***Peroneutypa scoparia* (Schwein.) Carmarán & A.I. Romero AEB 1267 (= PDD 111251) – a good match.**
A depauperate, poorly sporulating example of the 'hyperparasite' *Harpographium fasciculatum* is closely associated with some of the perithecial necks of *P. scoparia* – see the last pages of this PDF and the PDF for AEB 1295 (= PDD 117255). PDFs for AEB 1298 (= PDD 120016) & AEB 1349 (= PDD 120014) exhibit a better sporulating *H. fasciculatum* in association with *P. scoparia*.

Eutypella scoparia* = *Peroneutypa scoparia* = *Peroneutypa heteracantha
Many older records & illustrations are under the latter – as in PDD before 2011. Those following the 2006 reference 'Carmarán et al. 2006. A new phylogenetic classification in Diatrypaceae. Fungal Diversity 23: 67–87' use the middle name. However, the first name and other names not listed above often appear in the nomenclatural record (see Index Fungorum & Rappaz F. 1987. Taxonomie et nomenclature des Diatrypacees ä asques octospores. Mycol. Helvetica 2: 285-648.). Index Fungorum and most recent records use *Peroneutypa scoparia*.

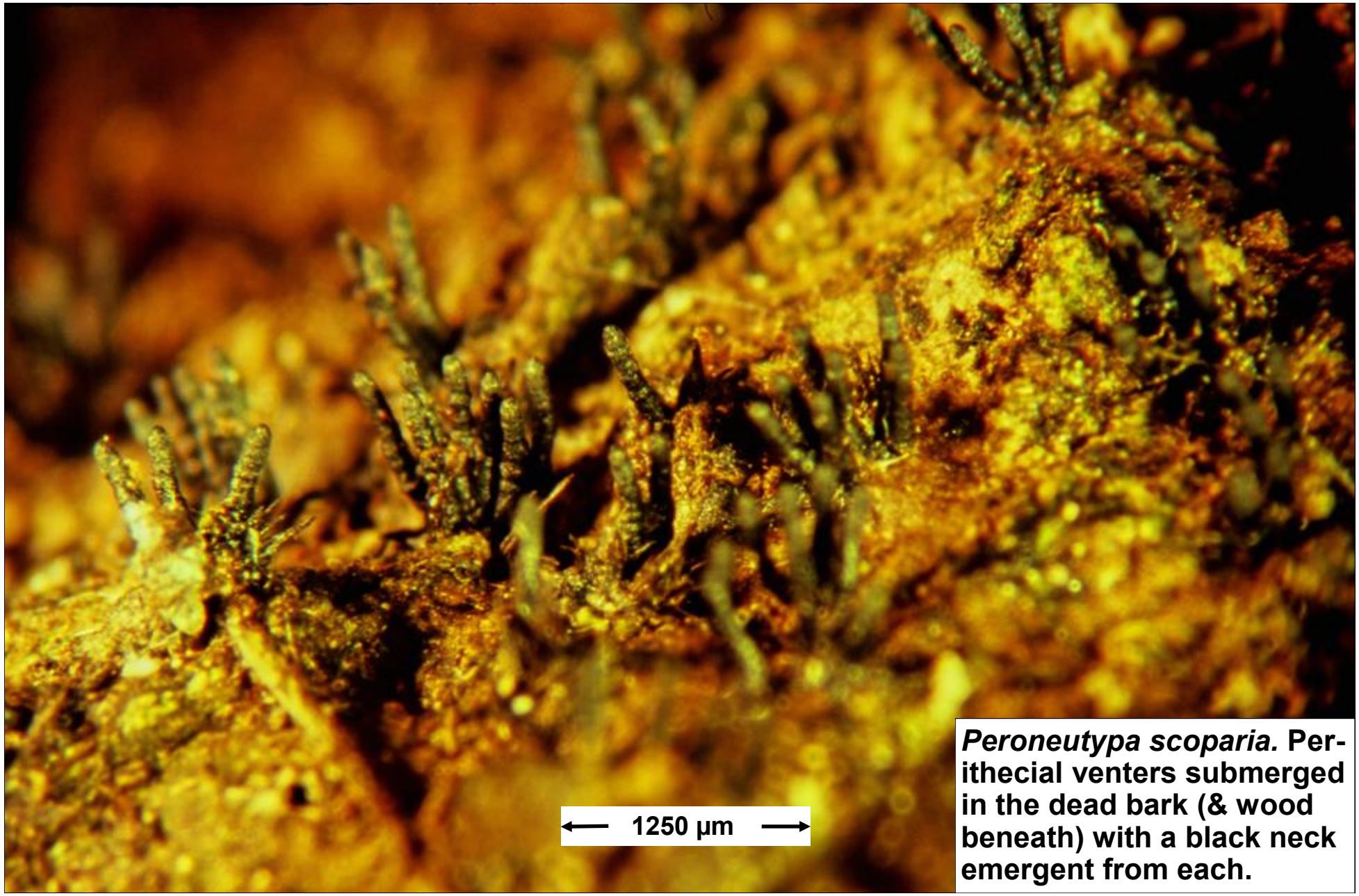
Collected: 21 January 2016 on the bark of a fallen dead unidentified branch

