***Badhamia utricularis* (Bull.) Berk. – AEB SM6 (= PDD 110386)**

Species Fungorum current name *Physarum utriculare* (Bull.) Chevall.
Mycobank current name *Badhamia utricularis* (Bull.) Berk.
PDD & others use *B. utricularis*

Collection site: Remutaka Forest Park nr. Wainuiomata

Collection date: 6 April 1999

Substrate: a dead tawa tree trunk oriented horizontally about chest height. The slime mold fruiting bodies were hanging pendent from the lowermost side of the trunk.

Collectors: Dan Mahoney, Ann Bell and Toni Atkinson

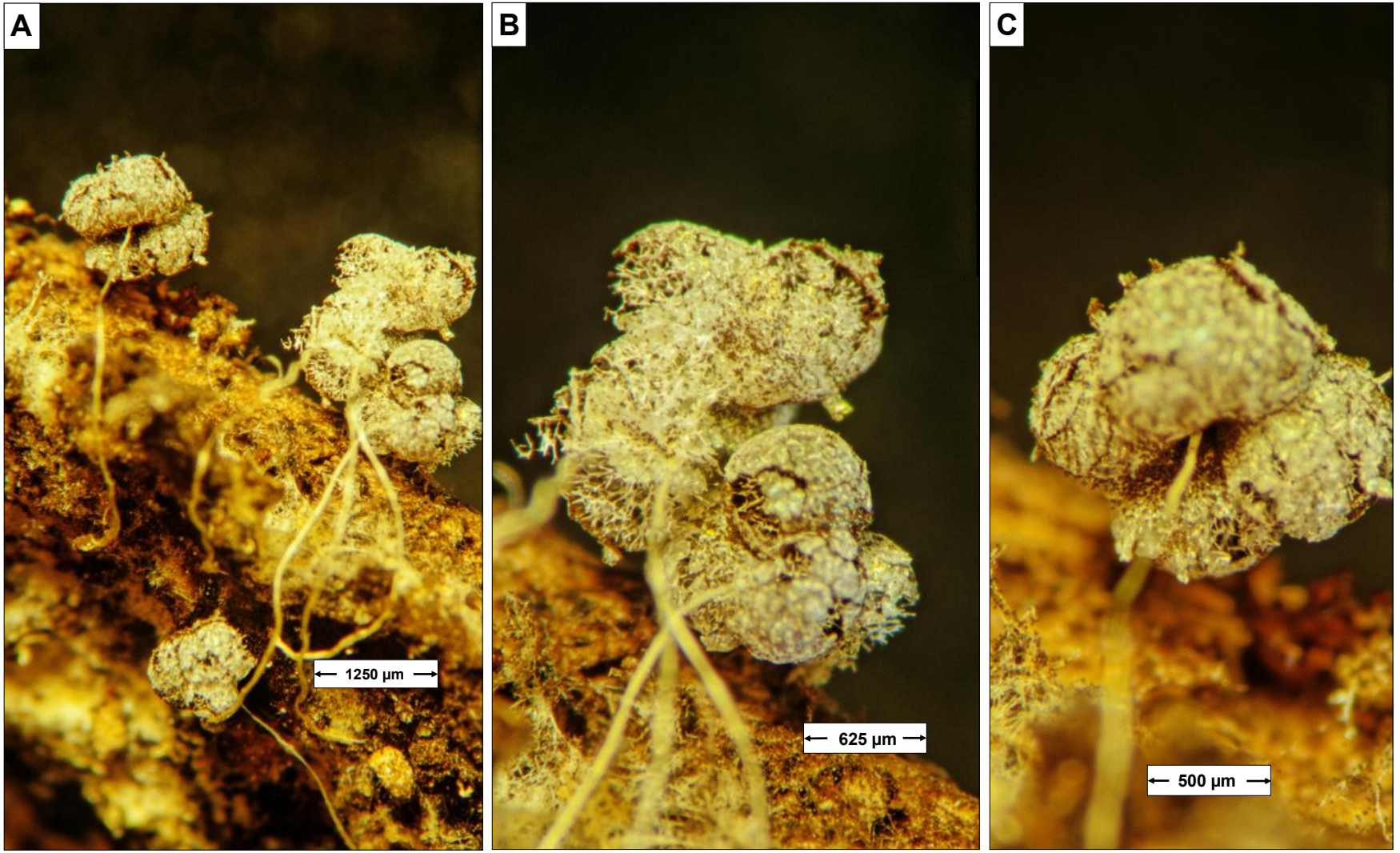
Identifier: Dan Mahoney

Vouchers: dried herbarium material, semi-permanent slide mounts, Dan's brief description

Dan's brief description:

