

***Didymium squamulosum* (Alb. & Schwein.) Fr. SM66 (= PDD 110439) – a beautiful specimen on the protected concave surface of a fallen dead nikau palm frond**

Collection site: Remutaka Forest Park

Collection date: 27 September 2010

Substrate: on the wet concave (protected) surface of a downed dead nikau palm frond

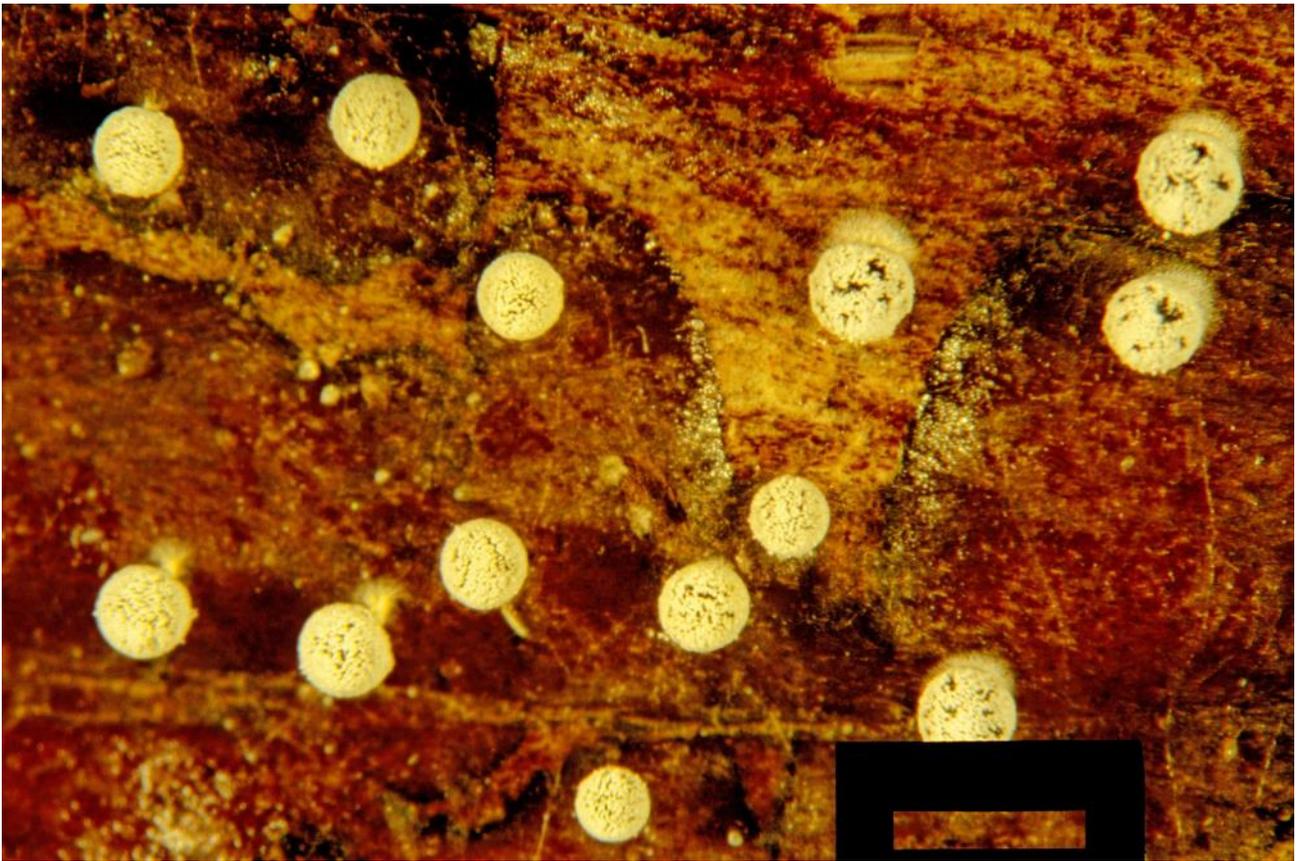
Collector: Ann Bell

Identifier: Dan Mahoney

