

***Stemonitis axifera* (Bull.) T. Macbr. SM 23 (= PDD 110403) – A small collection but a reasonably good match. See Stephenson's *Myxomycetes of NZ*, (2003, pp. 126-127) and Martin & Alexopoulos (1969, pp. 191-192 & Fig. 143)**

Collection site #10 at the Ohakune NZ Fungal Foray: The following site description was prepared by Nick (DOC worker who helped organize certain aspects of the foray).

Rangataua Forest and Ecological Area. Rangataua Forest is largely a mixed beech forest (red, silver and mountain) with occasional rimu, Hall's totara and miro. Parts of this forest have been logged. This forest is situated on the largest lava flow in New Zealand, the "Rangataua lava flow" which can easily be seen from the main highway. Access is via the Rotokura Ecological Area track around the lakes, or along Rangataua Road.

Substrate: unidentified dead decorticated wood

Collection date: 5 April 2005

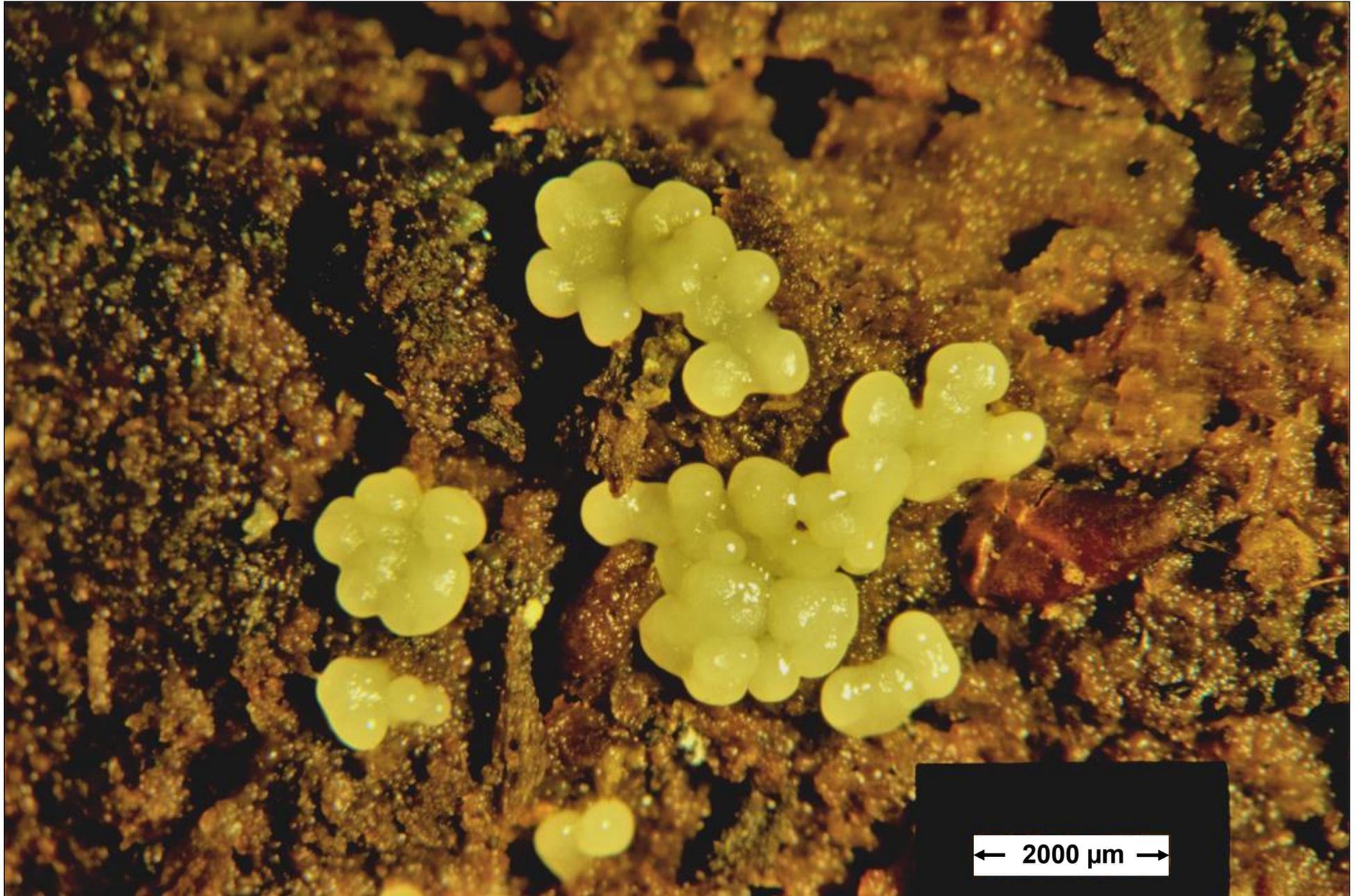
Collector: Ann Bell

Identifier: Dan Mahoney

Voucher material: Dried herbarium specimen [SM 23 (= PDD 110403)] accompanied by two slide mounts (both 70% ETOH initially then Shear's mounting fluid (SMF) added at the coverslip edge and the resulting mount heated), the first is a whole sporangium including stipe – the second is a partial sporangium showing the fragile surface network; in-situ colored projection