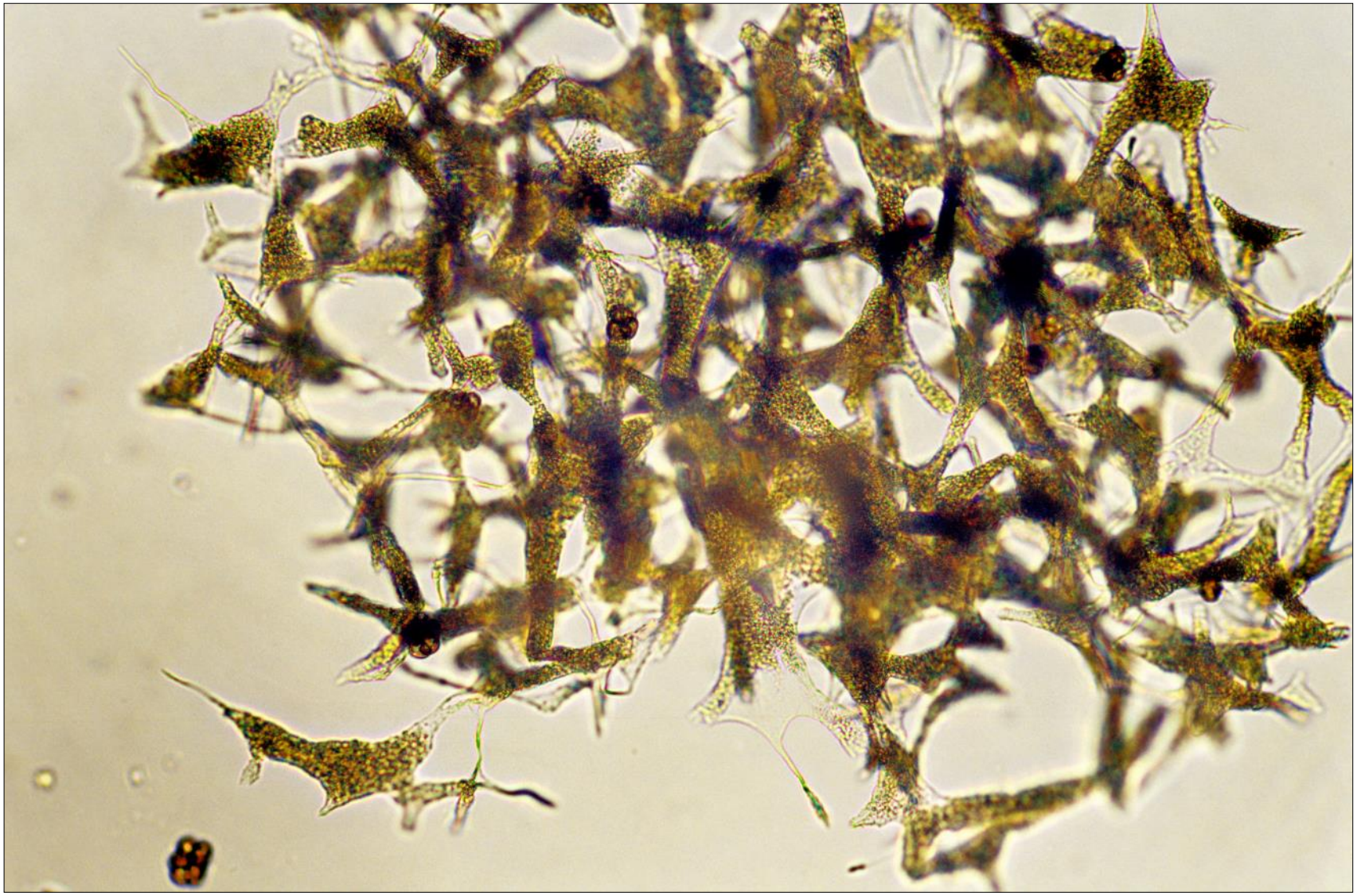
Badhamia utricularis AEB SM6 (= PDD 110386) is readily identified by the following:

1) its long, pendent, irregularly branching (or anastomosing?) weak, fibrillose sporangiophores (up to 6–7+ mm long, dirty white to faintly yellow - especially yellow at, and near, the base)
2) its ovoid to subglobose or irregularly shaped sporangia that were often variously lobed or clustered
3) its white (to yellowish depending on the type of photography and/or mounting medium) capillitium composed of continuous flat limy tubules broken only by slight nodal angular enlargements
4) its evanescent, thin, slightly iridescent, white to ash-colored, netted peridium containing flecks of violet
5) its distinctive dark black spore mass composed of spore clusters containing 3 to 10 spores each. Individual spores were brownish, thick-walled and finely verruculose. They varied in shape from irregularly globose to irregularly ellipsoid - mostly 9–11 µm in longest axis (n=10) – although the occasional irregularly ellipsoidal larger spore was seen. Spore clusters sometimes breaking up, but usually remaining intact.