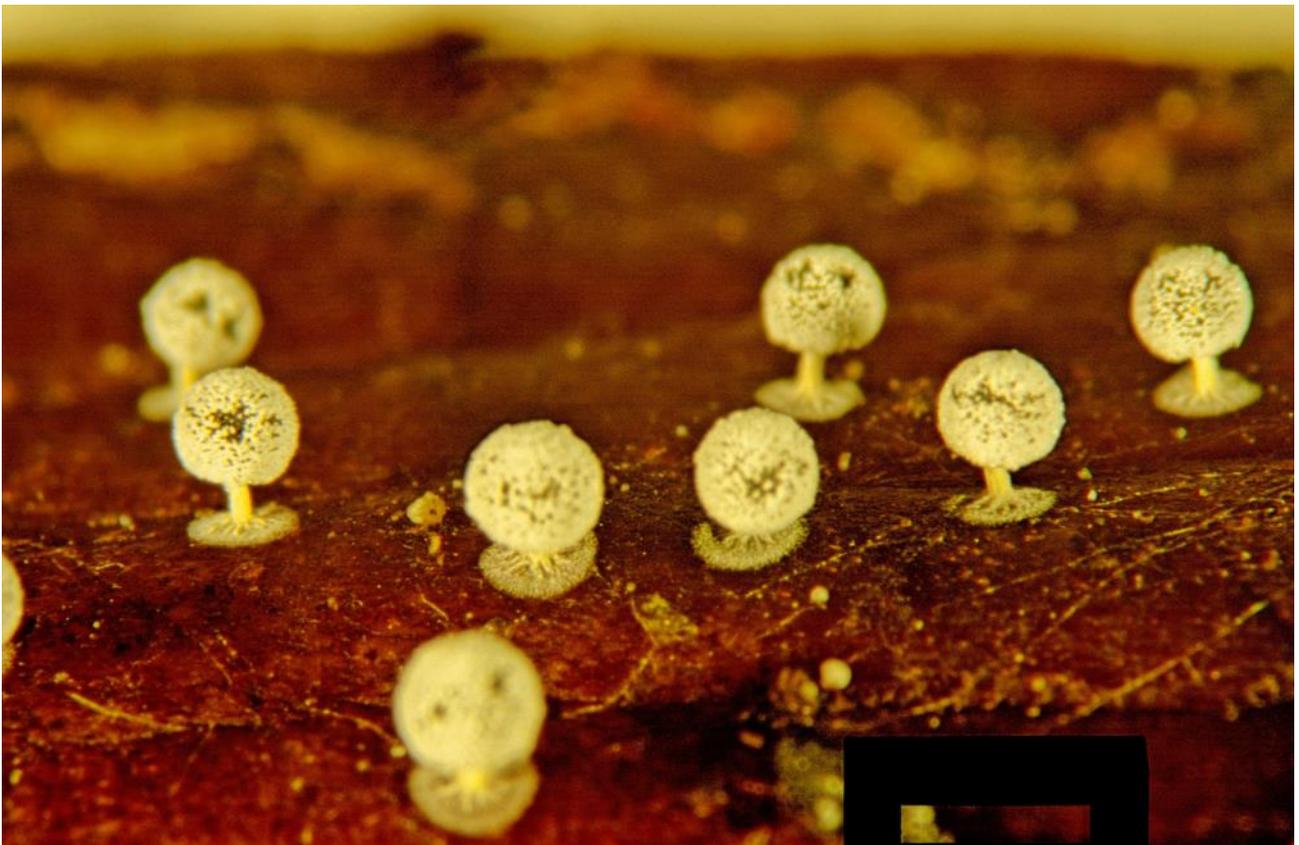
Voucher materials: Dried herbarium specimen SM66 (= PDD 110439) accompanied by 2 Shear's mounting fluid (SMF) heated semi-permanent slide mounts; dissecting scope projection slides (best scanned) of fresh in situ fruiting bodies on the nikau frond; compound scope digital photos of fruiting structure detail – peridium, capillitium, stellate crystals, spores & stalk; Dan's brief description below.

