***Ascobolus crenulatus* P. Karst. 1868 – PDD 124548 (= AEB 1393)**

Substrate: hare (*Lepus europaeus*) dung

Collected: 29 November 2024; **Incubated in a moist chamber:** 2 December 2024

Collection site: NZTM E1744964, N5422591, near Hawkin's Hill Radar Dome (Wellington South Coast) in pasture/scrub; **Collector:** Ian Flux; **Identifier:** Dan Mahoney

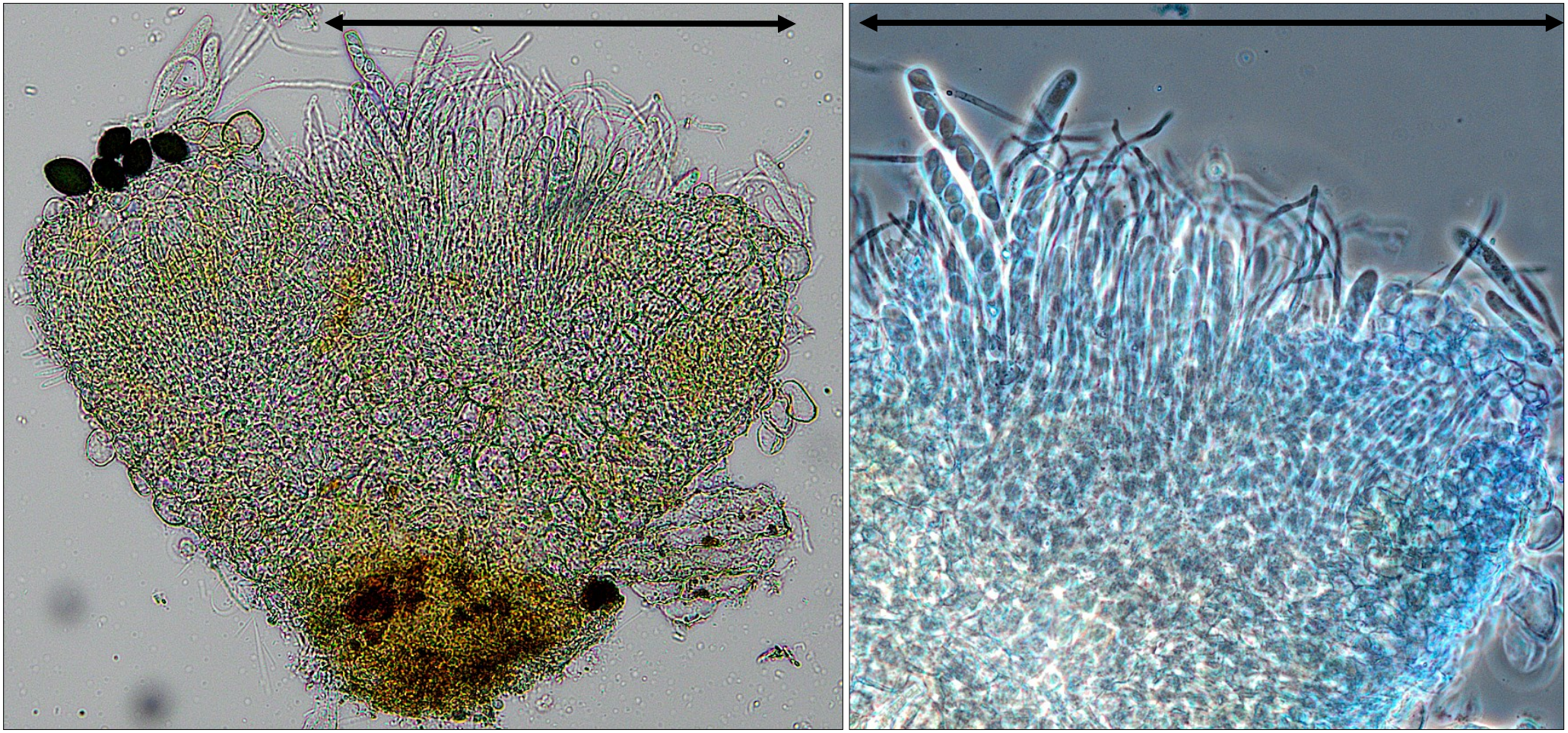
Voucher materials: no dried hare pellet herbarium specimen but represented by 1 Shear's mounting fluid (SMF) and 2 aniline blue lactic acid (ABLA) semi-permanent slide mounts; in-situ photo of a fruiting body on the moist chamber incubated hare dung taken 20 December using a Zeiss SV 11 Stereo-zoom dissecting microscope and a MC80 camera; fruiting body detail photos taken 9, 13 & 20 December using an Olympus BX51 compound scope and a DP28 camera; reference consulted and Dan's comments.