Collection site: Rimutaka Forest Park – Orongorongo Track

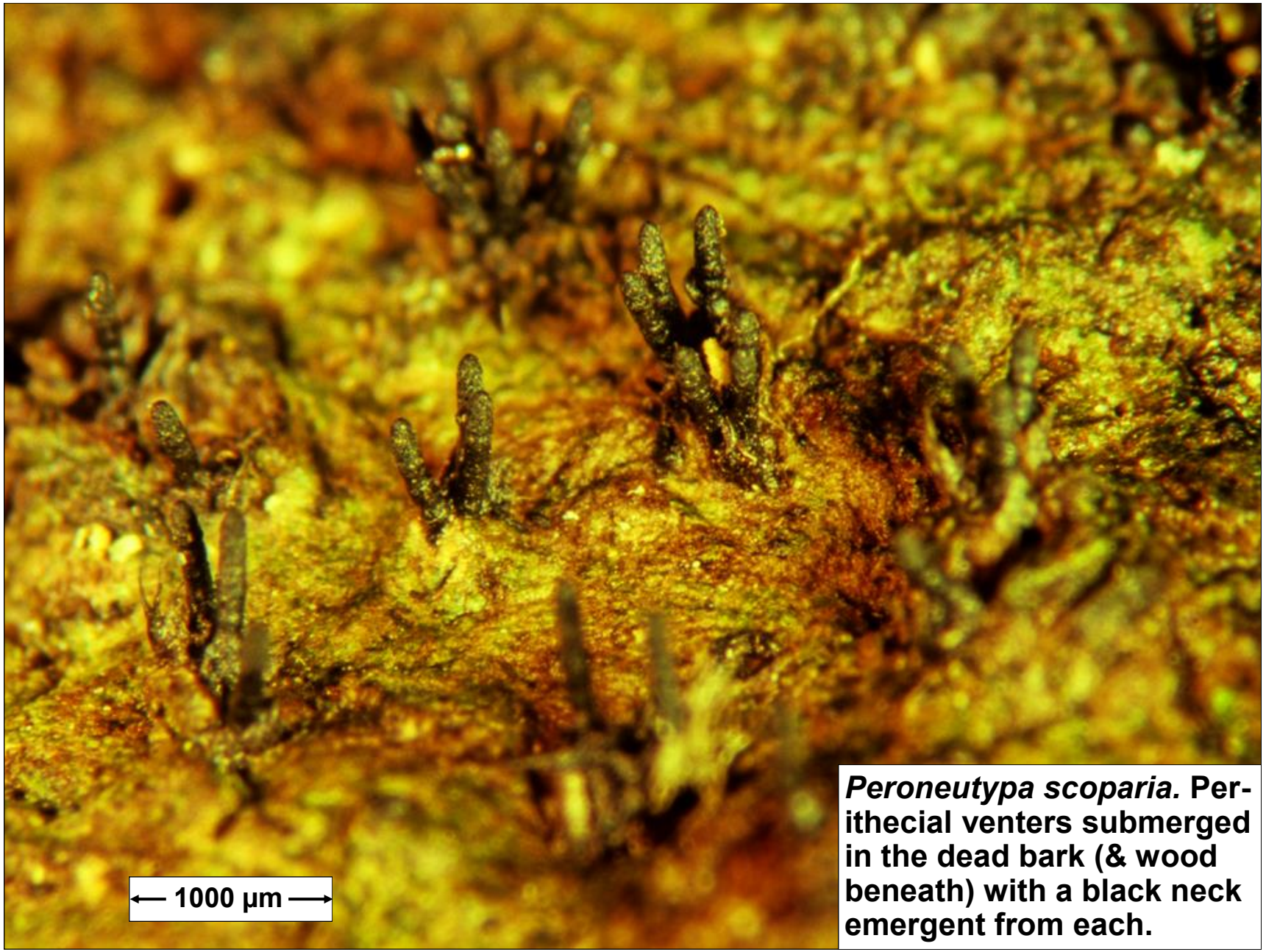
Collected and identified by: Dan Mahoney