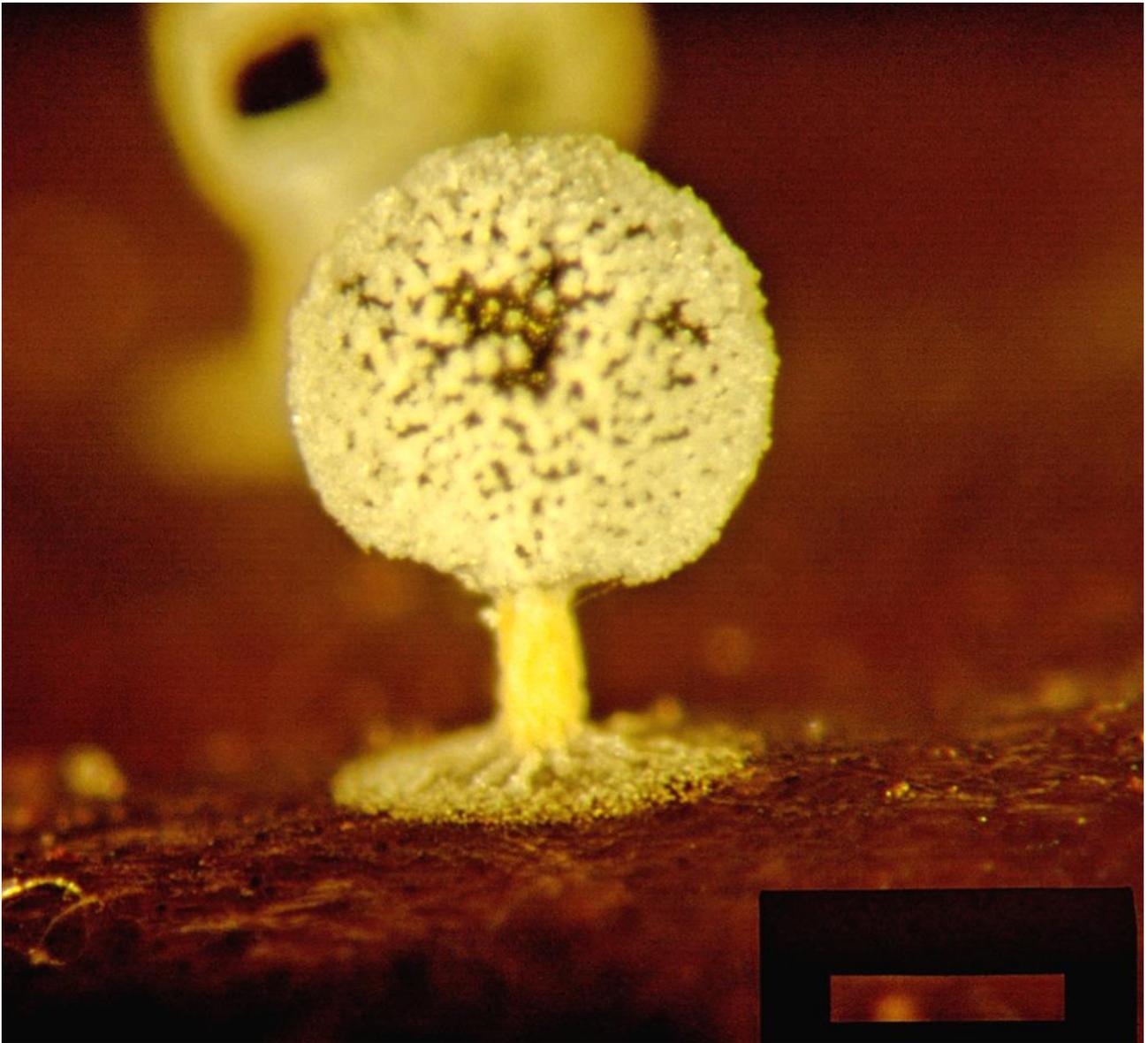
Brief description: **Fruiting bodies** numerous, well-spaced, white (white sporangia, stalks and hypothalli). No plasmodiocarpus stages. **Sporangia** globular (the umbilicate feature not well observed – assuming its presence – due to the short robust stalks and large sporangia. Sporangia mostly 0.7–1.0 mm with the stalk usually less than this yielding a fruiting body ca 1.5 mm in height. **Peridium** membranous, thin, clear or mottled with dull reddish-brown patches. White **stellate crystals** covering the peridium and these separate or clustered but not united into scales. Similar smaller crystals covering the stalk and the well-defined, disc-shaped hypothallus. **Stalk** longitudinally furrowed, stocky & robust. **Capillitium** of narrow, colorless, branching and anastomosing threads. **Columella** not clearly observed but seemingly present as a whitish hemispherical body covered with spores in the slide mounts. Because of having other specimens to examine, I failed to follow up the columellate or umbilicate nature of the sporangia. **Spores** globose, dark violet-brown, distinctly spinose and mostly 10–11 µm.

