***Crassochaeta fusispora* (Sivan.) Réblová AEB 1078 (= PDD 97389) To date, this is the only collection of this species from the Southern Hemisphere. For records from Austria, Norway, Great Britain and New Zealand see 'GBIF Backbone Taxonomy' online.**

Substrate: dead, dry, decorticated wood

Collection site: Dry Creek track in Belmont Regional Park, Lower Hutt

Collection date: 3 March 2009; **Collector & identifier:** Ann Bell

Voucher materials: Dried herbarium material AEB 1078 (=PDD 97389) accompanied by four Shear's mounting fluid (SMF) semi-permanent slide mounts; Dan's projection slides of in-situ perithecia on the wood (scanned and digitized) and a number of digital compound microscope images of perithecial fragments and centrum contents from Ann's SMF slides; Dan's brief description and comments.

Brief description: **Perithecia** few, scattered, blackish with moderately numerous setae over the peridial surface, globular, reasonably small (see measurements on the in-situ photos of the perithecia). **Setae** light to dark golden brown, thick-walled (with a narrow lumen), septate, smooth, tapering (base to apex), nearly pointed to narrow and bluntly obtuse, simple, straight to crooked and often varying in width along their length (especially in upper portions), mostly 100–250 × 10–12.5 µm (width nr. base); closeup in-situ views of perithecia revealed somewhat shorter setae surrounding the sl. raised ostiole. **Peridium** dark, reasonably thick for a smallish perithecium, the outer darker portion breaking into plates of a dark-brown moderately thick-walled textura angularis – the plates an artifact of squashing or a natural feature? (details not clear and there were too few perithecia to investigate further – and still have a herbarium collection). The innermost portion of the peridium is more lightly pigmented, consisting of elongate compressed cells. Comparison of the peridium with that described by Réblová would bear future attention. **Paraphyses** common, longer than the asci, hyaline, smooth, septate (indented at septa), broad-celled in lower portions but becoming narrower as the paraphyses taper to narrowly rounded apices. **Asci** cylindrical to cylindrically clavate with 8 ascospores overlapping uniseriately (typical) or becoming irregularly biseriate in the central region, with a small non-amyloid apical ring. **Ascospores** fusiform, tapering from a broader center to narrowly rounded extremities, smooth, regularly 3-septate, septa brown and prominent, versicolorous with the 2 central cells brownish and the 2 end cells hyaline or nearly so, moderately small vacuolar contents common. Older more darkly pigmented spores often collapsing in an accordion-like fashion, 14–16 × 6–7 µm.

Worth noting were numerous simple dematiaceous setae or conidiophores that arose among the perithecia from the wood substrate. These don't appear as part of a dark subiculum as described for another species of *Crassochaeta* (*C. nigrita*), nor are they branched. Under the highest power of the dissecting scope (using the X2.5 objective lens) no conidia could be seen associated with these structures. Since I didn't want to damage the scant herbarium material, I didn't try to scrape them off for examination at a higher magnification.

Réblová M. 1999. Studies in *Chaetosphaeria* sensu lato IV. *Crassochaeta* gen. nov., A new lignicolous genus of the Trichosphaeriaceae. Mycotaxon 71, 45–67. **See a portion of page 54 & whole pages 56 & 59 pasted in below.**

Crassochaeta fusispora (Sivan.) Réblová, comb. nov. Figs. 22-29.

≡ *Chaetosphaerella fusispora* Sivan., Trans. Brit. Mycol. Soc. 67: 475, 1976. - basionym.

≡ *Chaetosphaeria fusispora* P. Larsen, Dansk. Bot. Arkiv 14: 7, 1952 (Illegitimate. Art. 53.1.) non *Chaetosphaeria fusispora* (Kawamura) Hino, Bull. Miyazaki Coll. Agr. For. 4: 191, 1932 nec *Chaetosphaeria fusispora* W. Gams & Hol.-Jech., Stud. Mycol. 13: 45, 1976.

ANAMORPH. Unknown.