Reference consulted:

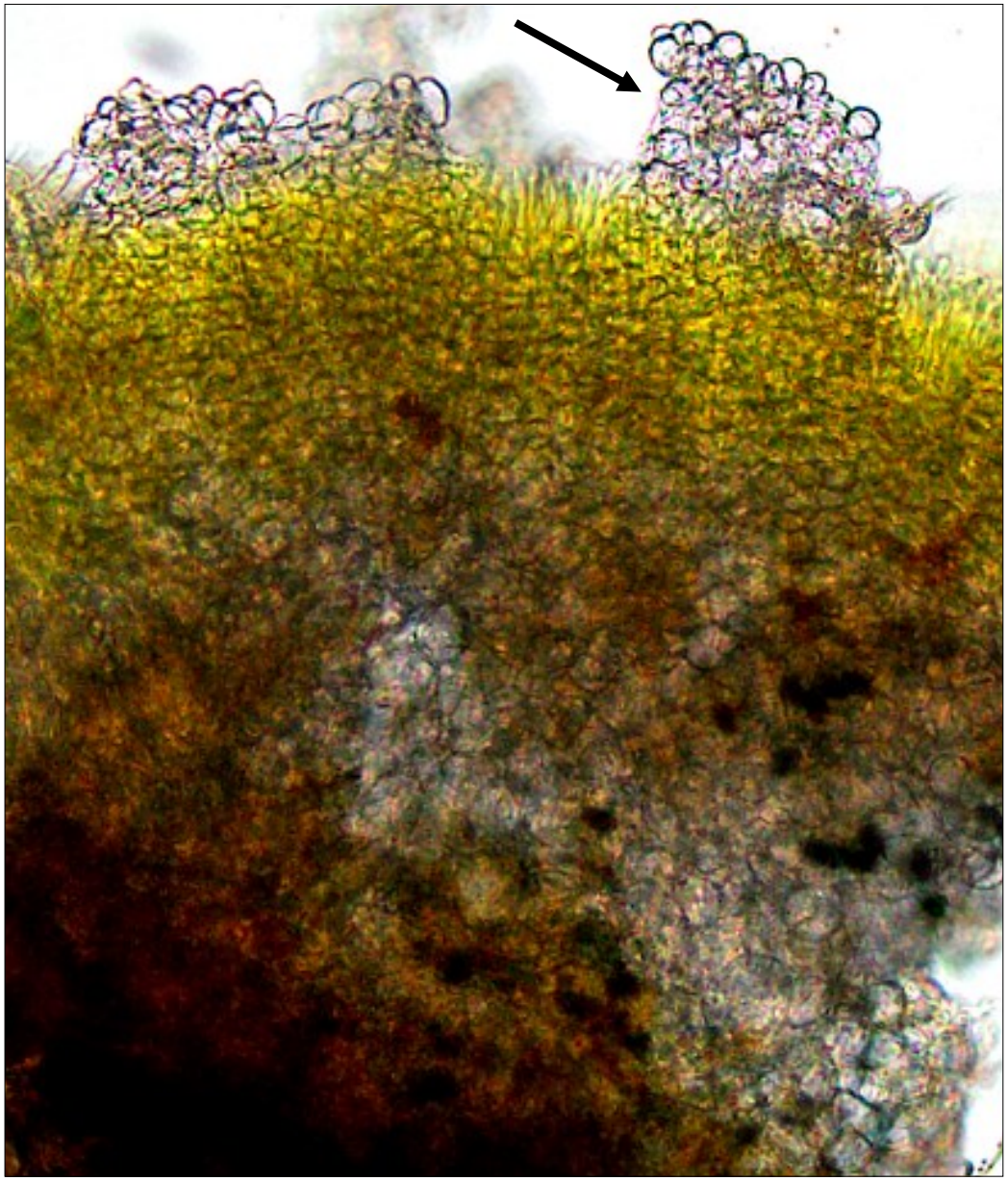
Brummelen J. Van. 1967. A world monograph of the genera *Ascobolus* & *Saccobolus* (Ascomycetes, Pezizales). Persoonia, supplement Vol. I. Rijksherbarium, Leiden. 260 pages plus 17 plates and explanations. *Ascobolus crenulatus* from pp. 115–117 and plate 8 were examined.