Comment: The Listers have a good description (pp. 117-119) and illustration (plate 109) in the 1925 3rd edition of their world monograph.

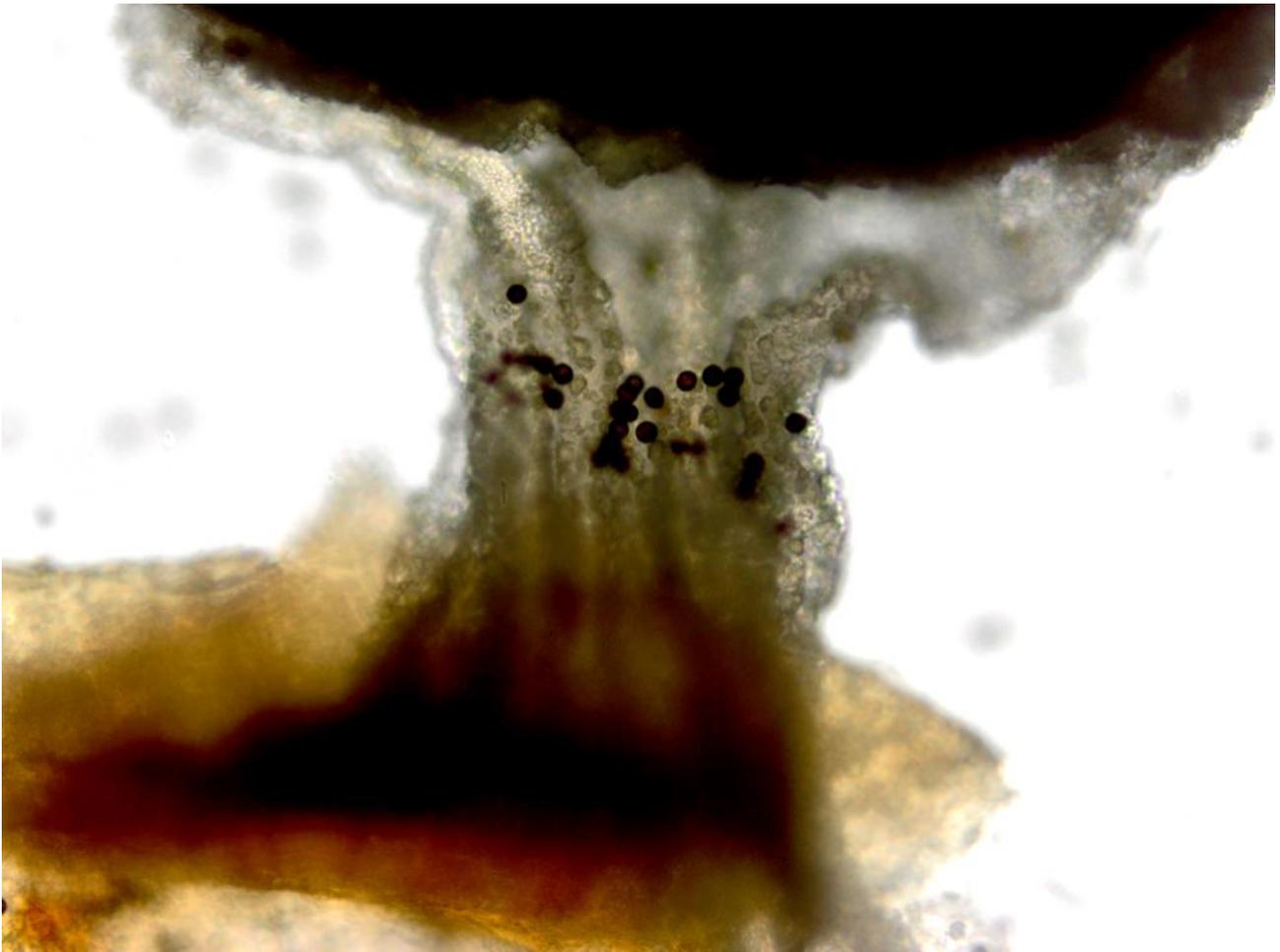


In situ bird's eye view (top) and side