Voucher materials: Dried herbarium specimen AEB 1267 (= PDD 111251) accompanied by 4 semi-permanent lacto –Fuchsin microscope slides; in-situ photos of fresh perithecial necks under the Zeiss dissecting scope and photos of microscopic detail from the lacto-Fuchsin slide mounts (fortunately, the slide mounts yielded reasonable photos; but, unfortunately, when observed again in January 2022, they were clouded and less presentable). However, for those who may examine the dried perithecia in the future, good material still awaits; Dan's brief description and comments.

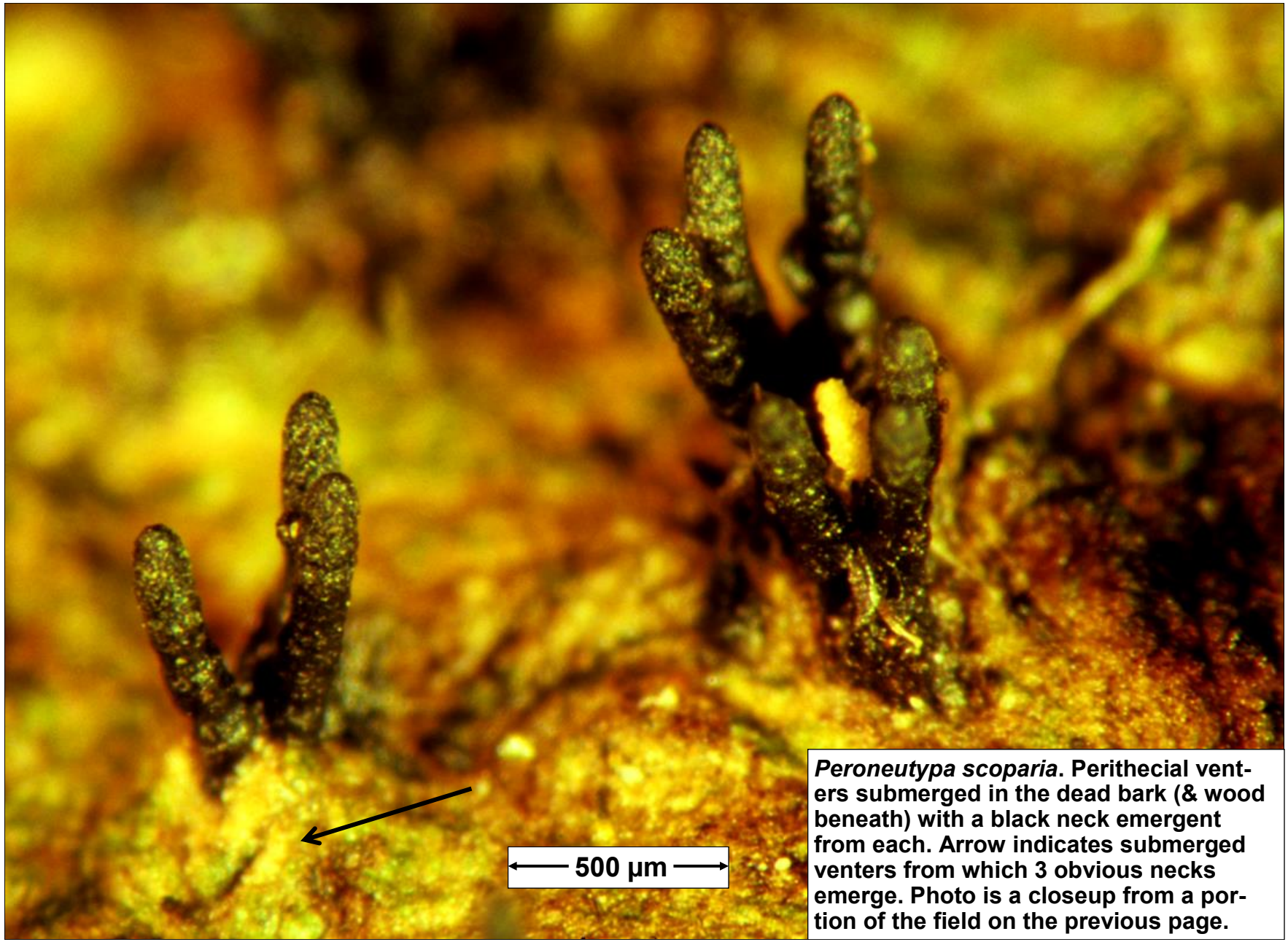
Dan's brief description and comments: See Google images for many excellent photos that show the large black necks that emerge from submerged perithecial venters. Asci and ascospores are very small but these also match the published descriptions. Asci are truncate apically with the 8 hyaline smooth allantoid ascospores bunched together irregularly. Asci with their long narrow stipes and the ascospores were best viewed in lacto-Fuchsin under phase microscopy using the oil immersion objective.