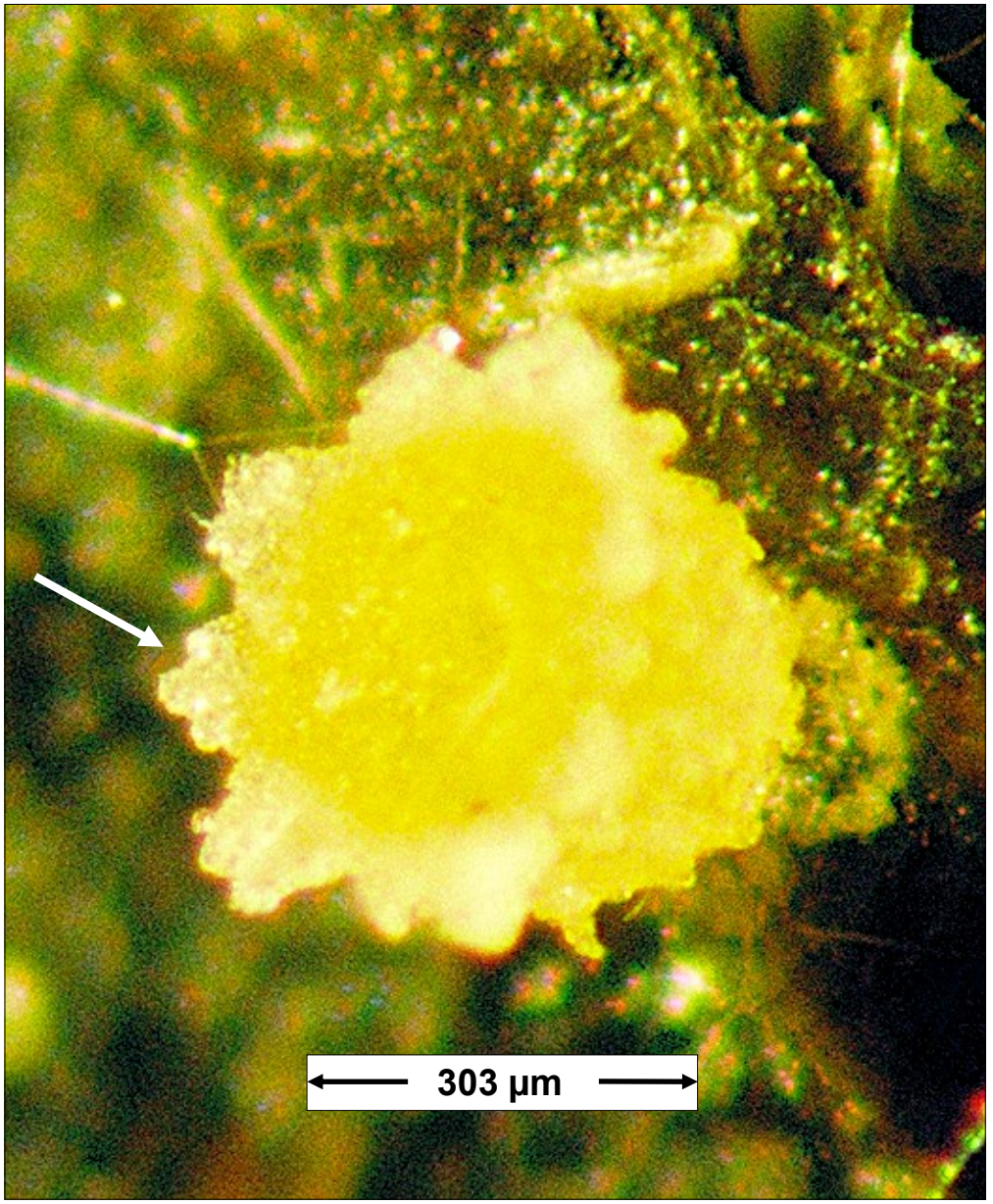
Dan's comments: This common coprophilous species was more scanty and not as clearly represented on the dung as was *Ascobolus crenulatus* PDD 124545 (= AEB 1390). Fully developed apothecia with violet-pigmented ascospores were rarely seen and those seen quickly discharged any pigmented spores. Photos on 20 December, however, provided views of the mature longitudinally striated (then yellowish brown) spores.