Perithecia superficial, scattered or in small groups of 2-3, globose to subglobose, ostiolate, not collapsing, black, glistening, roughened, 200-350 µm high and 200-300 µm diam, setose, papillate.—Setae arising from the upper part of the perithecium, dark brown, septate, unbranched, stiff, erect, tapering, pointed to slightly obtuse, to 200 µm long, 4-6 µm wide in the middle and 10-11 µm wide at the base, never conidiogenous. Sparse hyphae growing from the base of the perithecia; hyphae pale brown, septate, branched, 14-15 µm wide.—Peridium leathery to brittle, in surface view *textura angularis*; lateral wall consisting of two layers. Outer layer 23-42 µm wide, cells angular, brown, thick-walled, on the exterior with dark brown, opaque and easily detached protruding cells; groups of those cells sometimes forming little pustules. Inner layer 2-3 µm wide, consisting of 2-3 layers of hyaline, elongated, compressed cells.—Ostiolar canal periphysate.—Paraphyses persistent, apically free, abundant and extending beyond the asci, cylindrical, 8-10 µm wide, septate, branched, strongly constricted at the septa.—Asci unitunicate, 8-spored, (67-)73-91(-101) × (9.5-)10-11.5(-12) µm, stipe 27-30 µm long, arising in a broad hymenium, clavate, long stipitate, broadly rounded at the top, apex with a thin, J-, refractive apical annulus.—Ascospores fusiform, (13.5-)15.5-17.5 (-19.5) × (4.5-)5-6(-7) µm, 4-celled, slightly constricted at the septa, at the septa not thickened, the two middle cells becoming brown, the two terminal cells remaining hyaline, 2-seriate in the ascus.

MATERIAL EXAMINED. 1) Type material. GREAT BRITAIN. Wales, Denbighshire, Loggerheads, on branch of *Acer pseudoplatanus*, 20 Sept. 1973, R. J. Bevan (IMI 179183 - neotype of *Chaetosphaerella fusispora*, designated here).

2) Additional material. GREAT BRITAIN. Wales, Denbighshire, Loggerheads, on branch of *Acer pseudoplatanus*, 20 Sept. 1973, R. J. Bevan (IMI 192664). - Cambridgeshire, Anglesey Abbey, on branch of *Acer pseudoplatanus*, 8 Sept. 1974, R. J. Bevan (IMI 192744).

DESCRIPTIONS AND ILLUSTRATIONS. Larsen (1952: 7, Fig. 1), Sivanesan (1976: 475, Fig. 4).

HABITAT. Saprobe on decayed wood and bark.

KNOWN HOST. *Acer pseudoplatanus*.

KNOWN DISTRIBUTION. Europe, known only from Great Britain.

When Larsen (1952) described *Chaetosphaeria fusispora* P. Larsen he made a later homonym of *Chaetosphaeria fusispora* (Kawamura) Hino. Sivanesan (1976) created a new name for it, *Chaetosphaerella fusispora* Sivan., which he based on the illegitimate basionym *Chaetosphaeria fusispora* P. Larsen. The type material of *Chaetosphaeria fusispora* collected by Larsen (Larsen, 1952) is lost. Sivanesan redescribed *Chaetosphaerella fusispora* from collections made by R. J. Bevan in Great Britain but did not designated a neotype. Therefore, the neotype is chosen here from the collections examined by Sivanesan (1976).