slides of a fresh pale-yellow coalescing plasmodium and the sporangial cluster on dead wood (best digitized) and a number of compound microscope digitized photos of microscopic details; Dan's brief description and comments.

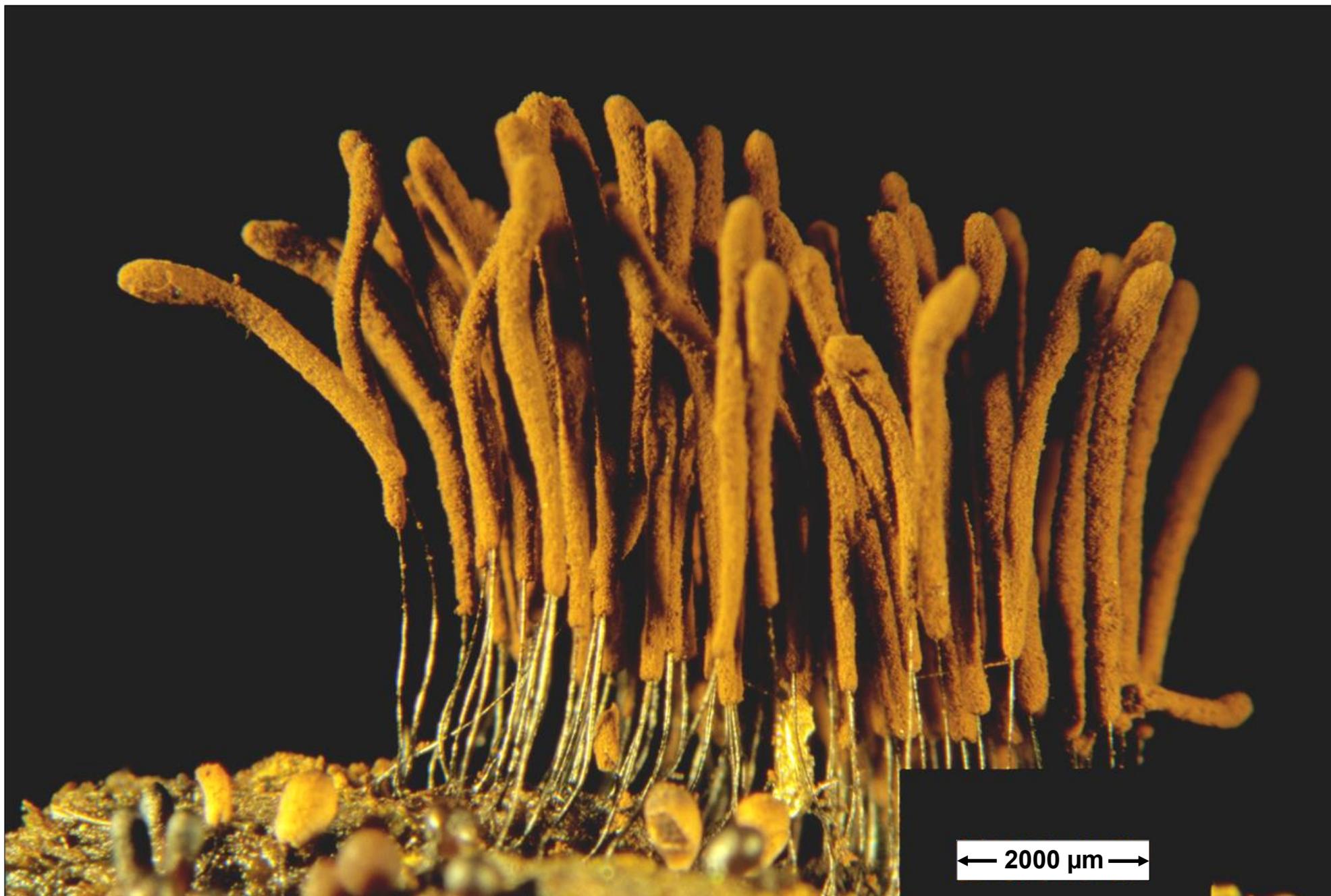
Brief description: One small cluster of roughly 25 closely associated sporangia was observed on the decorticated wood. These rose from a pale-yellow massing plasmodium and left a shiny colorless membranous hypothallus on the wood surface. *Sporangia* were about 8 mm high overall, including a black shiny stipe (approx. 2 mm long) and a cylindrical brownish sporangium (approx. 6 mm long) – the fugacious peridium was already gone. *Columellae* black and extending nearly to the sporangial apex, becoming narrower, curving and branching at that point. Numerous dark brown *capillitial threads* emerging all along the columella (at first wide but becoming narrower as they approached the sporangium periphery, curving and branching frequently with obvious flat membranous swellings at and near the points of branching. Capillitial threads at the periphery giving rise to a *surface net* composed of light brown, narrow and delicate threads. These often stretching and breaking during slide preparation. *Spores* light brown (brown in mass), globose, smooth to faintly warted and mostly 6 µm in diameter.