Also seen on the hare dung were *Stilbella fimetaria* PDD 124547 (= AEB 1392), *Podospora tetraspora* PDD 126080 (= AEB 1395) , *P. curvicolla* PDD 124549 (= AEB 1394) and *Saccobolus depauperatus* (the latter not providing enough information for a thorough identification).

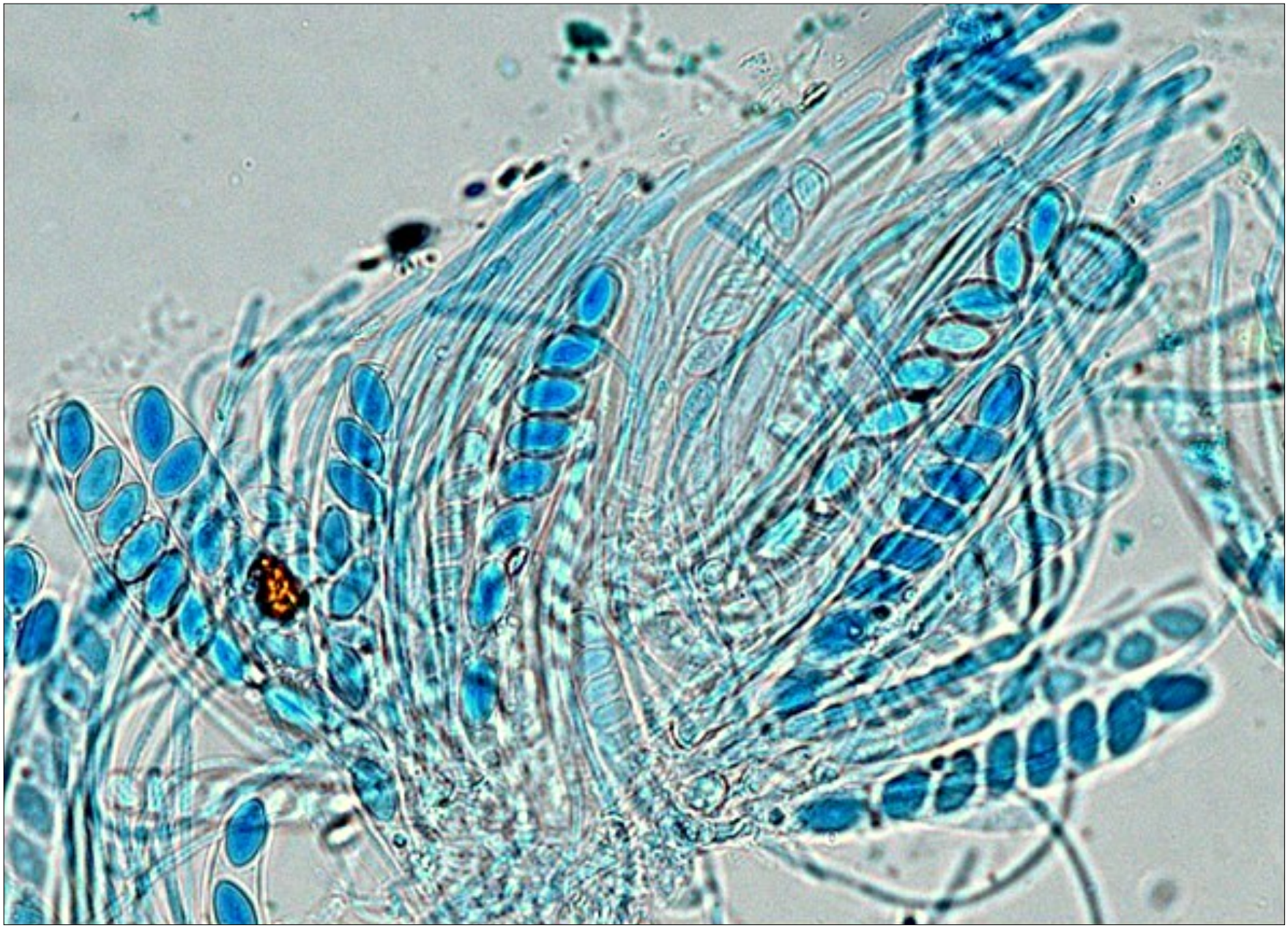


Both photos represent the same young apothecium just beginning to produce asci & ascospores.
Left photo: whole apothecium 250 µm high × 330 µm wide mounted in water (9 Dec.)
Right photo: the water mount irrigated with aniline blue lactic acid (ABLA) and cropped (9 Dec.).
Note the double-headed arrow, indicating the common region in both photos.