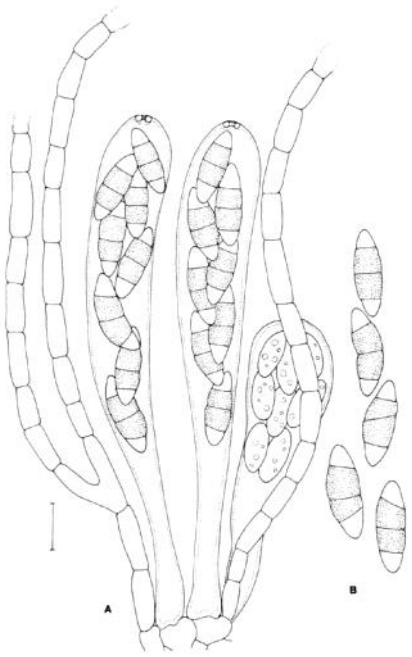
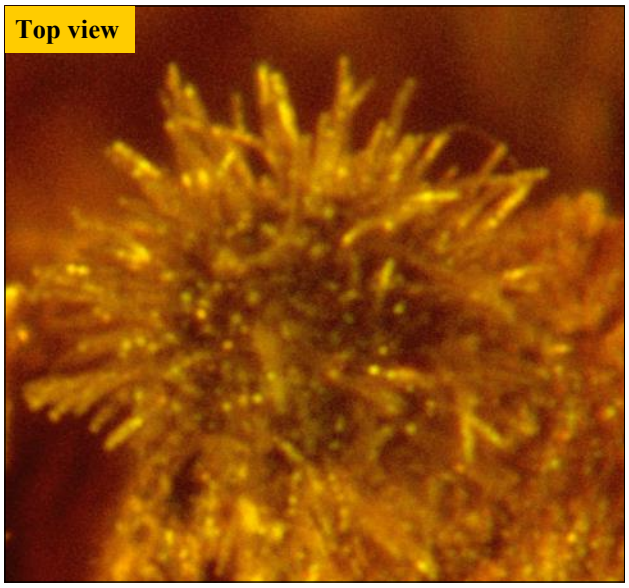
