Trichia botrytis (J.F. Gmel.) Pers. SM63 (= PDD 110436) – a reasonably good match in Stephenson's Myxomycetes of New Zealand

Substrate: dead wood

Collection site: Rimutaka Forest Park

Collection date: Last week of February 2010

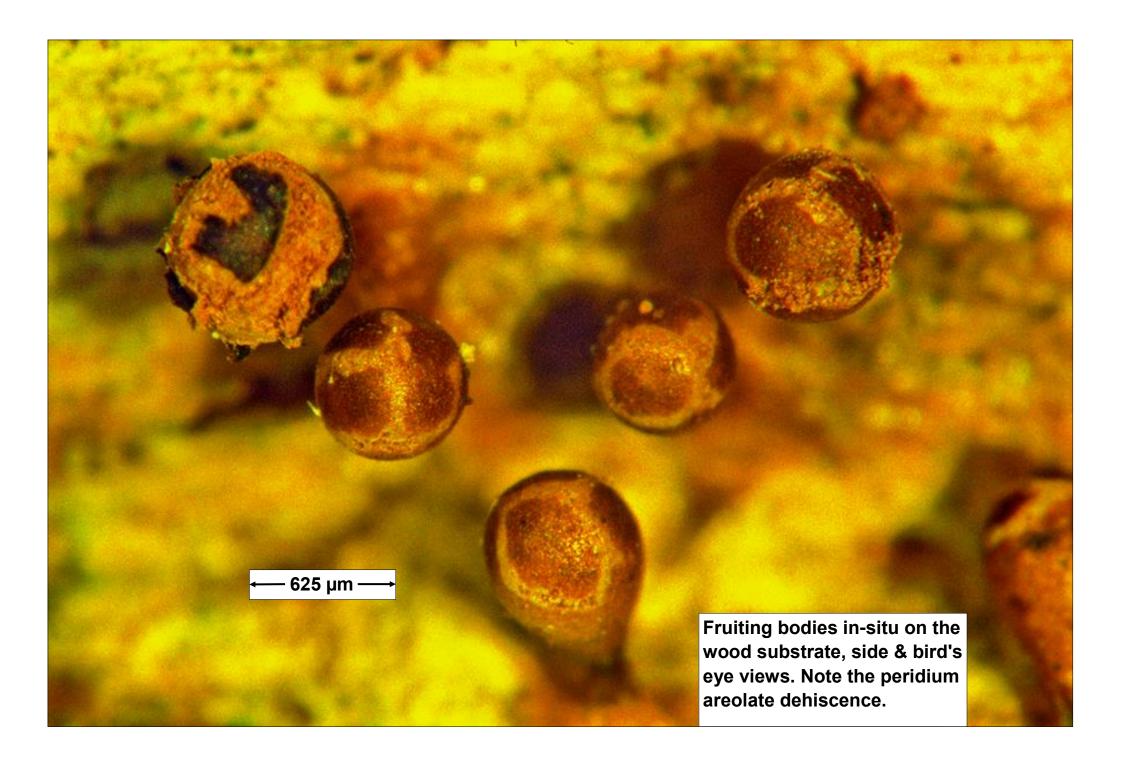
Collector: Ann Bell

Identifier: Dan Mahoney

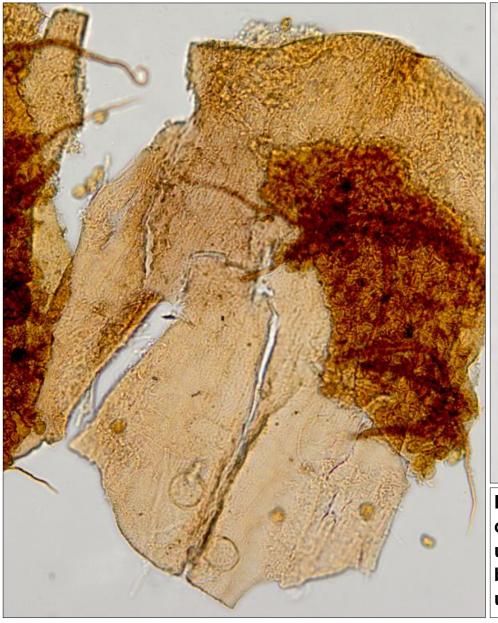
<u>Voucher materials:</u> dried herbarium material (SM63, = PDD 110436) accompanied by 2 Shear's mounting fluid (SMF)-heated semi-permanent slides; several digital photos (Olympus BX51) of squashed sporangia, elaters and spores plus several scanned Kodak print film photos of in-situ fruiting bodies on wood.

Brief description: A small scattered fruiting of ca 25 simple fruiting bodies (ca 1.5 mm high with sporangia ca .75 mm wide); stalks sturdy, short, reasonably broad, longitudinally ribbed, dark, filled with debris (not spore-like bodies); sporangia clavate and *Hemitrichia clavata*-like in shape, smooth, peridium 'tough' as mentioned by Stephenson, ochraceous brown (or faintly reddish) – dehiscence fragments blackish with age, 2-layered with areolate dehiscence as described by Stephenson. Capillitium of yellow ochraceous, simple to sparingly branched, spirally ornamented (non-spinose) elaters which taper to long slender apices, mostly 5–6 μm wide at their mid-point. Spores yellow ochraceous, finely warted, globose (most had collapsed and I had little success in getting them to 'swell'), mostly 10–12 μm.

Worth noting was a faint circumscissile line which could sometimes be seen on the mid to lower sporangia with higher powers of the dissecting scope and more clearly in slide mounts. I'm not familiar with that many species of *Trichia* so I was at first bothered by the possibility of this dehiscence producing an operculum (as described for *T. crateriformis* G.W. Martin). However, no operculum was ever seen and other characters favored *T. botrytis*.









Left photo: Peridium layers - inner lighter, outer darker, SMF-heated. Photographed under X20 objective. Right photo: Spirally banded elater, SMF-heated. Photographed under X40 objective.





Both photos: Spirally banded elaters & spores, water mount. Focus on the finely warted spore surfaces. Brightfield microscopy, 100X objective. Note that the normally globose spores have collapsed.