profile (bottom) of fresh fruiting bodies. Bar inner space lengths = 1250 & 1667 μm , respectively.

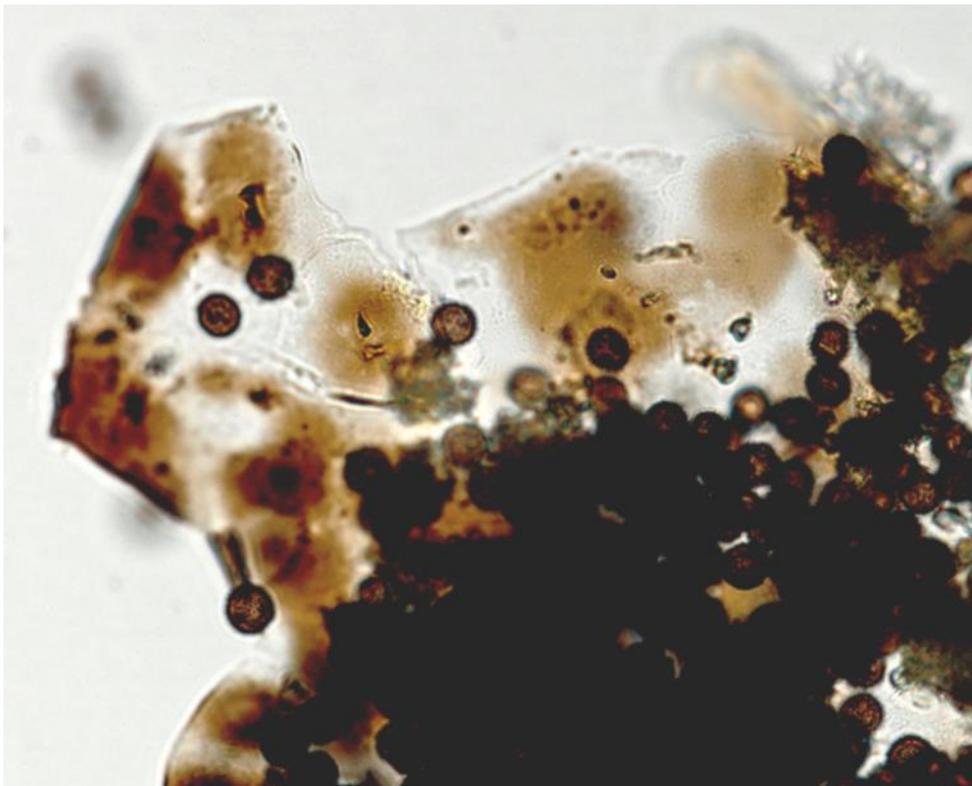




Side profile of an in situ fresh fruiting body. Bar inner space length = 400 μm .