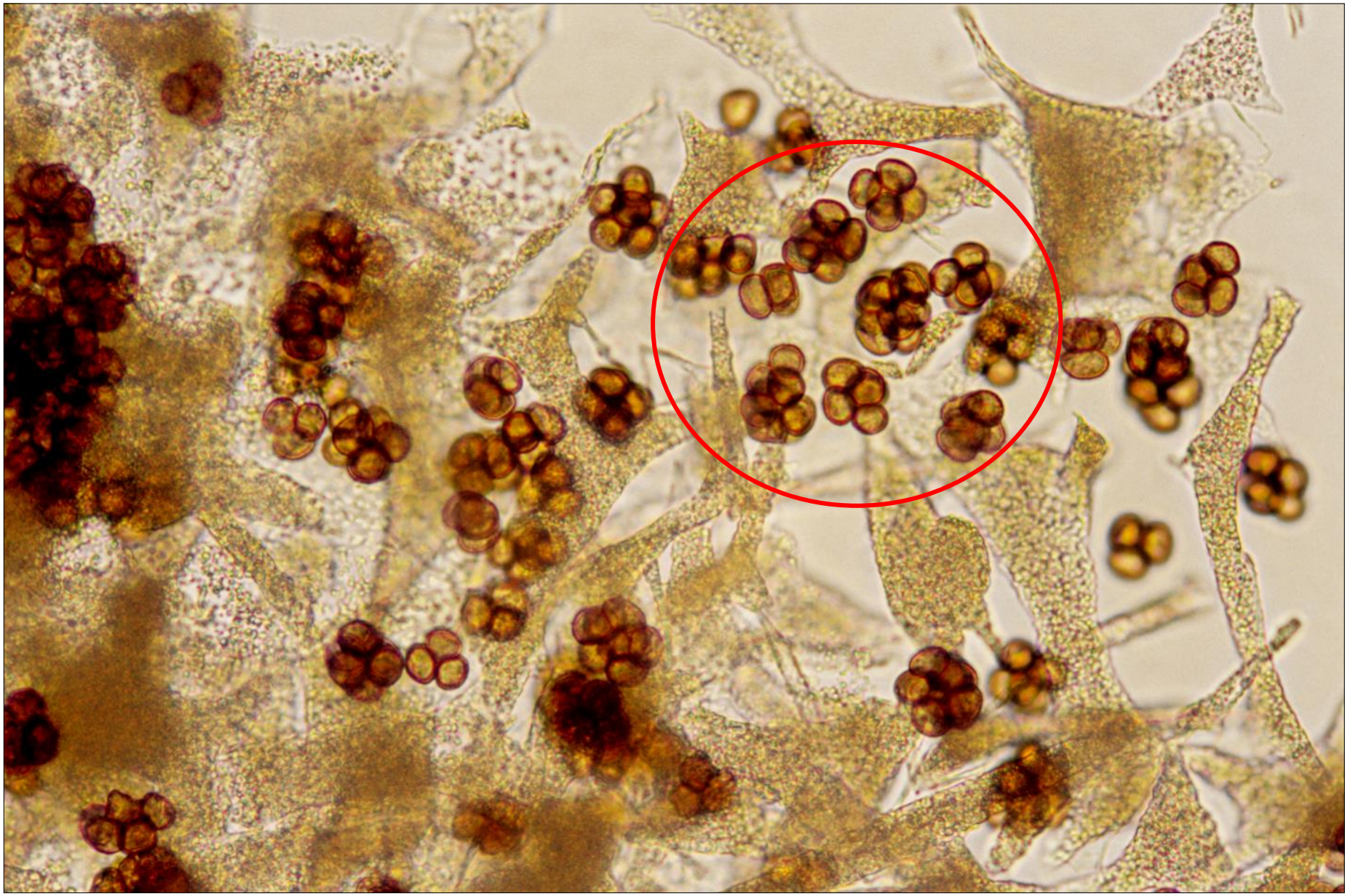


A–C. *Badhamia utricularis* AEB SM6. Fresh in-situ fruiting bodies from the underside of a dead tawa trunk. B and C are closeups from A. Note the long weak fibrillose sporangiophores, the apical clusters of whitish-grey mature sporangia, the thin evanescent single-walled peridia with netted calcareous ornamentation and the inner calcareous tubular capillitial threads.