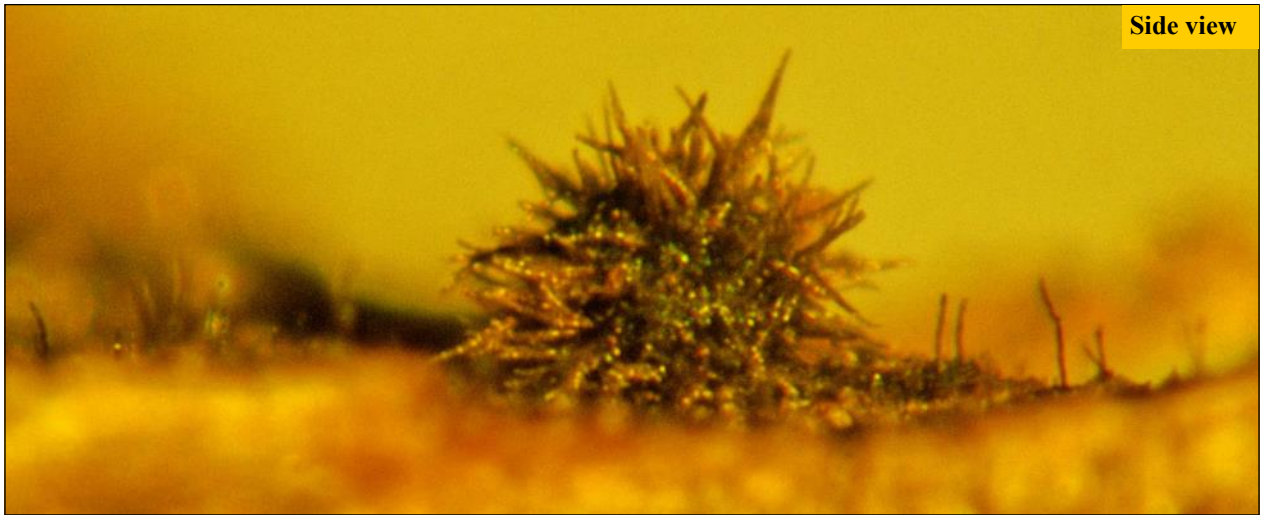
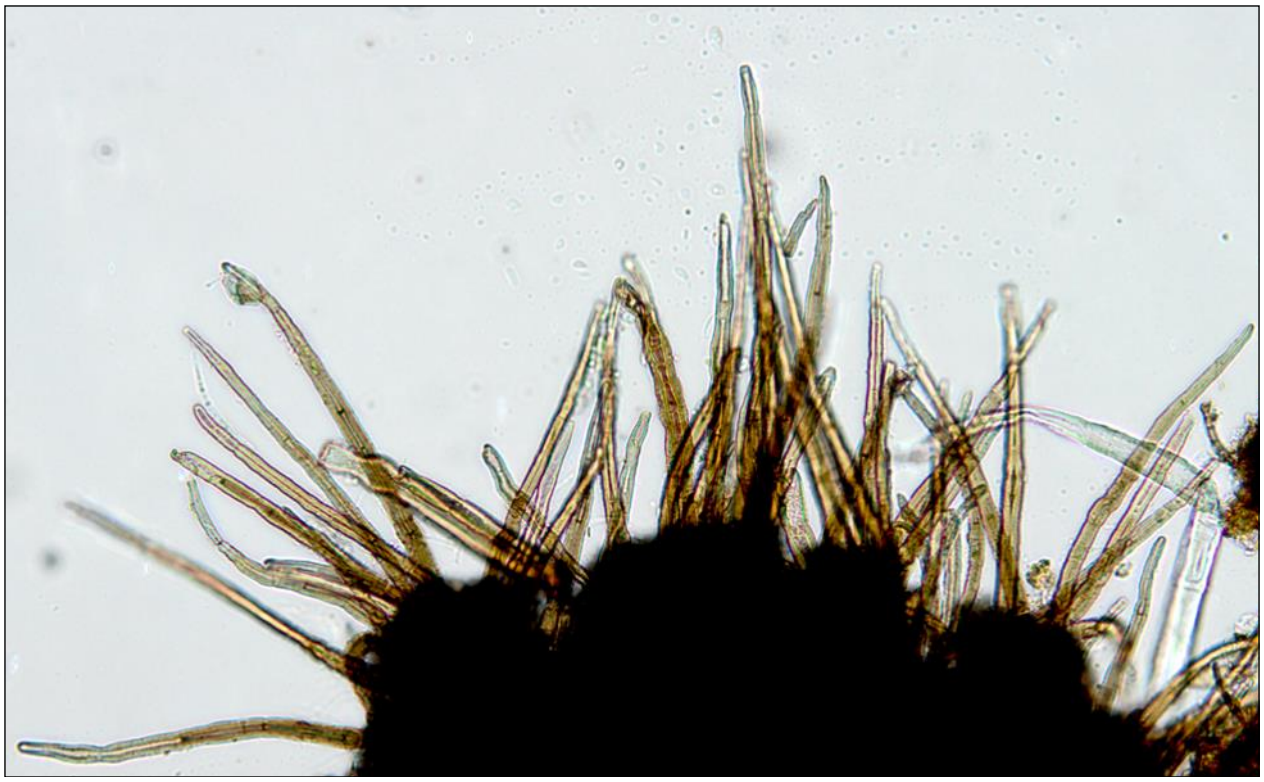


