

Elaeomyxa cerifera (G. Lister) Hagelstein SM65 (= PDD 110438) – a good match. The first collection from New Zealand and the 2nd from the southern hemisphere (see its Australian record in *Australasian Mycologist* (2009) 28: 56–64. New additions to the Myxomycota of Australia by Roland McHugh, David W. Mitchell, Margaret H. Brims and Steven L. Stephenson.)

Collection site: Battle Hill Farm Forest Park - Battle Hill is on Paekakariki Hill Road, 6km from the intersection with SH58 at Pauatahanui near the S. edge of the North Island.

Collection date: 23 September 2010

Substrate: dead, wet, rotten wood among (and often upon) moss

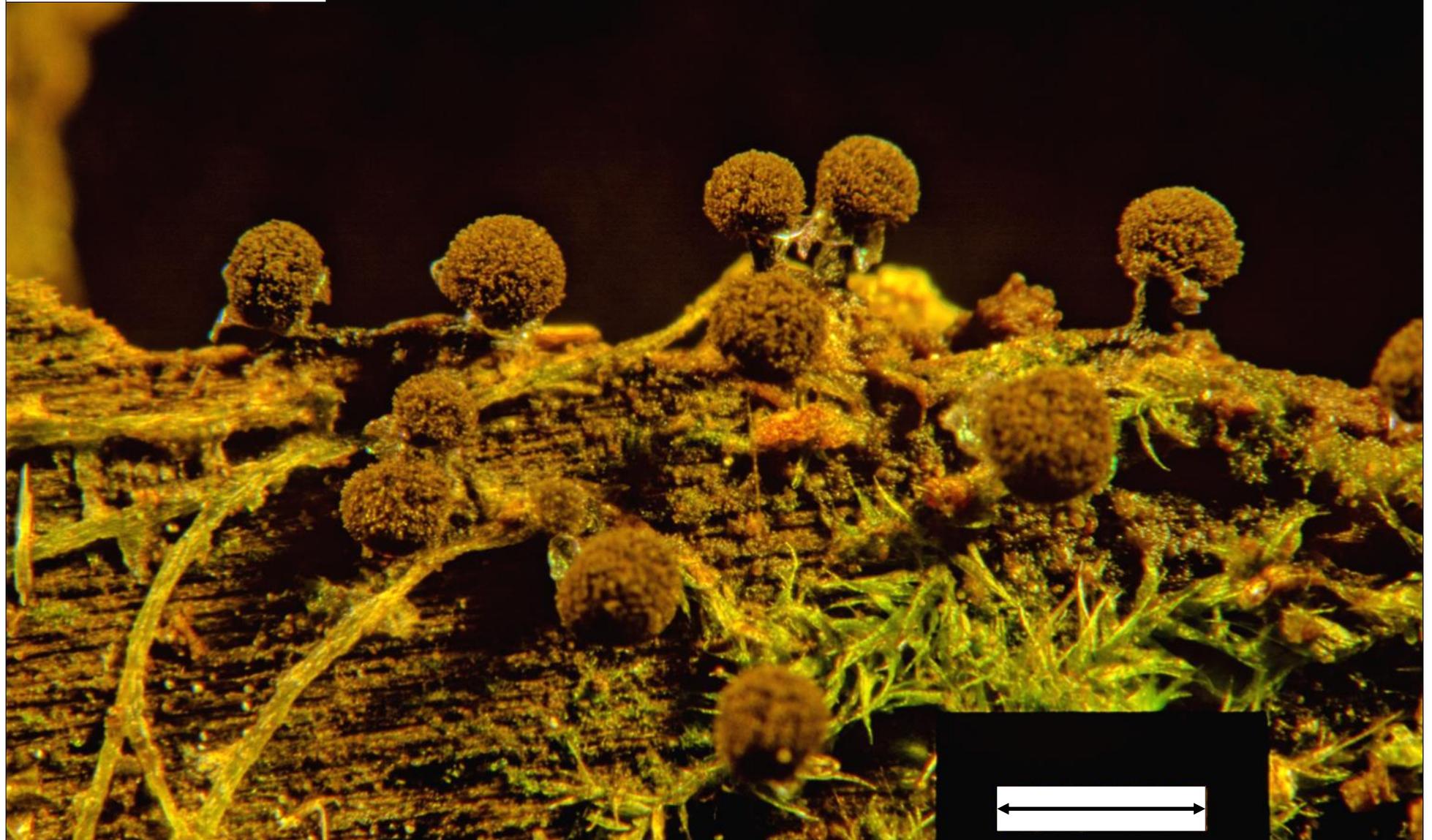
Collector & identifier: Dan Mahoney

Voucher materials: dried herbarium material & 3 semi-permanent Shear's mounting fluid (SMF) microscope slides (SM65, = PDD 110438); a number of dissecting scope in-situ projection slides of the freshly-collected fruiting bodies (the best of these scanned) and a number of compound scope digital photos from the SMF slide mounts (the SMF slides were gently heated to remove air bubbles); Dan's brief description and references of interest below.

