***Rosellinia communis* L.E. Petrini with *Geniculosporium* anamorph AEB 1340 (= PDD 117256) – a good fit**

Collection date: 14 April 2021

Collection site: Remutaka Forest Park – Orongorongo Track

Substrate: soft decayed dead wood

Collector: Ann Bell; **Identifiers:** Dan Mahoney & Ann Bell

Voucher material: dried herbarium specimen AEB 1340 (= PDD 117256) accompanied by a Shear's mounting fluid (SMF) semi-permanent slide mount; Dan's in-situ dissecting scope digitized photos and his compound scope digital photos of microscopic detail; Dan's brief description.

Brief descriptions:

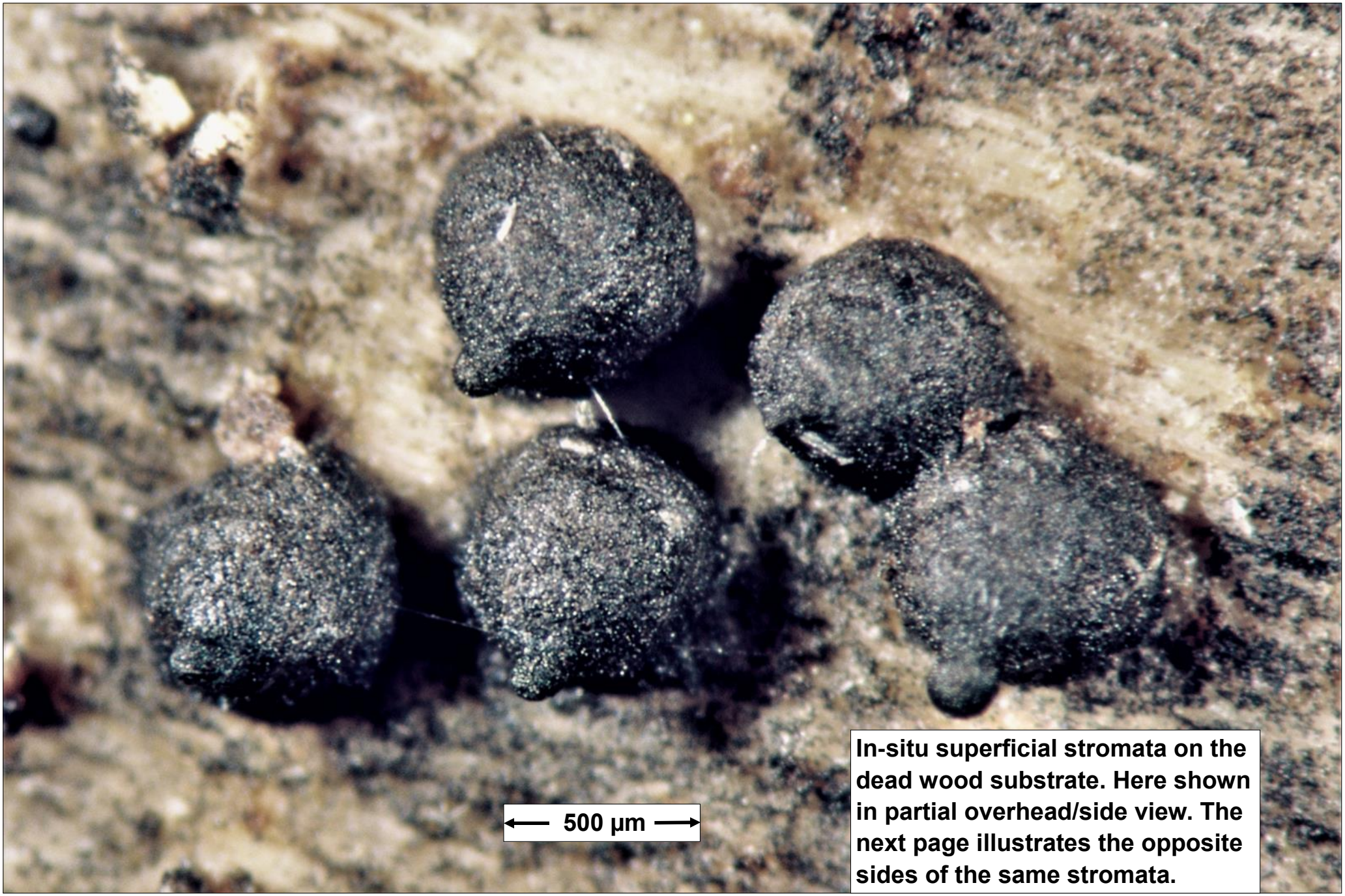
Teleomorph: Stromata (uniperitheciate) superficial on the wood and emerging through the bark, blackish, broadly conical with concentric rings and a short papillate apex, older and lacking any whitish subiculum. **Paraphyses** numerous, longer than the asci, simple, septate and tapering toward their apices. **Asci** cylindrical with a medium-length stipe and a Melzer's positive blue apical ring. **Ascospores** 8, arranged uniseriately to uniseriately overlapping, inequilateral (plano-convex) in one view and symmetrical (ellipsoidal-fusoid) in the other, dark brown; with a straight germ slit stretching the entire length of the spore, mostly 15–19 × 8–9 µm.