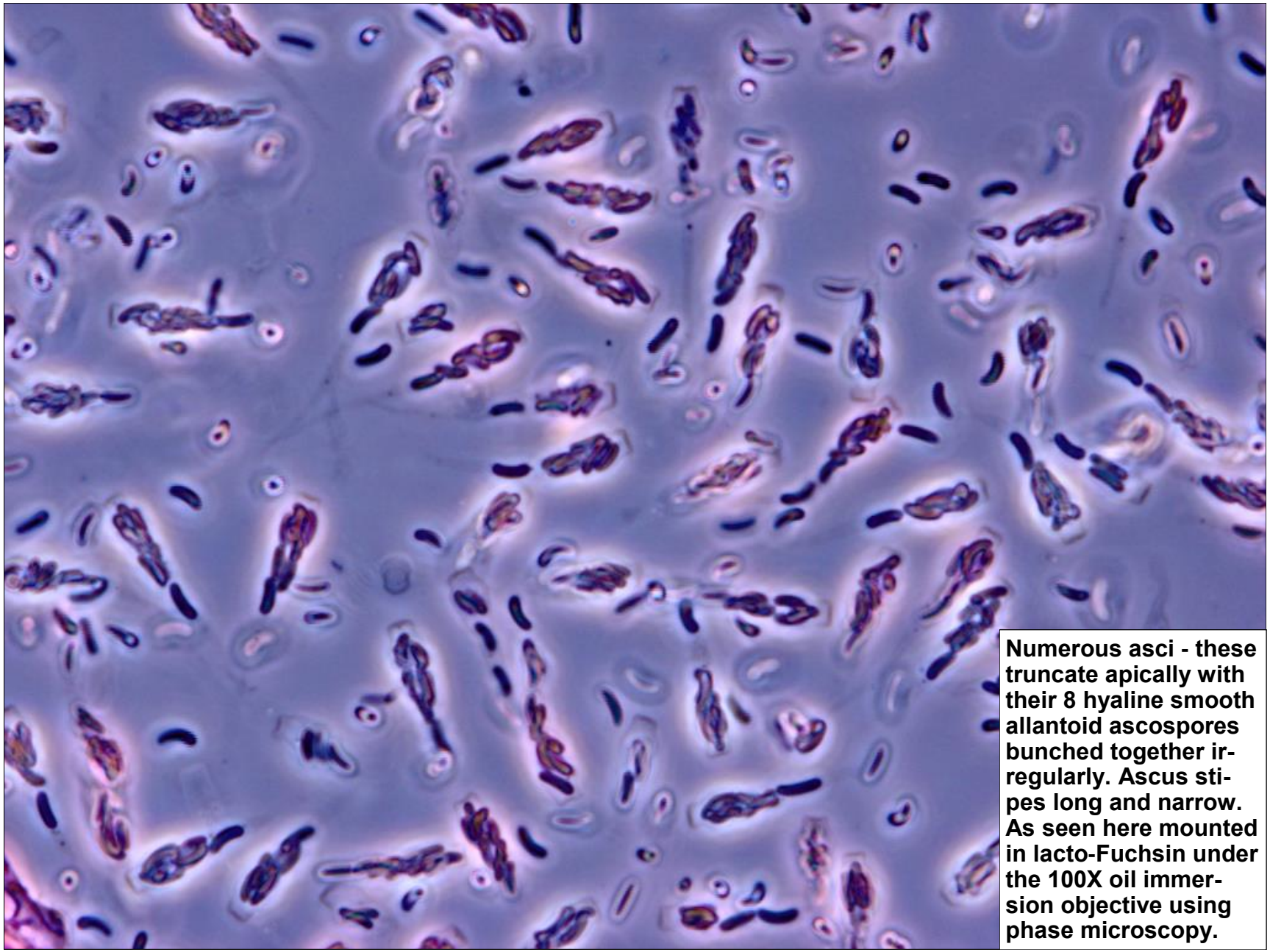
Peroneutypa scoparia. **Perithecial venters submerged in the dead bark (& wood beneath) with a black neck emergent from each.**