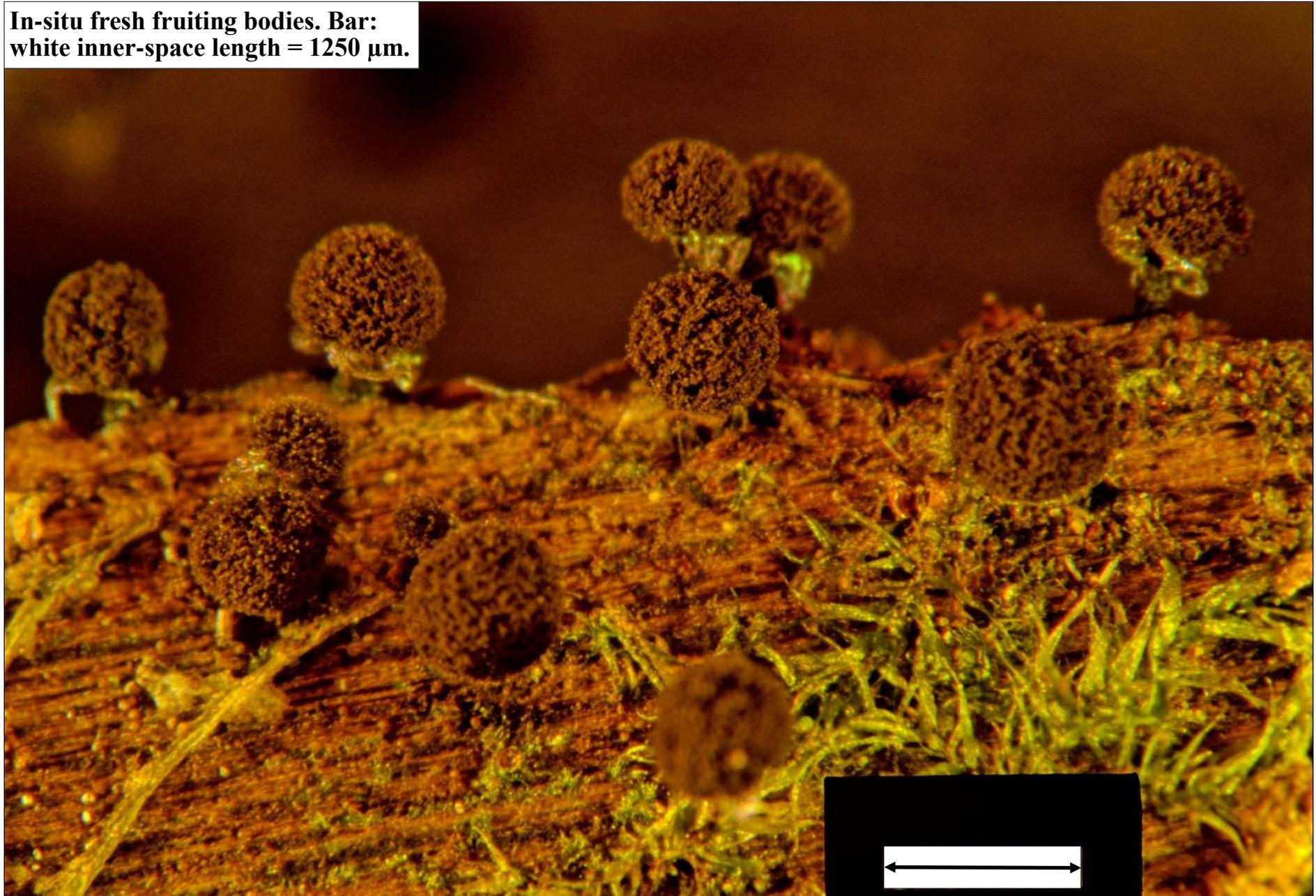
Brief description: The collection was small but the 15 fruiting bodies were in good shape. The thin, iridescent bluish, clear to pale yellowish brown peridia were gone although remnants were hanging from the base of the sporangia – leaving the globose, brown, spore-capillitial mass in place atop the short black stocky stipe. Most striking - in SMF slides - was the shallow yellow pulvinate zone at the stipe apex below the dense capillitium – a feature made more prominent by gentle heating of the SMF slides. According to the literature, this zone is the result of waxy particulate matter within the robust stipe – and therefore the epithet 'cerifera' meaning to bear wax. **Sporangia** were mostly 0.6–1.0 mm in diameter. **Stipes** were black, stocky and filled with pale yellow to yellow-brown particles. Stipes measured ca 0.6–1.0 × 0.25–0.45 mm. **Capillitial threads** were numerous in the broad zone above the stipe – beginning as broader threads ca 3 µm in width near the stipe but decreasing to roughly half this as they repeatedly underwent dichotomous branching and anastomosing before reaching the sporangial margins. Individual threads were smooth, dark purplish to purplish brown but nearly hyaline at their narrow marginal extremities. **No lime**, granular or crystalline, was observed in the stipe, peridial fragments or among the spores and capillitial threads. **No columella** was present. Spores were globose, violet to violet brown, evenly spinulose but with some of the 'spines' seemingly darker than others (though not in clumps or special patterns) and mostly (9–)10–11 µm in diam.