Comments: The sporangium and spores are reported as reddish brown but for this specimen they were principally brown – perhaps rusty brown. Other features match the description of this species.

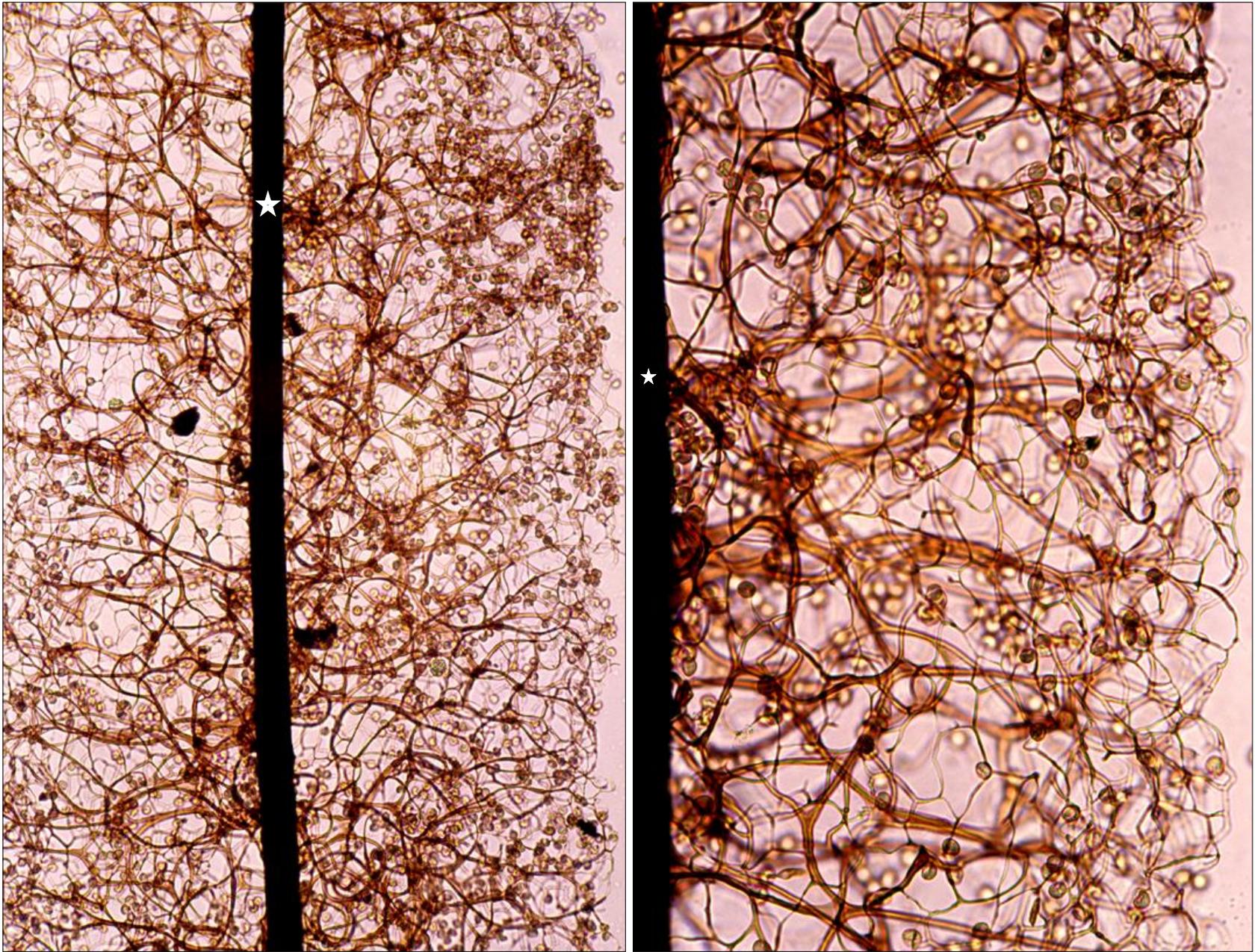


← 2000 μm →

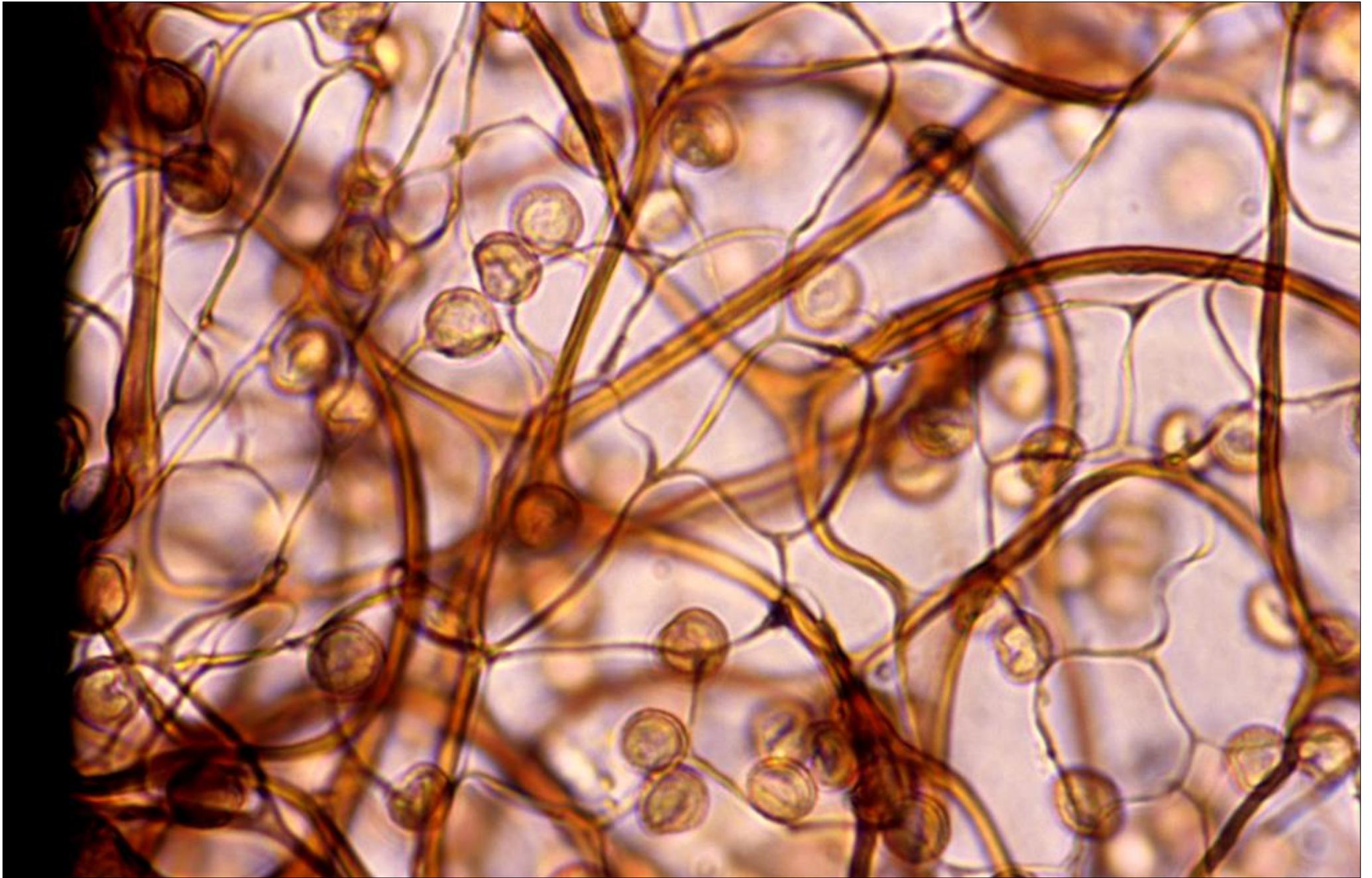
In-situ pale-yellow plasmodium massing on dead wood prior to formation of the sporangia (photo 5 Apr. 05).