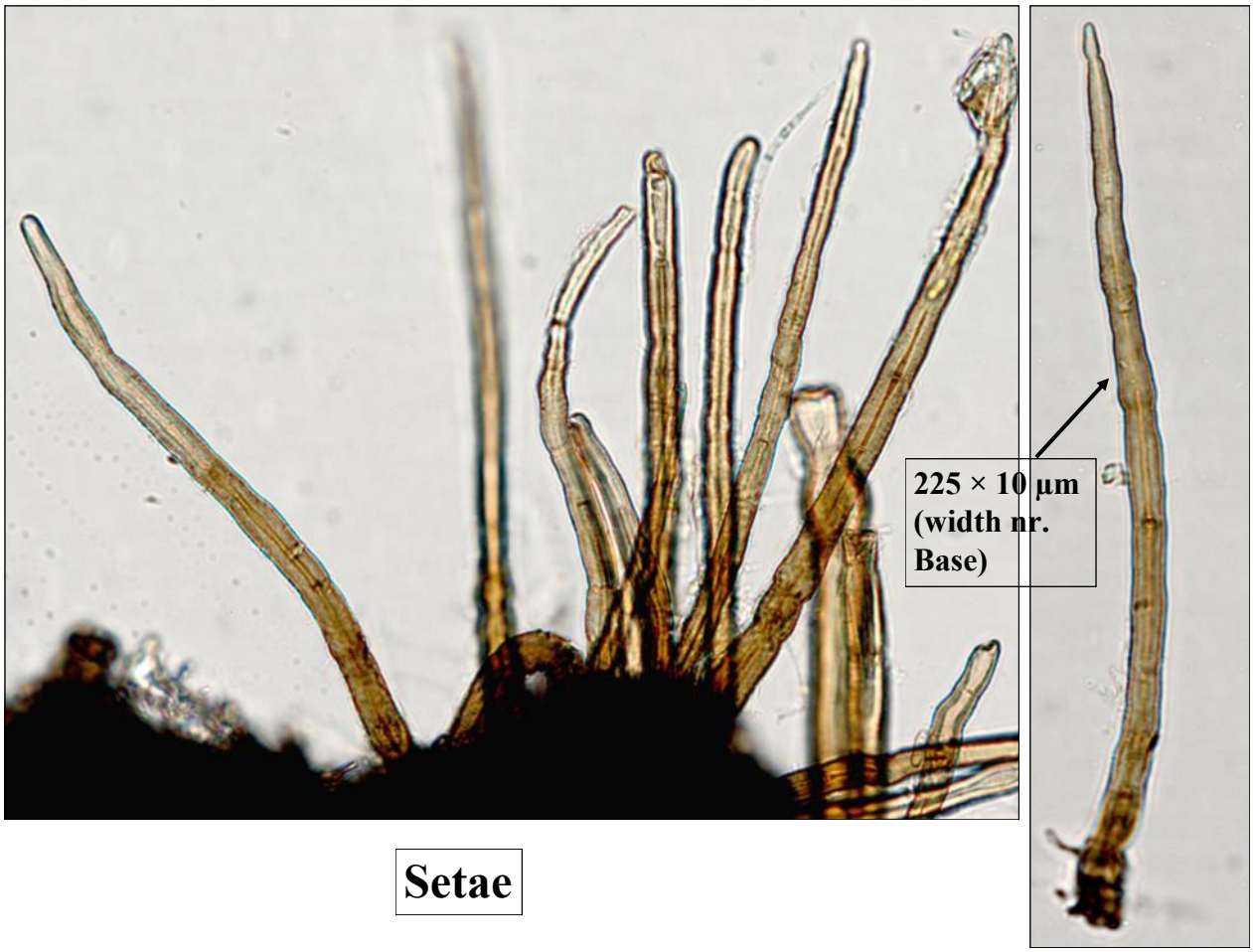
Fig. 29A, B. ***Crassochaeta fusispora***. - A. Asci, paraphyses and ascospores. - B. Ascospores. - A, B from IMI 179183. - Scale bars: A, B = 10 µm.