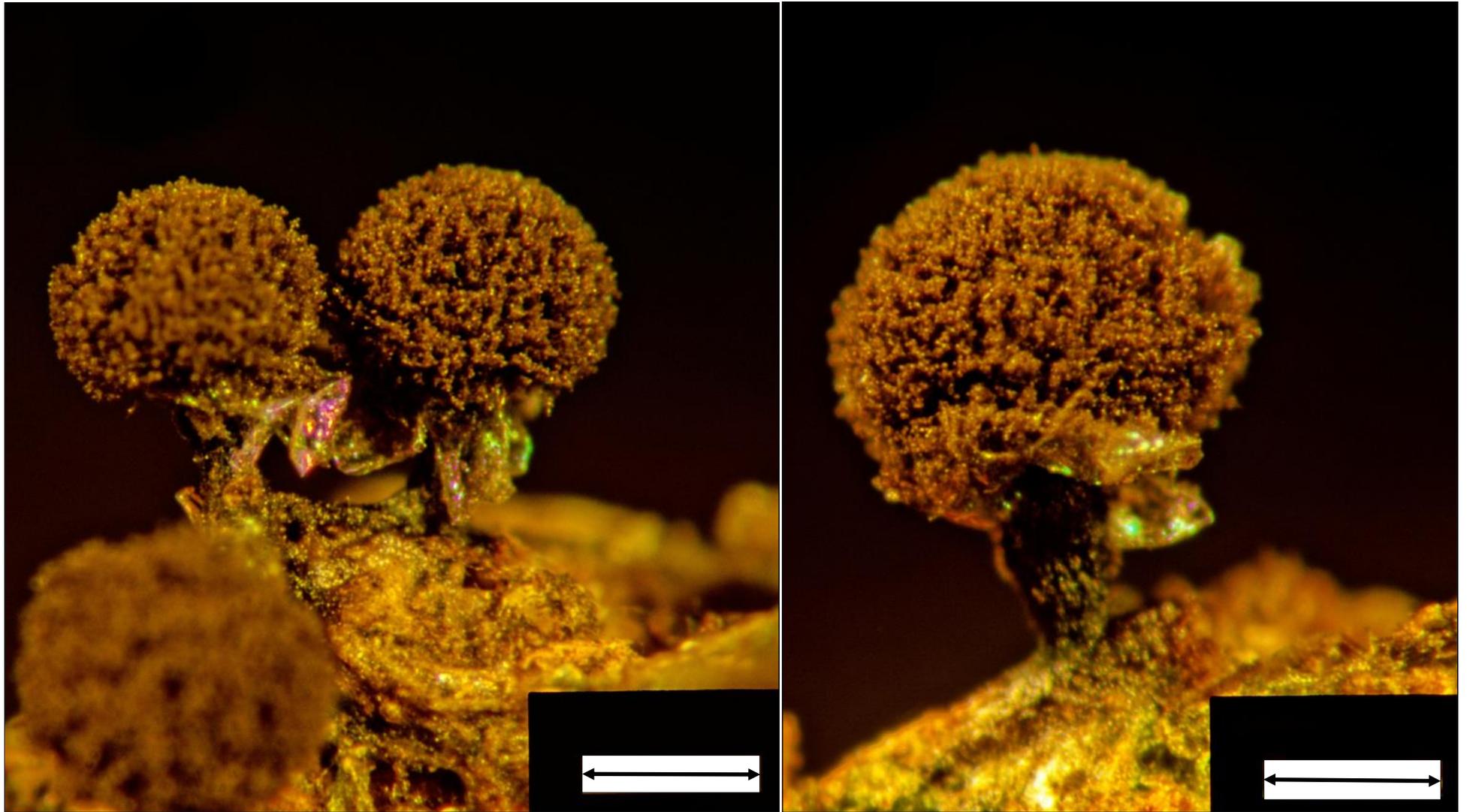
References of interest: **1)** Hagelstein R. 1942. A new genus of the Mycetozoa. *Mycologia* 34(5): 593-594. **2)** McHugh R, Mitchell DW, Brims MH & Stephenson SL. 2009. New additions to the Myxomycota of Australia. *Australasian Mycologist* 28: 56–64. **3)** Moreno GH, Singer H, Stephenson SL. 2008. A study on *Lamproderma australiensis* and *L. reticulosporum*. *Bol. Soc. Micol. Madrid* 32: 113-120. **4)** Moreno GH, Rojas C, Stephenson SL, Singer H. 2009. A new species of *Lamproderma* (Myxomycetes) from Costa Rica. *Micol. Progress* 8(3): 215–219. “<https://doi.org/10.1007/s11557-009-0593-5>”. **5)** Leontyev et al. 2019. Towards a phylogenetic classification of the Myxomycetes. *Phytotaxa* 399(3): 209–238.

