***Nemania chestersii* (J.D. Rogers & Whalley) Pouzar – AEB 1032 (= PDD 94210)**

Collection site: bush gulley, private residence, Kelson, Lower Hutt

Substrate: dead wood of *Piper excelsum* (formerly known as *Macropiper excelsum*); commonly known as kawakawa

Collection date: 28 January 2008

Collector: Ann Bell; **Identifiers:** Dan Mahoney & Jacques Fournier (Jacques' emailed comments were invaluable and gratefully acknowledged)

Voucher materials: Dried herbarium specimen accompanied by 3 Shear's mounting fluid (SMF) and 1 lacto-fuchsin semi-permanent slide mounts (these slide mounts were prepared from dried herbarium material in January 2021); several Olympus BX51 compound scope/DP25 camera digital photos from water, Melzer's reagent, SMF, lacto-fuchsin & H_2O_2 / lacto-fuchsin microscope slides (all slides prepared in January 2021 from dried herbarium material) and in-situ photos of dried herbarium stromata viewed directly under the Olympus X2 objective using reflected light from a Schott KL 1500 Electronic Light Source / Fiber Optic Illuminator; Dan's comments and brief description below.

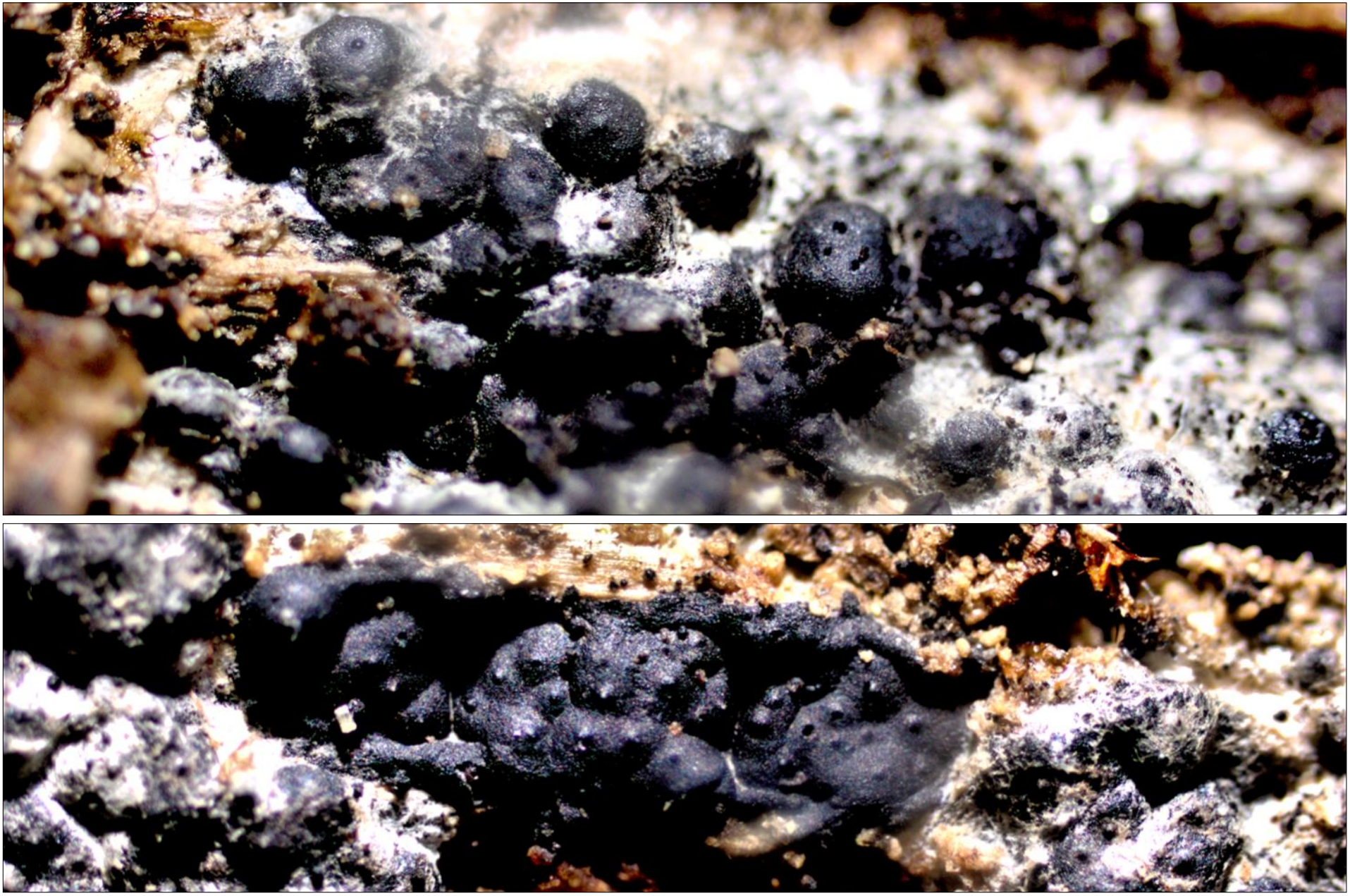
Dan's comments and brief description: Having re-identified *Rosellinia stenasca* AEB 1312 (= PDD 117250) as *Nemania chestersii* AEB 1312 (= PDD 117250), I turned to AEB 1032 (= PDD 94210) also identified as *R. stenasca* in 2008. It too was *Nemania chestersii*, closely matching the AEB 1312 collection of 2018. Although the 2008 collection was now (in January 2021) 13 years old and lacked any slide or photographic record, the herbarium specimen was still in good shape. Four new semi-permanent slides were prepared to accompany the re-named specimen and photos were prepared of in-situ stromata and microscopic detail. These are presented in the following pages. The reader is referred to the new PDD record – External link to the datastore of *N. chestersii* AEB 1312 (= PDD 117250) – for more extensive information on this species. A similar link to the new PDD record for *N. chestersii* AEB 1032 (= PDD 94210) can be viewed for the present pdf.