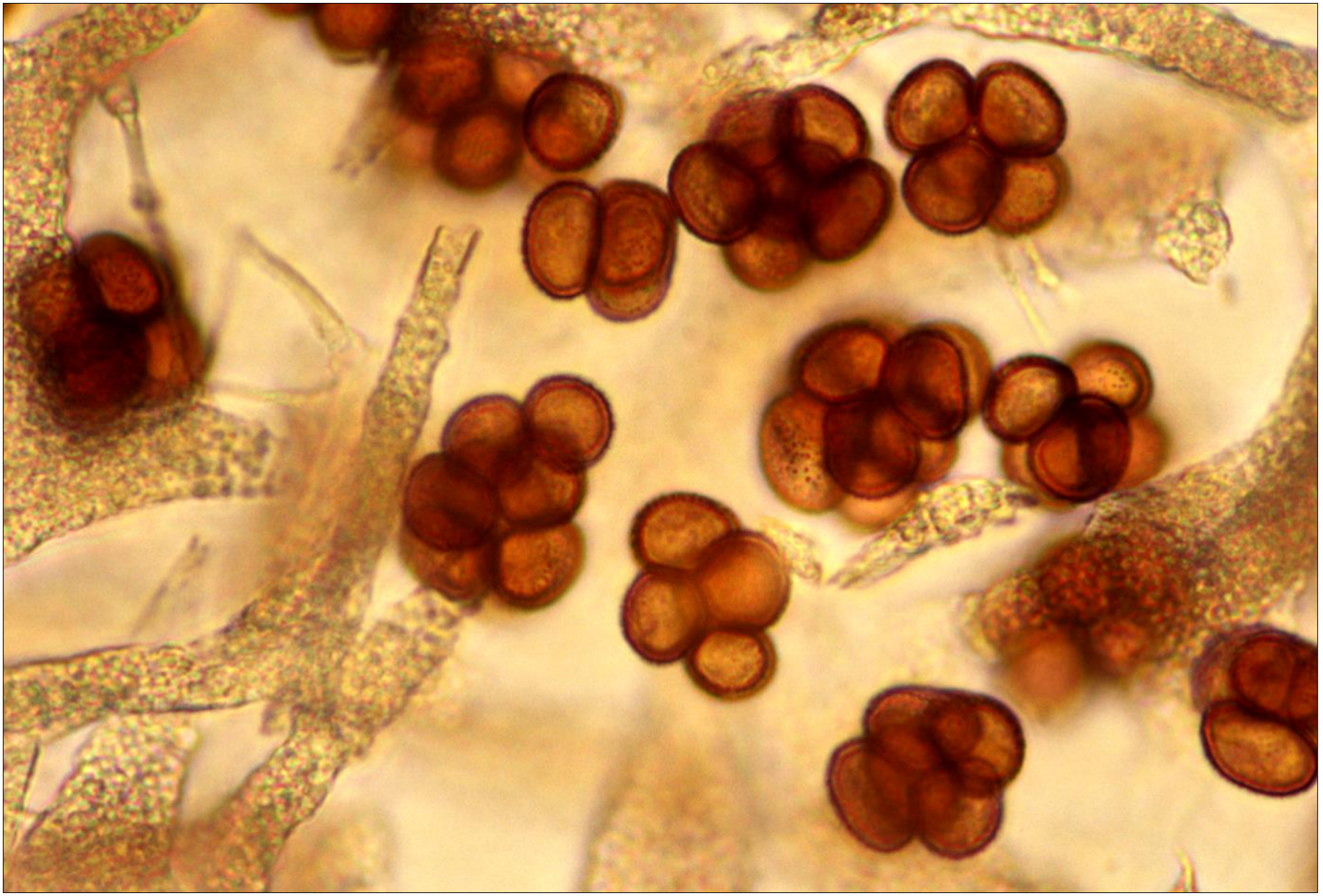
Badhamia utricularis **AEB SM6. Fresh in-situ fruiting bodies from the underside of a dead tawa trunk. Both photos are the same field of view but with different focuses and magnifications. Note especially the red-outlined narrow calcareous tubular capillitial threads in the right photo.**



Badhamia utricularis **AEB SM6. Capillitial threads photographed in a water mount under the X20 objective using brightfield microscopy. Here the calcareous granules are distinctly yellow while those seen fresh in-situ on the previous 2 pages are white. Perhaps this is the result of different lighting, the different medium or something else?**



Badhamia utricularis **AEB SM6. Calcareous capillitium and spore clusters photographed in a 70% EtOH sporangial squash mount irrigated with Shear's mounting fluid (SMF) and heated, using the X40 objective and brightfield microscopy. Again the capillitial threads are filled with yellowish calcareous granules. The red-outlined yellow-brown clustered spores are shown magnified on the next page.**



Badhamia utricularis **AEB SM6. Shown here are the red-outlined yellow-brown clustered spores from the previous page. These were photographed using the X100 objective. Individual spores are dark yellow-brown, globular to ellipsoidal, thick-walled, verruculose and 9–11 µm in longest axis. Spore clusters sometimes breaking up, but usually remaining intact.**