In-situ fresh fruiting bodies. Bar: white inner-space length = 1,667 μm .

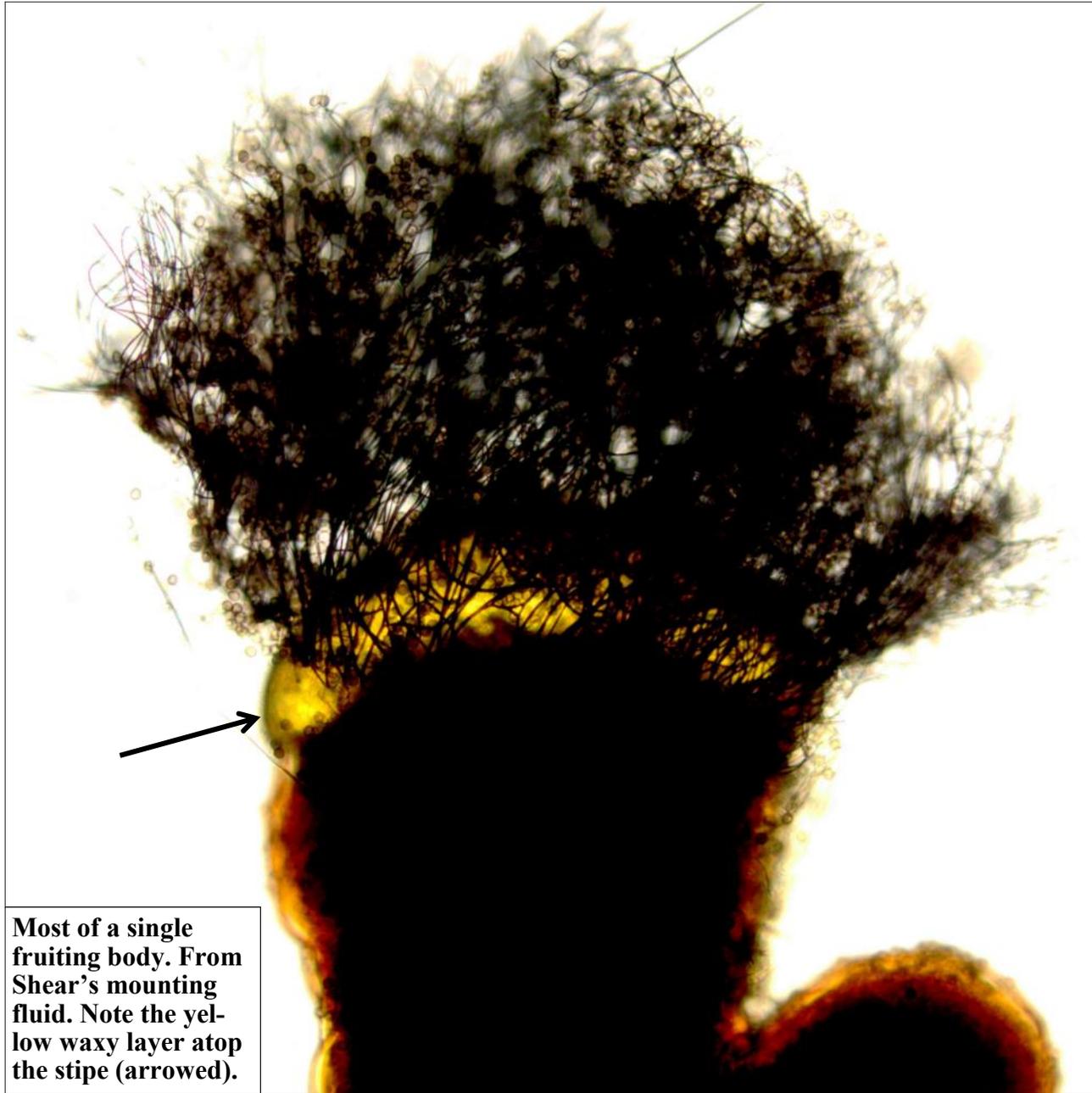


In-situ fresh fruiting bodies. Bar:
white inner-space length = 1250 μm .