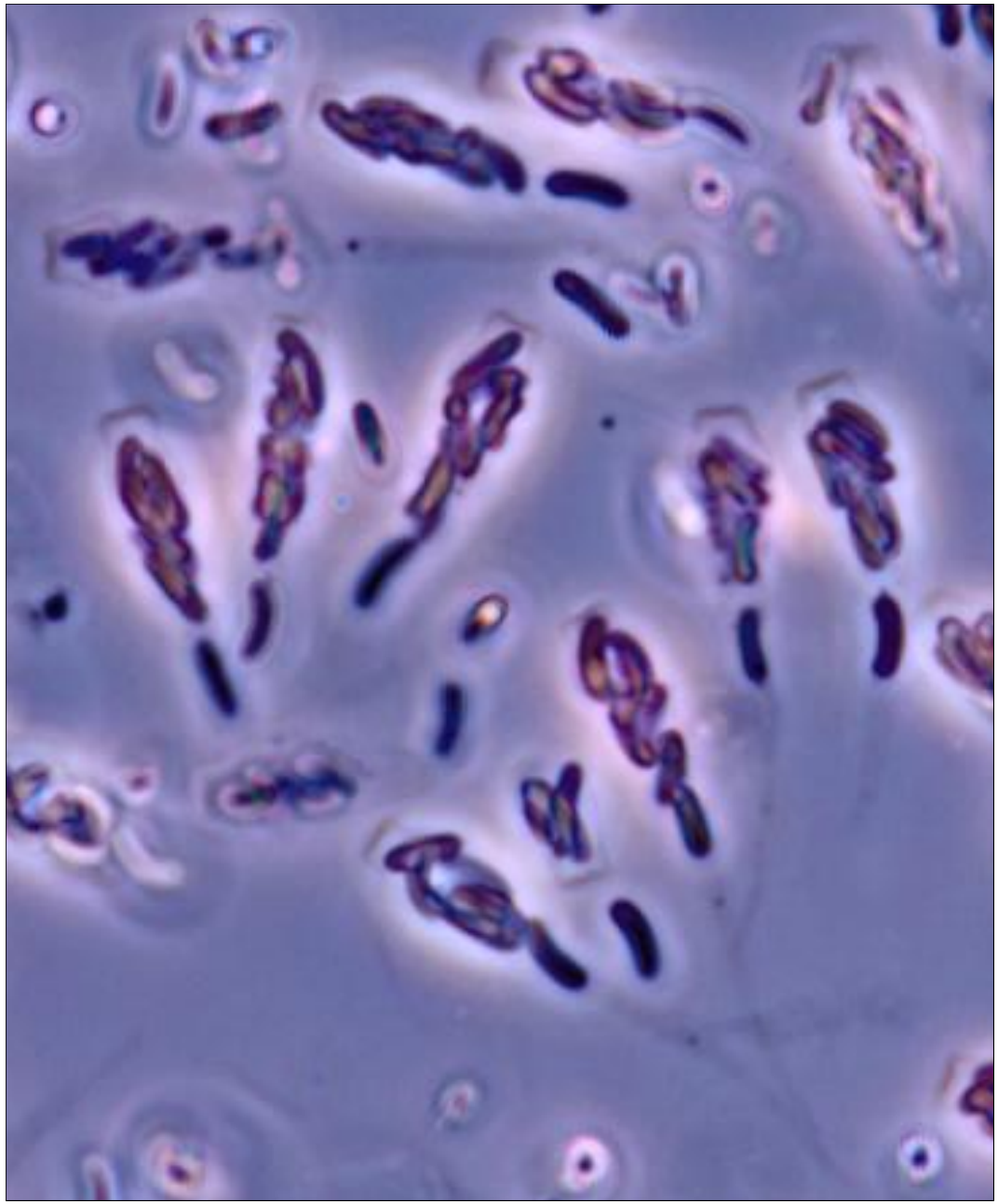
Peroneutypa scoparia. **Perithecial venters submerged in the dead bark (& wood beneath) with a black neck emergent from each.**