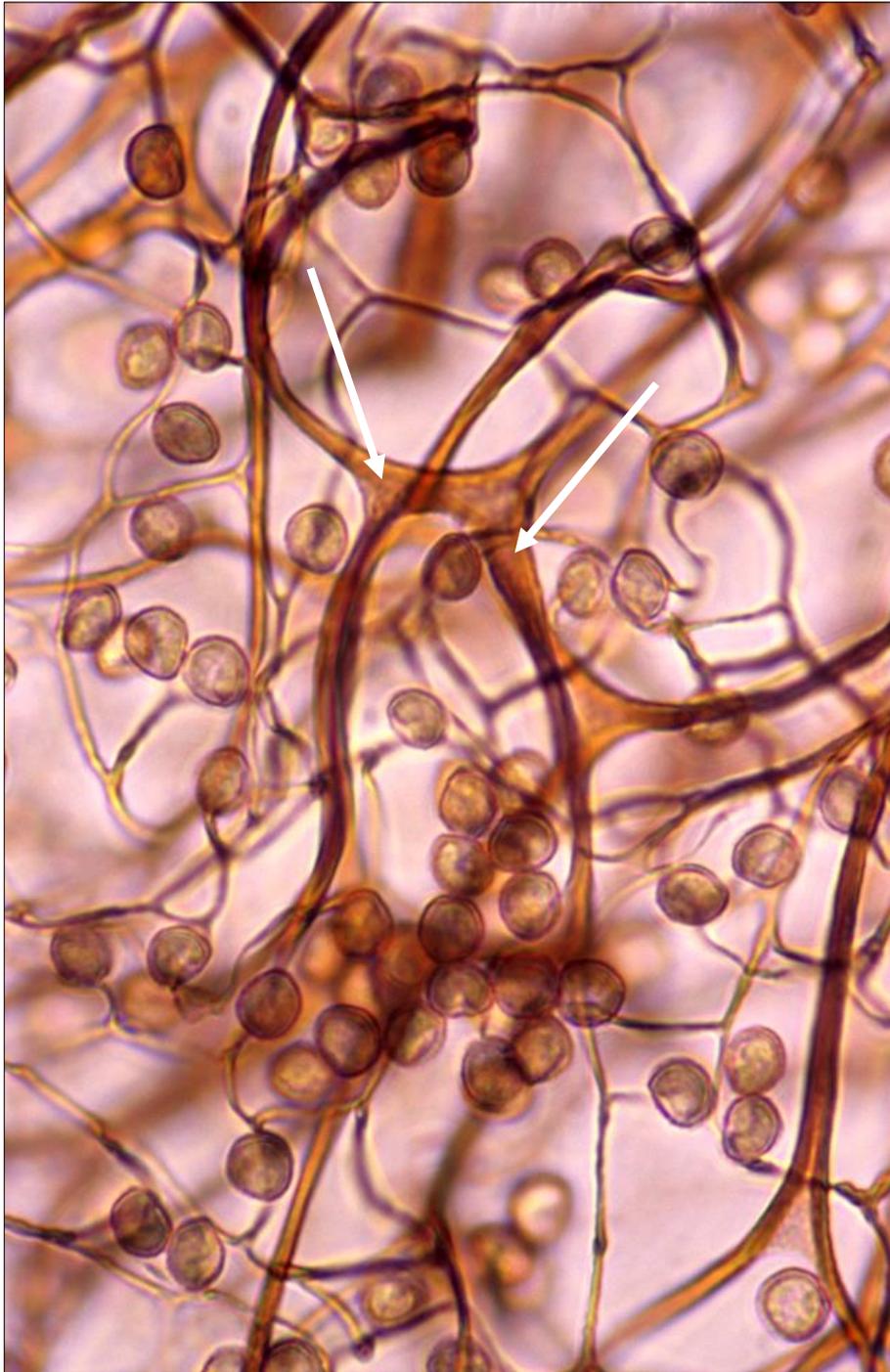
Small in-situ cluster of sporangia on the decorticated dead wood (photo 5 April 2005).



Columella, capillitium and spores, SMF (heated), X20 & X40 objectives, brightfield. Photos taken 30 April 2006 from slide prepared 5 April 2005. Symbol on the columella is approx. in the same position for both photos but a different focus (note the ☆ symbol).



Columella, capillitium & spores, SMF (heated), X100 objective, brightfield. Photo taken 30 April 2006 from slide prepared 5 April 2005.



Spores and fragmented surface net of capillitium, SMF (heated), X100 objective, brightfield microscopy. Photo taken 11 April 2006 from herbarium material mounted in SMF that day. Note the membranous webbing at branch points of the large capillitial threads (arrowed).