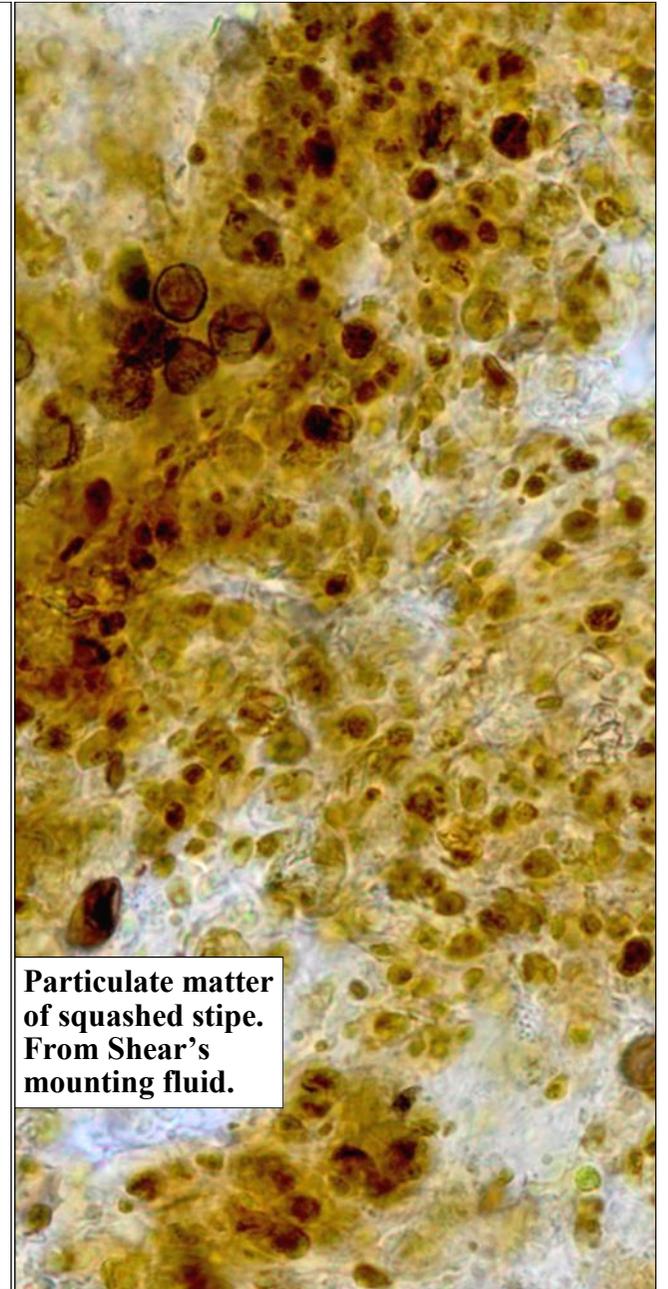




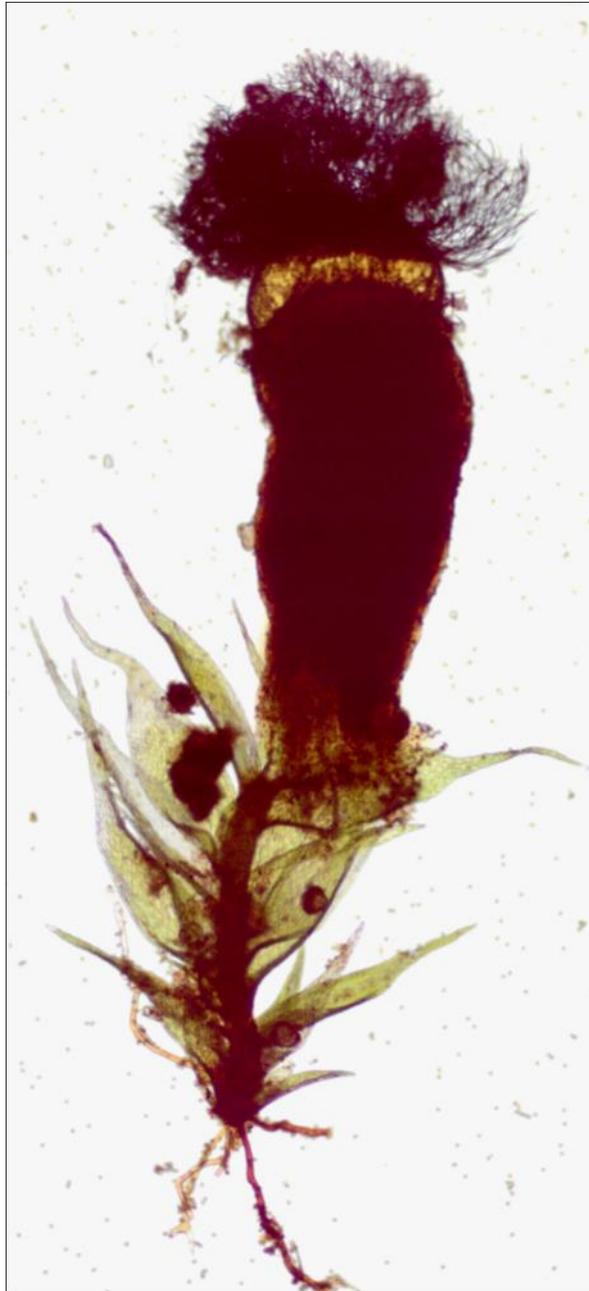
In-situ fresh fruiting bodies. Note bits of the iridescent peridium hanging down below the capillitial-spore mass. Bars: white inner-space lengths — left photo = 500 μm , right photo = 400 μm .