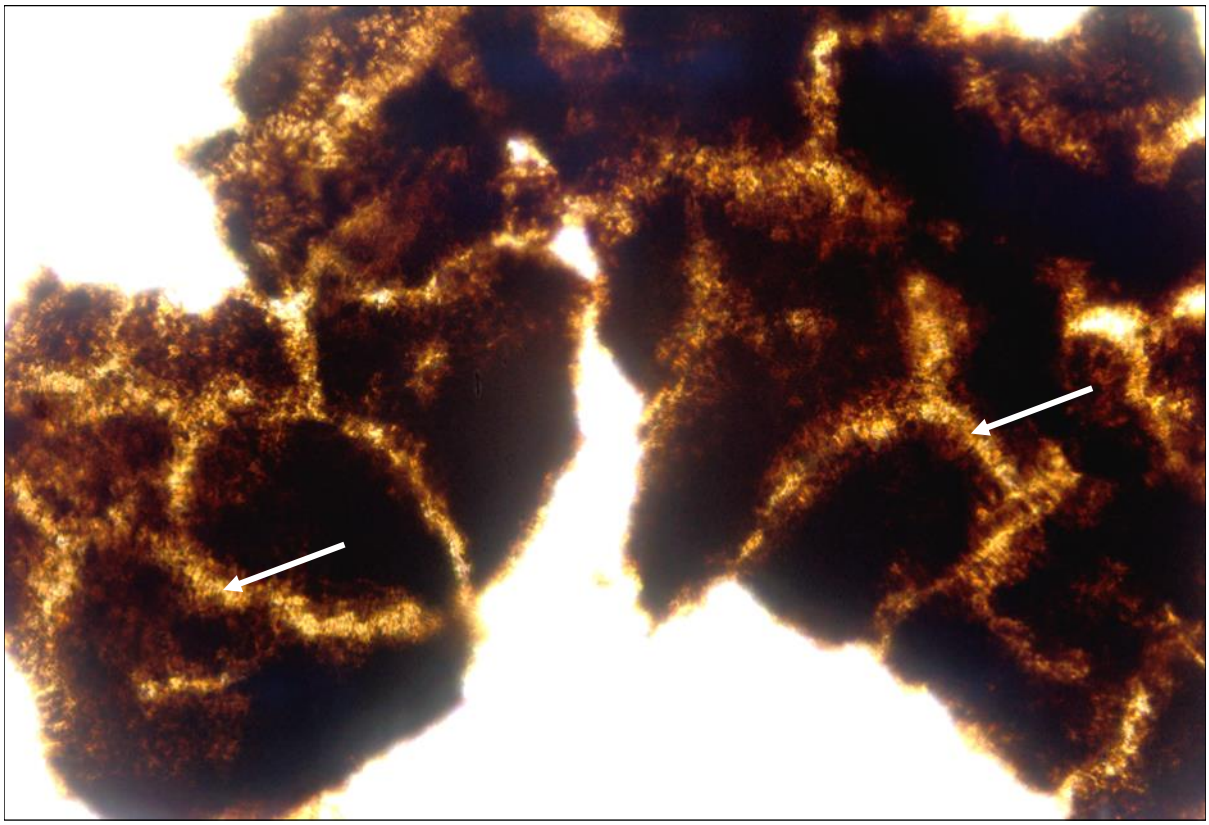
Setose perithecia. Bottom photo with simple dematiaceous (conidiophores?) emerging from the wood among the perithecia (no conidia observed). Perithecia approximate widths (without setae, in µm): top, 225; middle two, 375; bottom, 250.