Clusters of stromatic ascomata were closer together and more pulvinate than those of AEB 1312 with only narrow grooves between the clusters. Although not as 'fresh' as those seen in AEB 1312, asci and ascospores matched with the characteristic bluing in Melzer's and with ascospores typical of the smaller-sized *N. chestersii* variant — [9–12 ×4.5–5.5(–6) µm], longitudinally striate with an inconspicuous germ slit and basally truncate where the ephemeral appendage had been.

Crowded stromatic ascomata in clusters separated by narrow grooves. Viewed with reflected lighting from a fiber-optic Illuminator directly onto dried herbarium material beneath the X2 objective of an Olympus BX51 microscope with a DP25 camera. Other views of stromatic ascomata in clusters are presented in the next 3 pages.

Crowded stromatic ascomata in clusters separated by narrow grooves. Note also the white subiculum remnants.

Crowded stromatic ascomata in clusters separated by narrow grooves. These views reveal more pulvinate groupings than the more effuse groupings seen on the previous two pages. Note also the white subiculum remnants.



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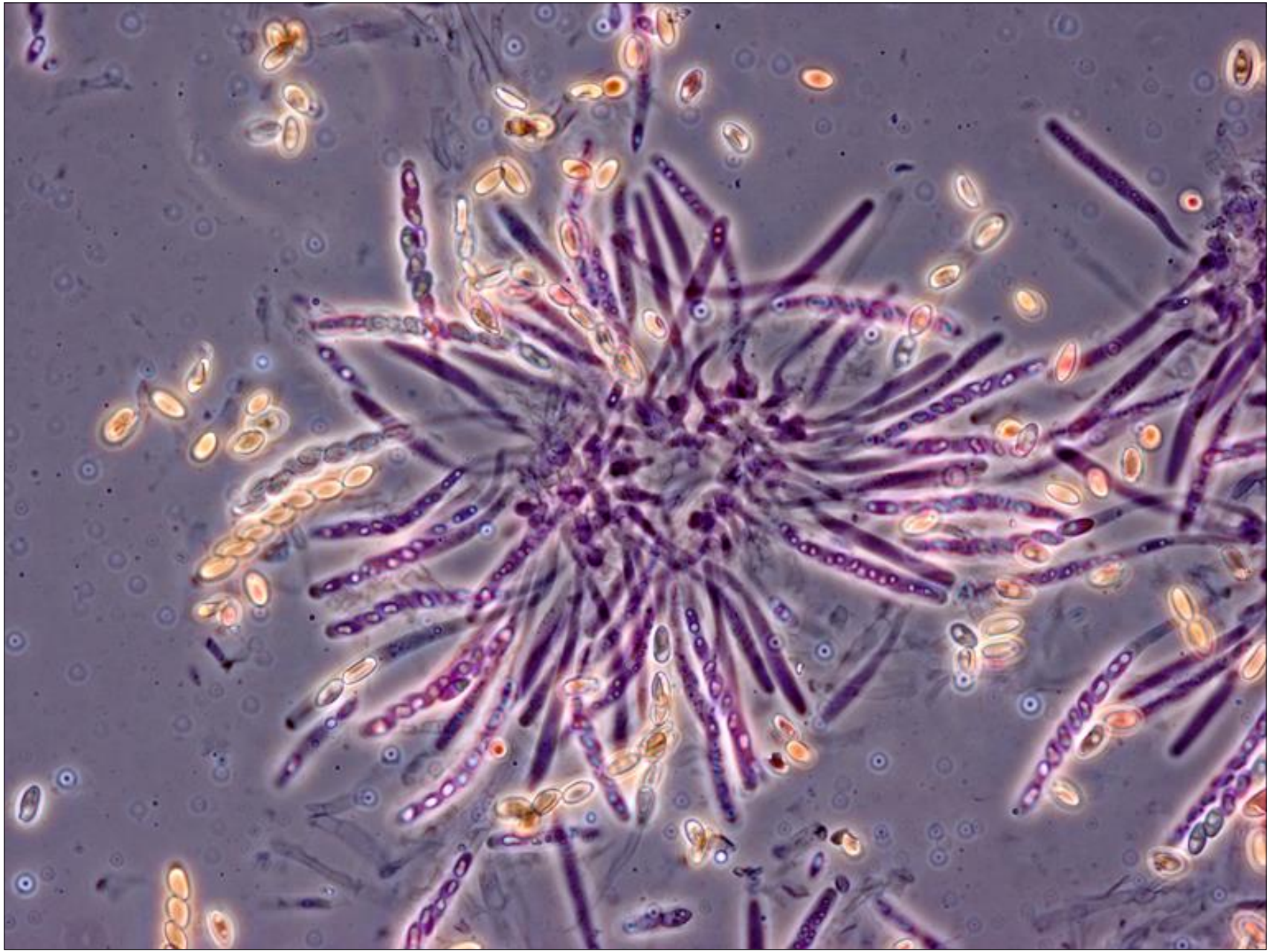