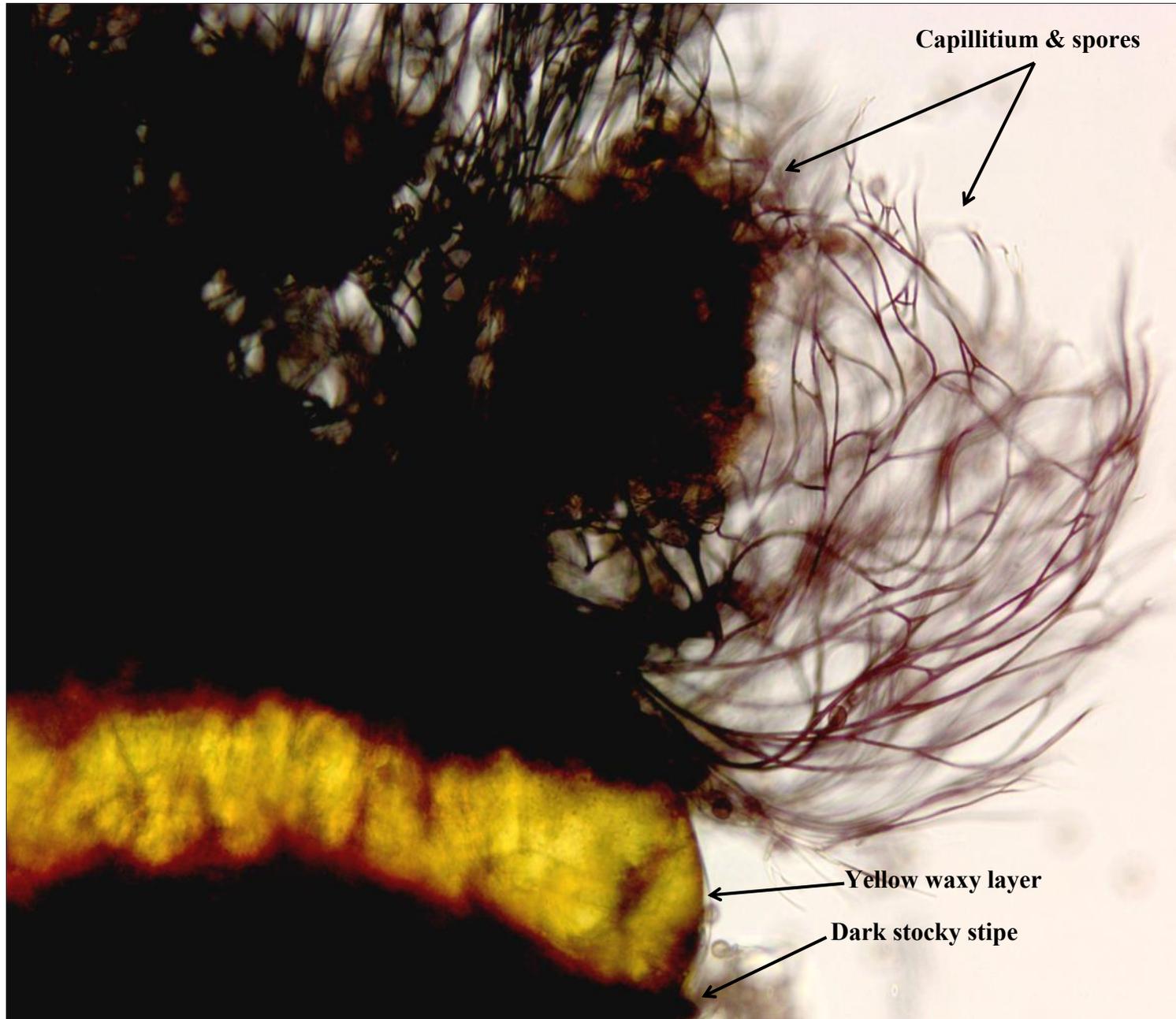
Most of a single fruiting body. From Shear's mounting fluid. Note the yellow waxy layer atop the stipe (arrowed).