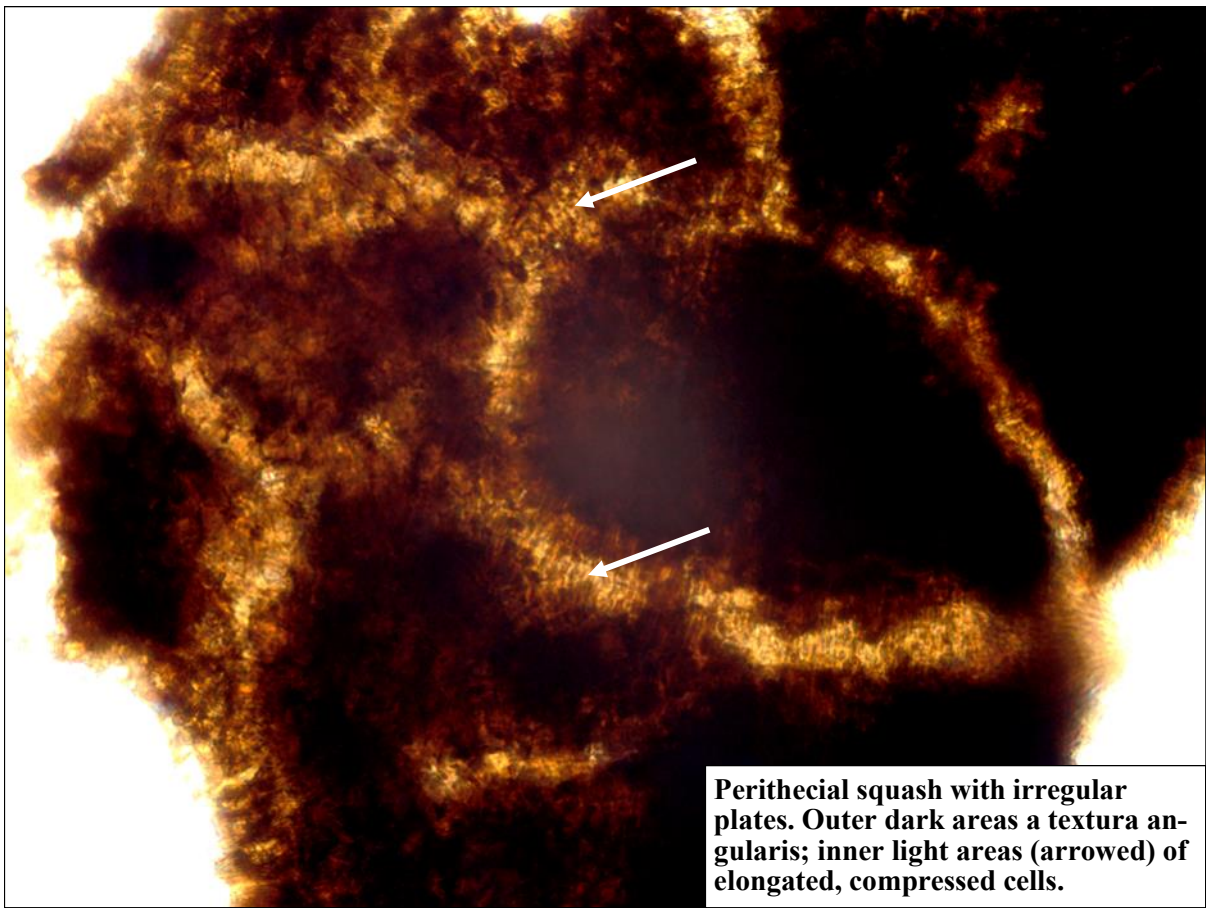






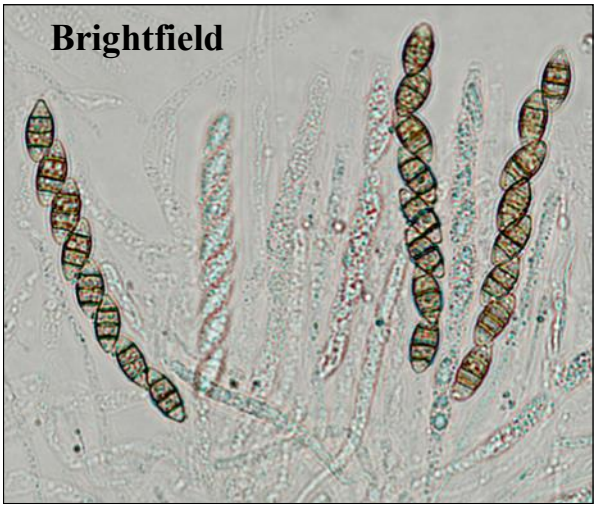
Setae

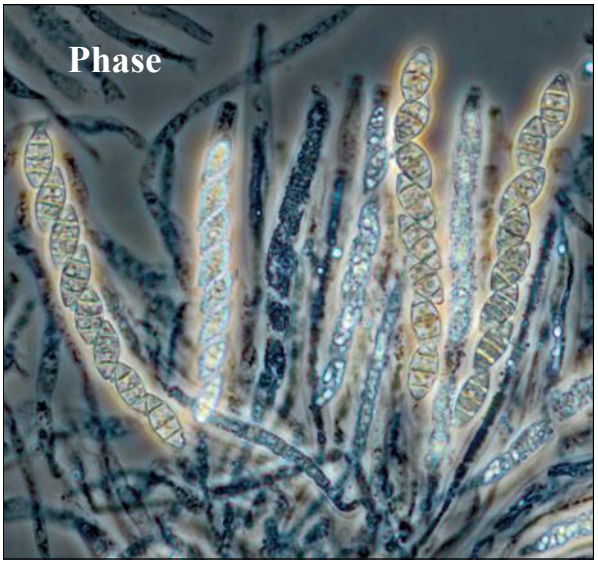




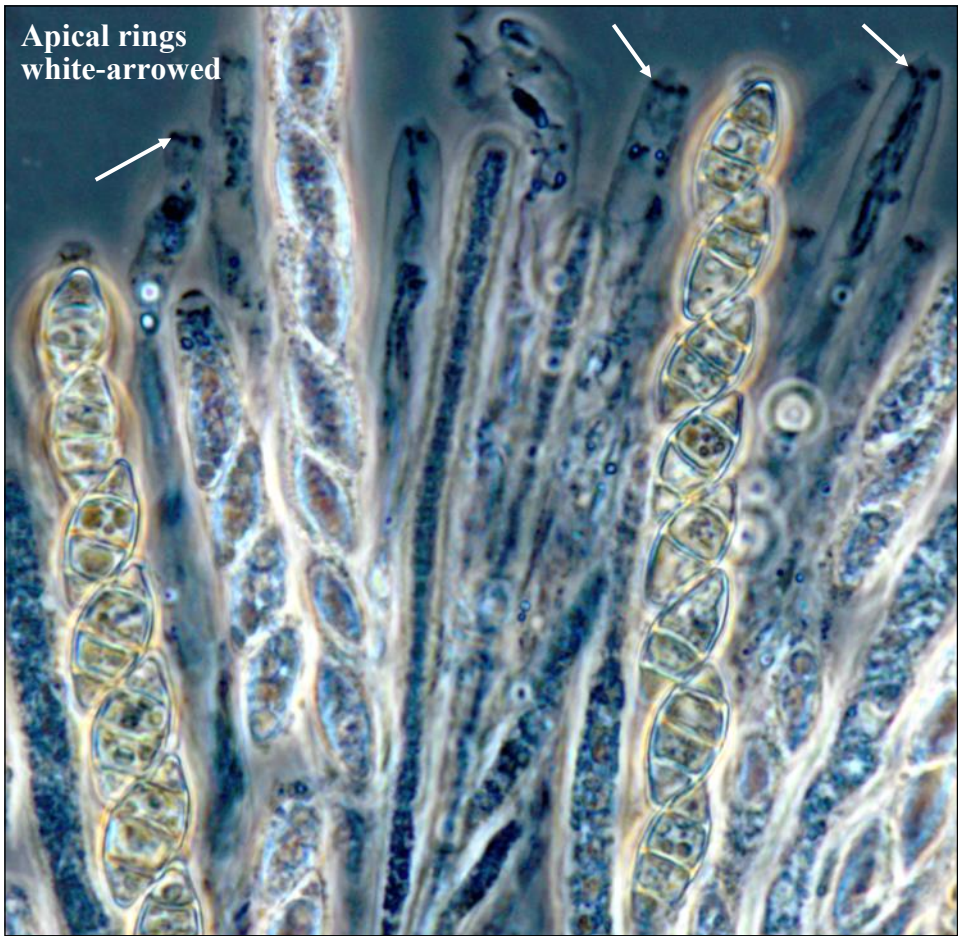
Perithecial squash with irregular plates. Outer dark areas a textura angularis; inner light areas (arrowed) of elongated, compressed cells.


Paraphyses


Brightfield


Phase


Versicolorous
ascospores



Accordion-collapsing ascospores black-arrowed

Young asci in SMF with truncate apices and apical rings (arrowed)