***Peroneutypa scoparia*. Perithecial venters submerged in the dead bark (& wood beneath) with a black neck emergent from each. Arrow indicates submerged venters from which 3 obvious necks emerge. Photo is a closeup from a portion of the field on the previous page.**

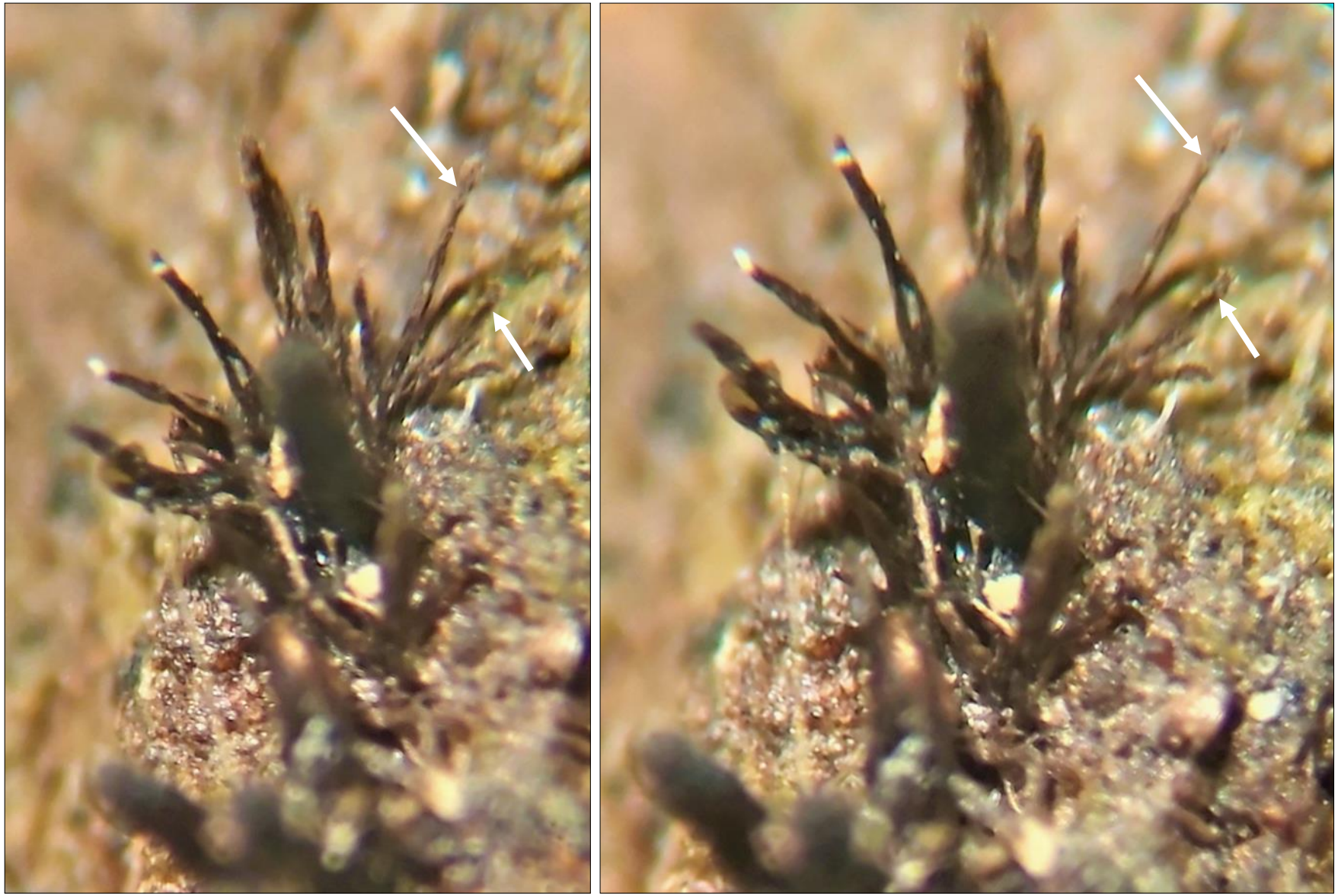


Numerous asci - these truncate apically with their 8 hyaline smooth allantoid ascospores bunched together irregularly. Ascus stipes long and narrow. As seen here mounted in lacto-Fuchsin under the 100X oil immersion objective using phase microscopy.