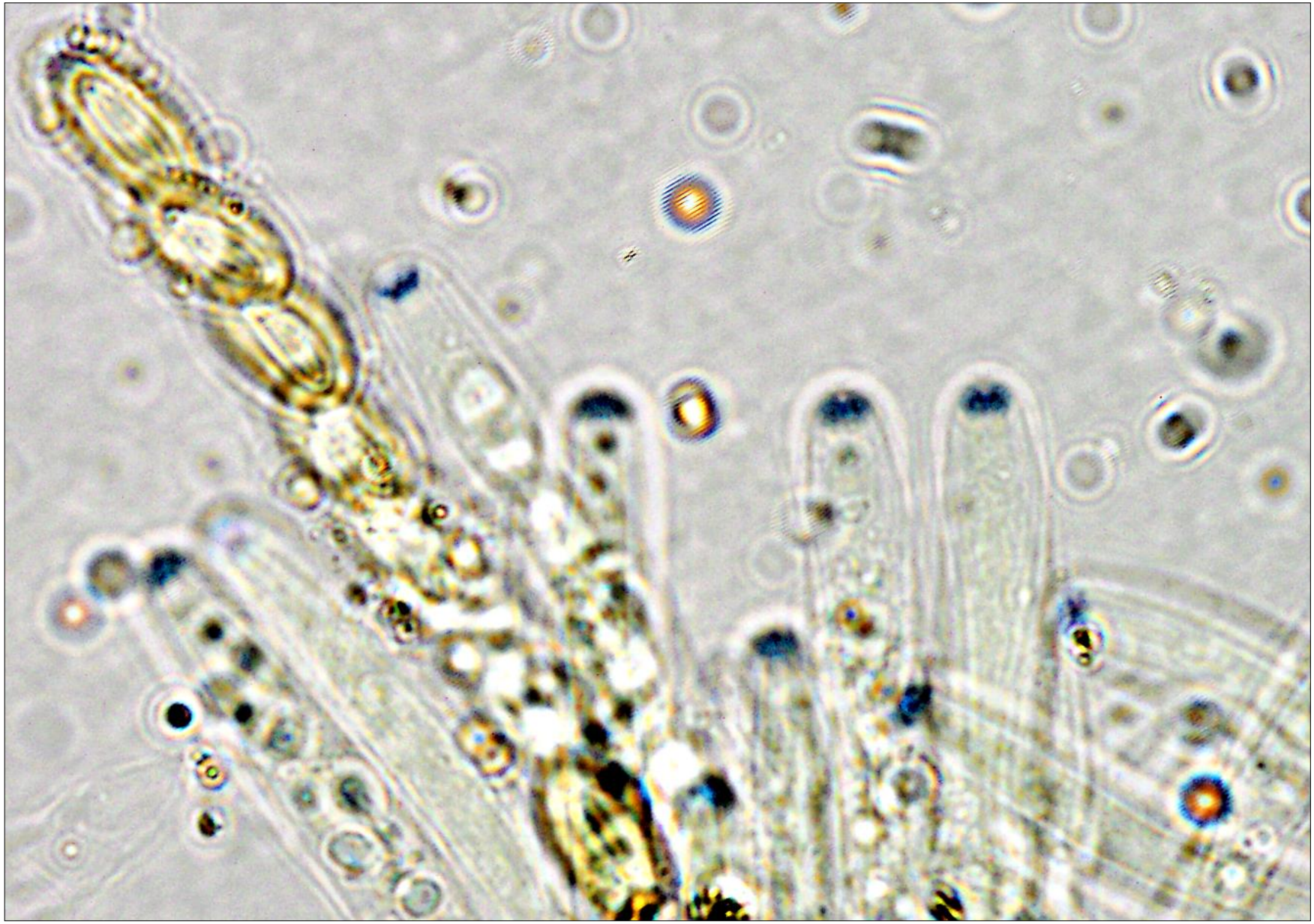


Hymenial squash featuring mostly younger asci with immature asco-spores. Lacto-fuchsin mount, X40 objective and phase microscopy.

Hymenial squash featuring mostly mature asci with fully pigmented ascospores. Note the 2 large globules in each ascospore & the occasional view of a germ slit (arrowed). Water mount, X100 objective and brightfield microscopy.

Another view of the hymenial squash from the previous page. Here carefully focusing on the ascospore longitudinal striations (arrowed). These, more than anything, characterize this species of *Nemania*.

Mature asci & ascospores. Emphasis ascospore longitudinal striations (arrowed). All X100 obj., brightfield; left 3 SMF, right 2 H_2O_2 / lacto-fuchsin.



Hymenial squash in Melzer's reagent. Featuring the bluing ascus tips & ascospore longitudinal striations. Photographed using the X100 objective and brightfield microscopy.

Hymenial squash in Melzer's reagent. Featuring the field of view from the previous page & again featuring the bluing ascus tips but here using DIC microscopy. Here the shallow urn-shaped ascus-tip bluing (arrowed) is clearer.