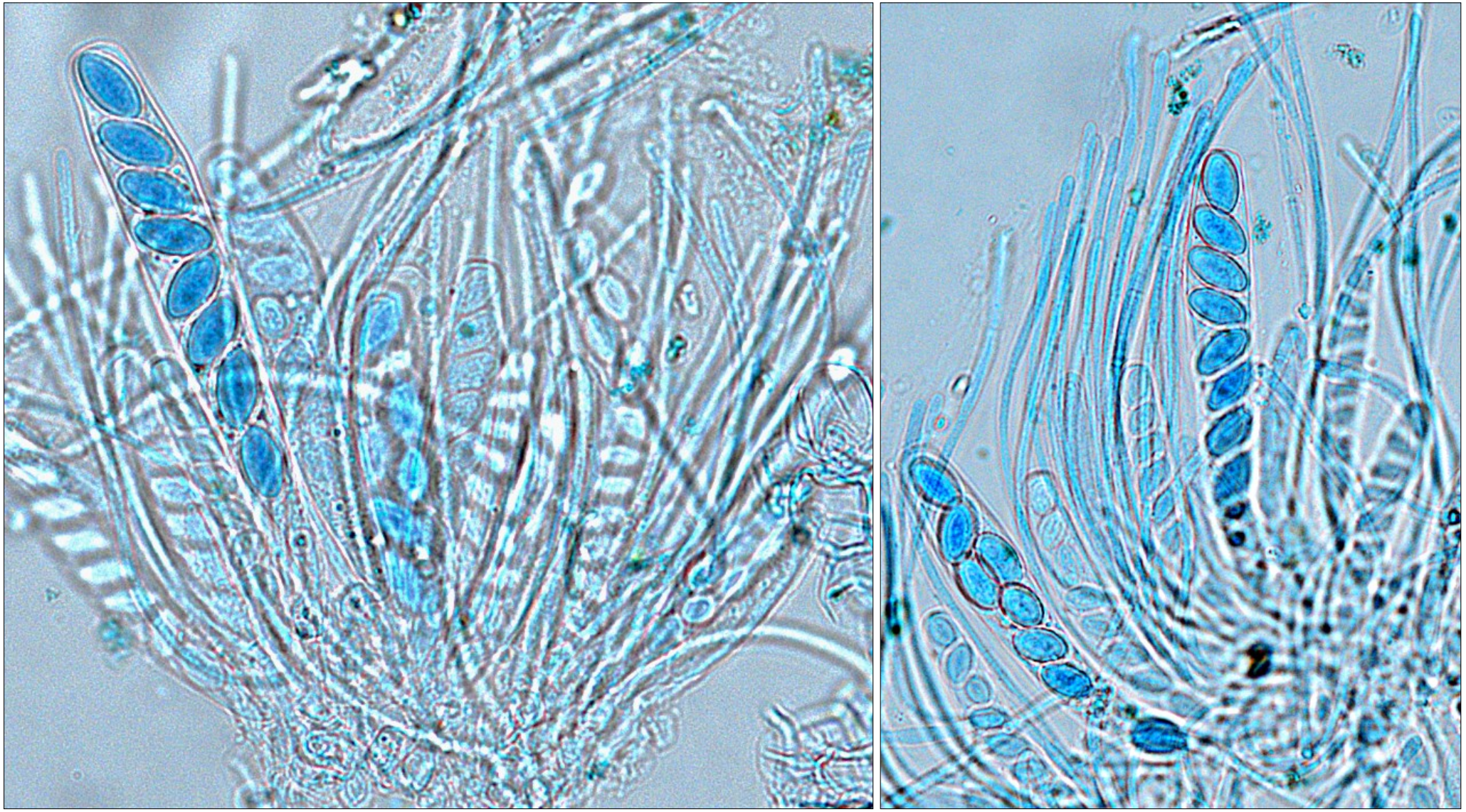




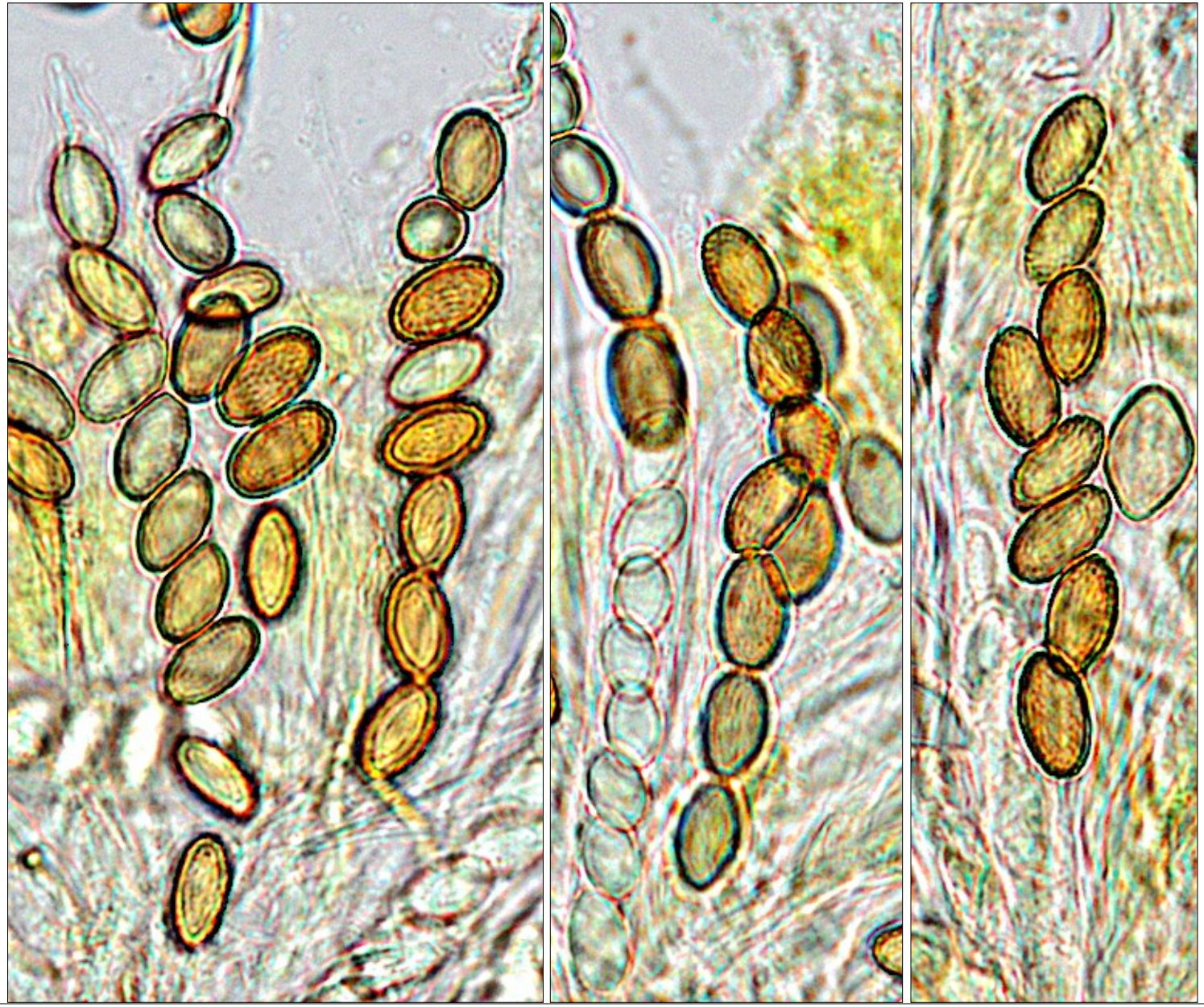
Photos of apothecia emphasizing yellow portions and the hyaline subglobular-celled outgrowths (crenulations) along the receptacle rim margin (arrowed). Left photo a water mount taken 13 December and right photo a whole apothecium seen in-situ (20 December) on the hare dung in its moist incubation chamber. Pigmented spores have been discharged or are still forming.



Ascobolus crenulatus **AEB 1393 photographed on 13 December. Asci, ascospores and paraphyses seen in a hymenium squash mounted in aniline blue lactic acid (ABLA) using the X40 objective. Mature stained but unpigmented ascospores 14–15 × 7.5–8 µm.**



Ascobolus crenulatus **AEB 1393 photographed on 13 December. Two more photos of asci, ascospores and paraphyses seen in a hymenium squash mounted in aniline blue lactic acid (ABLA) using the X40 objective. Mature stained but unpigmented ascospores 14–15 × 7.5–8 µm.**



Ascobolus crenulatus **AEB 1393 photographed on 20 December. Three photos of asci & mature ascospores seen mounted in SMF using the X40 objective. Ascospores 14–15 × 7.5–8 µm, once violet now yellowish brown, are ornamented with a rather regular pattern of longitudinal, occasionally anastomosing striae.**