Particulate matter of squashed stipe. From Shear's mounting fluid.



Photos from Shear's mounting fluid. Left: Whole fruiting body & the moss with which it was associated. Right: Higher magnification of the same fruiting body. Note the yellow waxy layer (arrowed) and the dense capillitium above the dark stocky stipe.



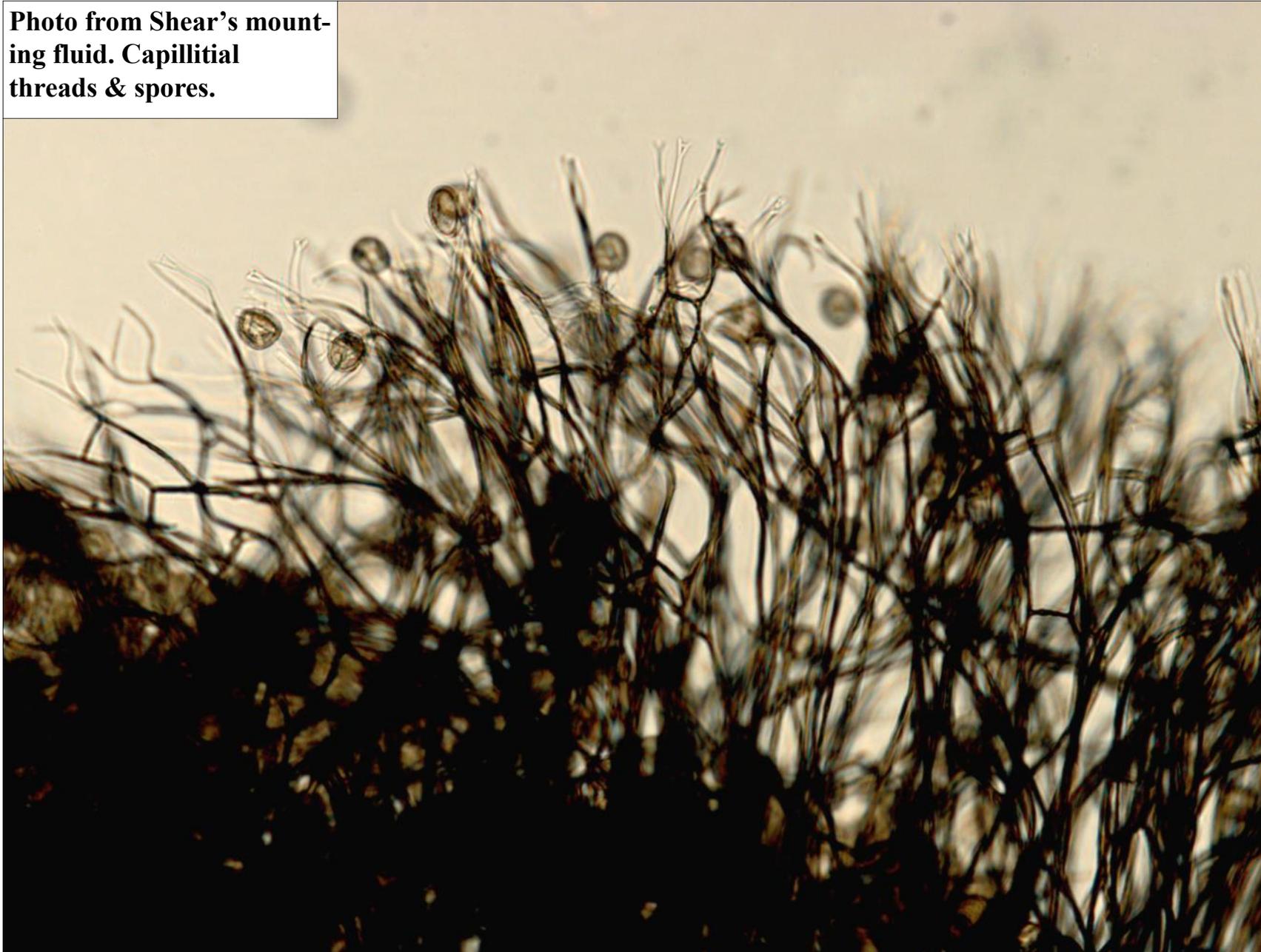
Capillitium & spores

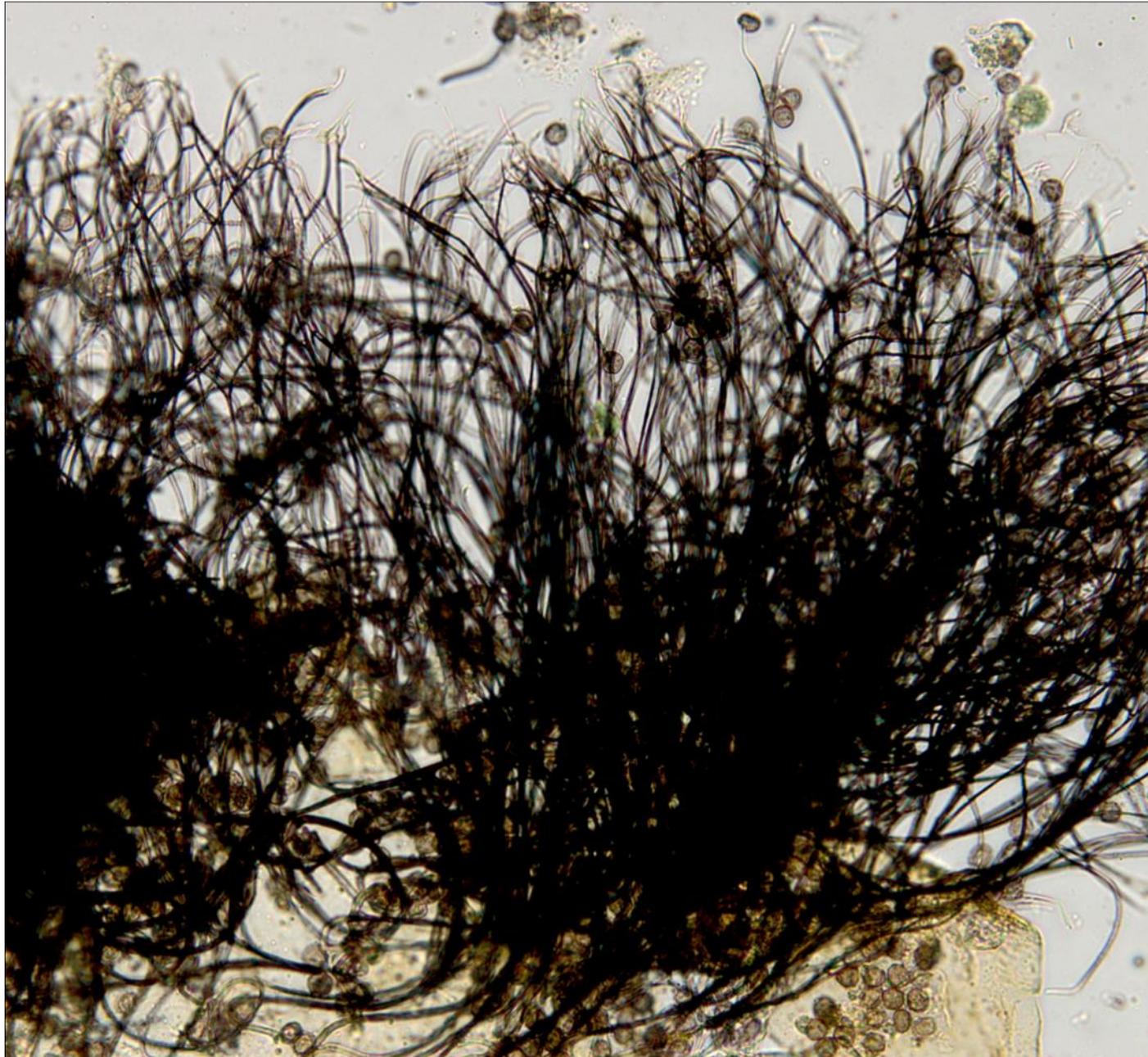
**Photo from
Shear's mounting
fluid. Portion of
fruiting body from
the previous page
- emphasis capilli-
tial threads, yel-
low waxy layer &
uppermost stipe.**

Yellow waxy layer

Dark stocky stipe

Photo from Shear's mounting fluid. Capillitial threads & spores.





Photos from Shear's mounting fluid. Capillitial threads & spores with a bit of peridium in the left-hand photo.



Photos of spores & peridia from Shear's mounting fluid. Both photos are different foci of the same field. Spores mostly (9–) 10–11 μm in diam.

