsed to become cupulate.



AEB 747. Asci, ascospores and sterile elements as seen in an ascoma squash – aniline blue lactic acid mount, X112 & phase microscopy. Note the branching, swollen-celled sterile elements (arrowed).



AEB 747. Dictyospores – water mount, X280 & brightfield microscopy. Top photo still within a faintly visible ascus. Bottom photo another ascus with the ascus wall deliquescing .



AEB 747. Dictyospores still within a faintly visible ascus – water mount, X280 & brightfield microscopy.