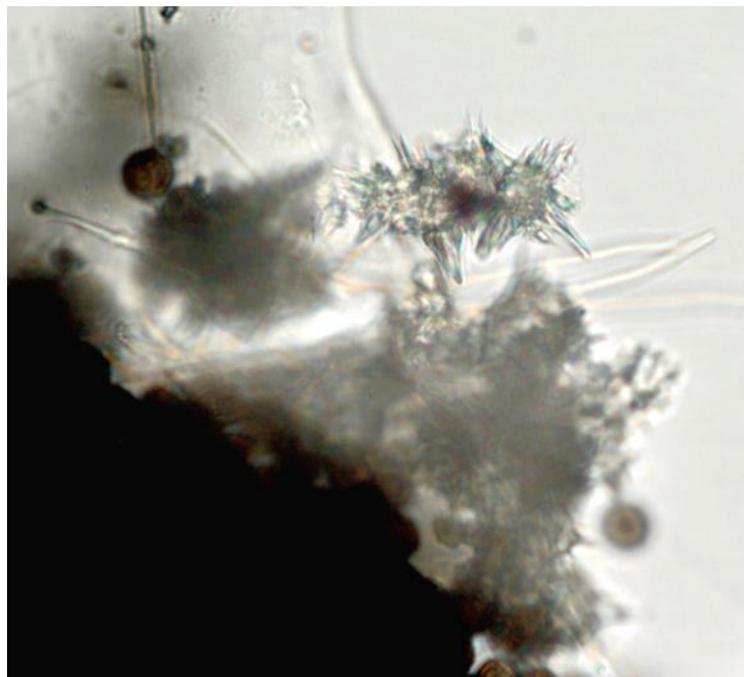


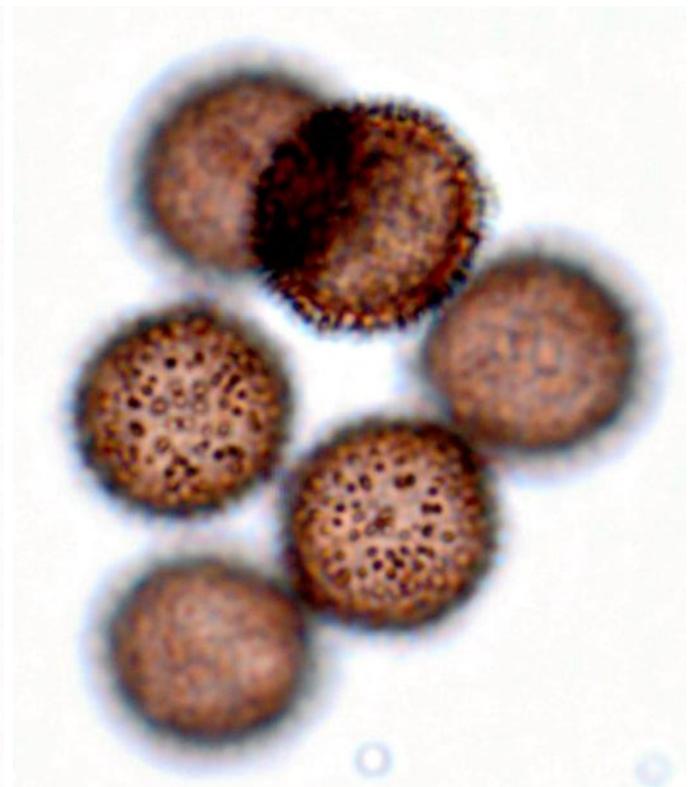
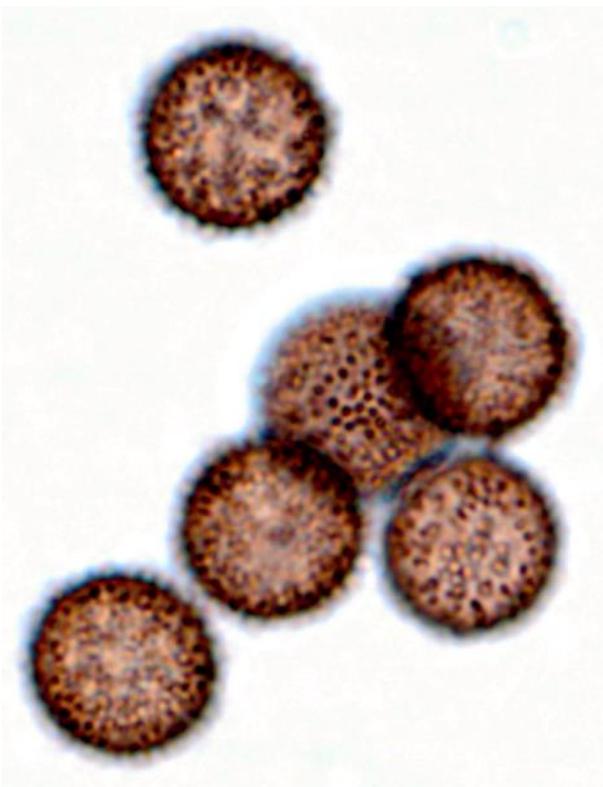
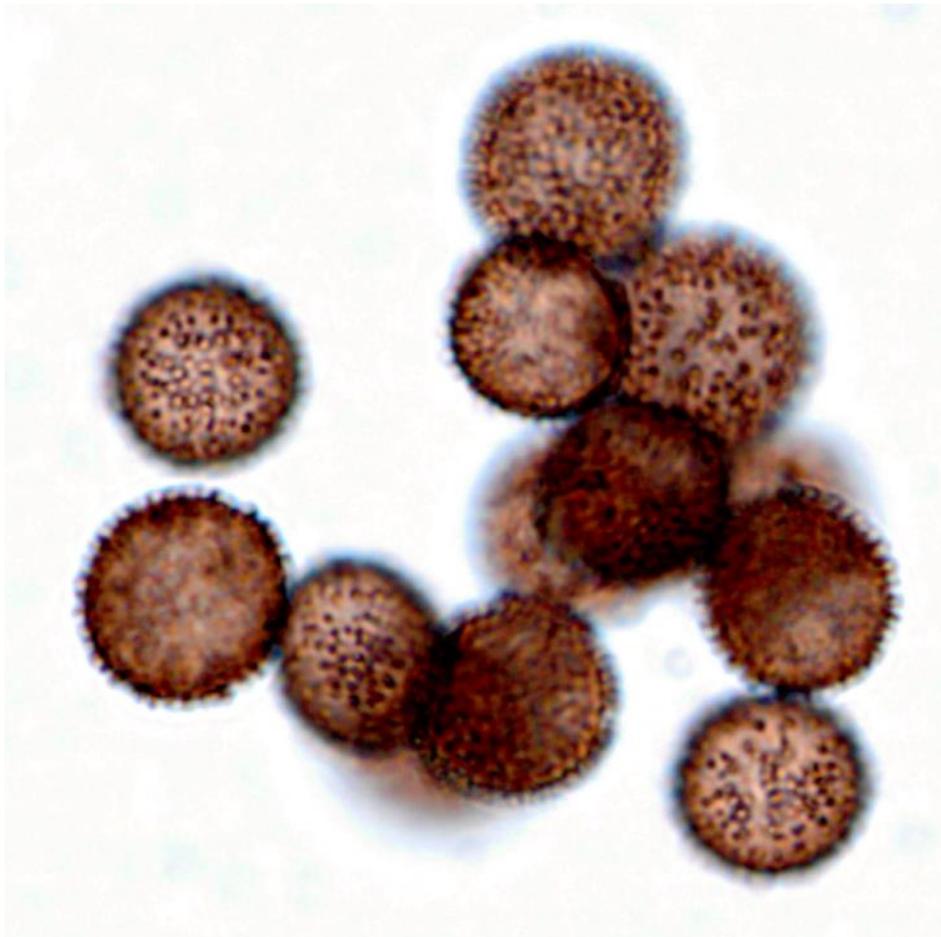
Top: Stalk with crystals & a few scattered spores. Bottom: Peridium mottled with dull reddish-brown pigment plus some spores & crystals. Slide mounts - both Shear's mounting fluid, heated.





Top: Capillitial threads, peridium & spores. Bottom: Stellate crystals, spores, peridium & a few capillitial threads. Slide mounts - both Shear's mounting fluid, heated.





**Spores - mostly 10–11 μm .
Slide mount - 70% EtOH then water.**