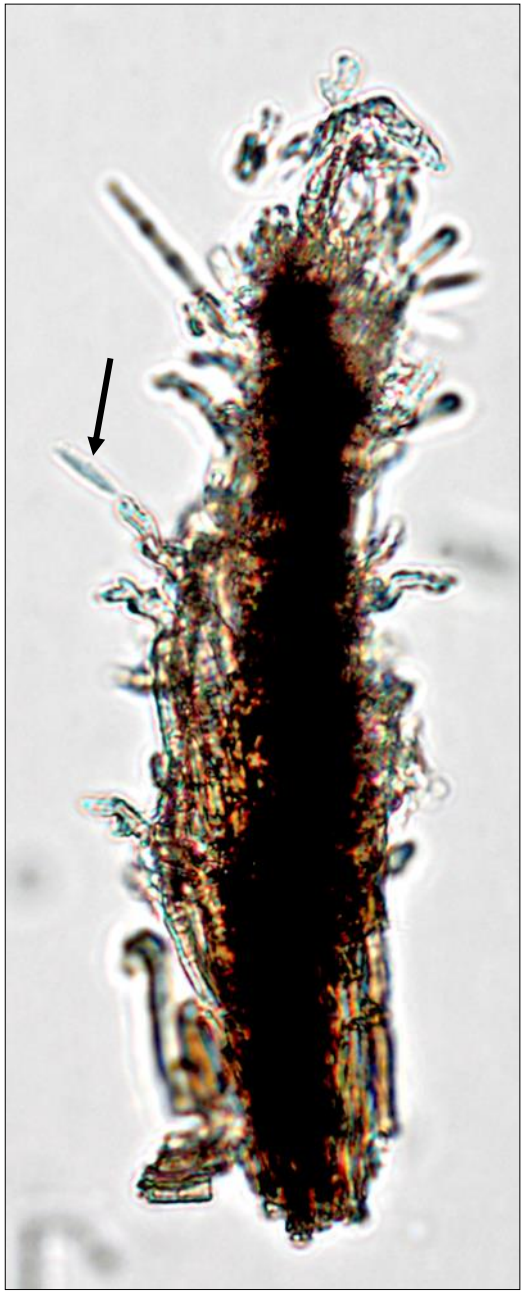


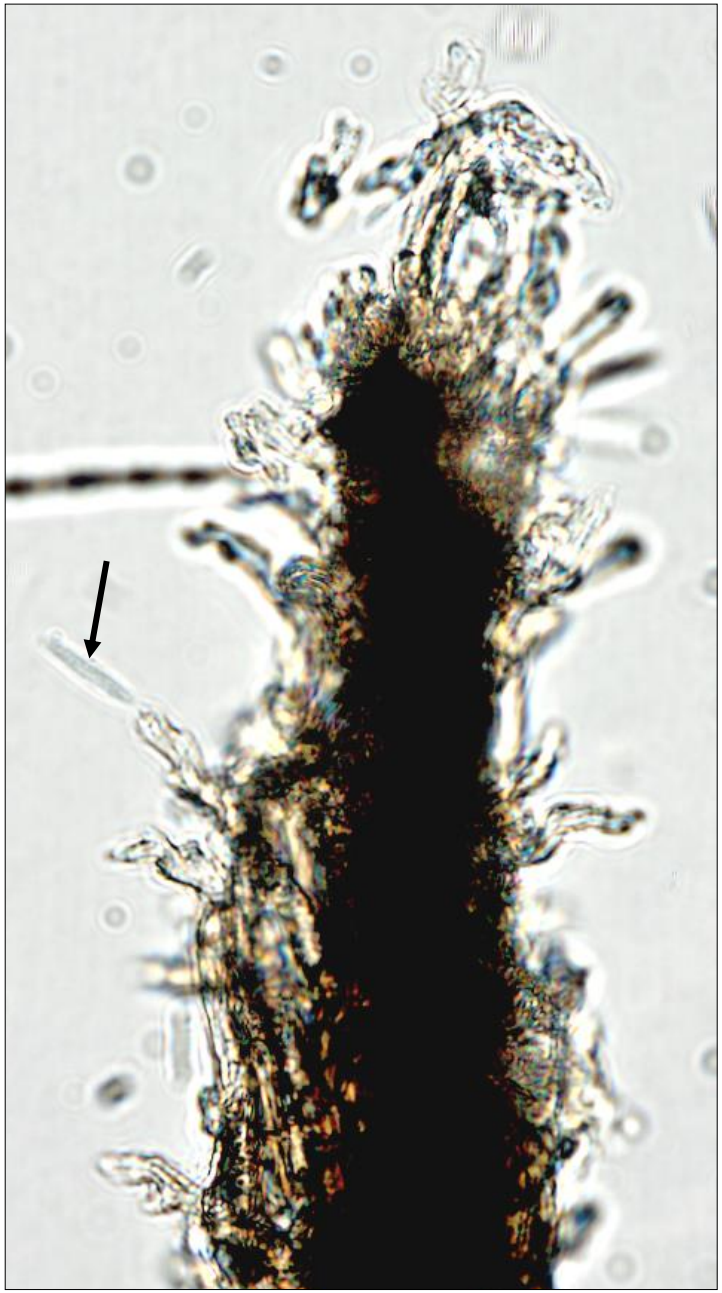
Asci and ascospores. Left photo cropped from the photo on the previous page and enlarged to better show ascus detail. Right 4 photos from another slide of ascospores mounted as on the previous page but cropped and enlarged to emphasize their shapes.

These in-situ photos were taken directly by using my Samsung Galaxy A70 smartphone camera. The Olympus BX51 X10 eyepiece was replaced with a X10 Gosky microscope eyepiece whose adaptor held my smartphone. The circled areas include a centrally located large *P. scoparia* perithecial neck surrounded by synnemata of *Harpographium fasciculatum* – most of which are non-sporulating. Those sporulating have fuzzy white surfaces which are arrowed and emphasized in the next two pages. Photos were taken in Jan. 2022 of the dried 2016 herbarium material.



Closeups of circled and arrowed areas on the previous page (arrows repeated). Highly fertile *H. fasciculatum* in the 2017 *Peroneutypa scoparia* collection (PDD 120016) prompted me to re-examine this earlier record of *P. scoparia*.





Having photographed the depauperate, poorly sporulating *Harpographium fasciculatum* on the previous 2 pages, I carefully removed the few sporulating synnemata, arrowed there, to a water mount. With luck, the Olympus BX51 compound scope – using the X40 (left photo) & X100 (right photo) objectives and brightfield microscopy – revealed the sporogenous periphery of a synnema and one still-attached conidium (arrowed). The conidium measured 10 × <1 µm.