Anamorph (*Geniculosporium)*: Forming grey 3-D thickets on the surface of some stromata. **Sporogenous** areas at the apices of the numerous, dichotomously or irregularly branching conidiophores – these forming short to longish sympodially extending areas with dry conidia produced singly (and over time scattered in a geniculate fashion), visible after conidial detachment by a small circular scar in face view and the short wall edges of the central protoplasmic channel in side view. **Conidia** obovoid, hyaline, smooth, one-celled, with a basal scar similar to side views of detachment scars on the sporogenous areas, mostly 3 × 2 µm.

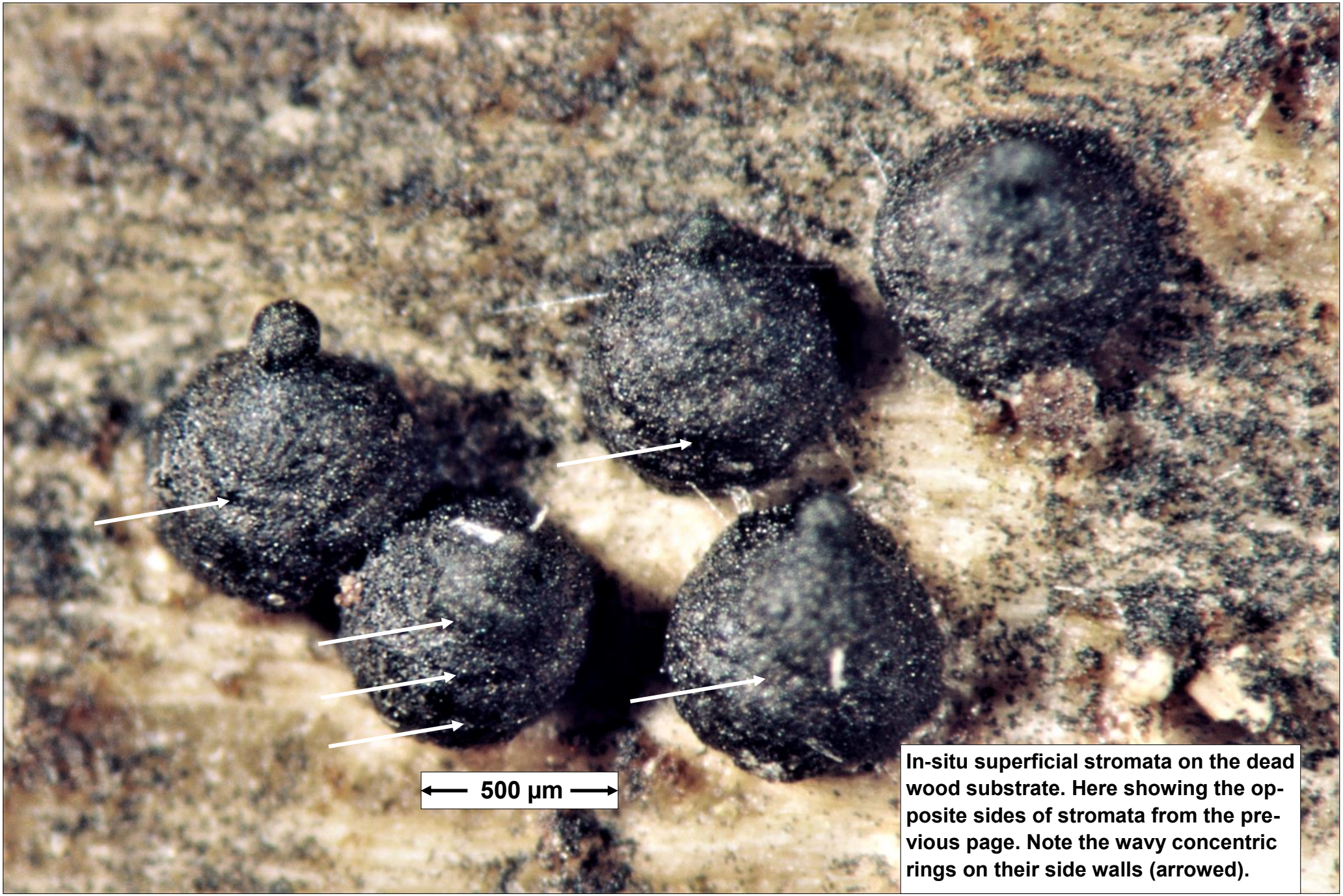
Primary reference: Petrini, L.E. 2003. *Rosellinia* and related genera in New Zealand. New Zealand Journal of Botany 41: 71–138.

Other AEB collections of *Rosellinia communis* online at the PDD website:

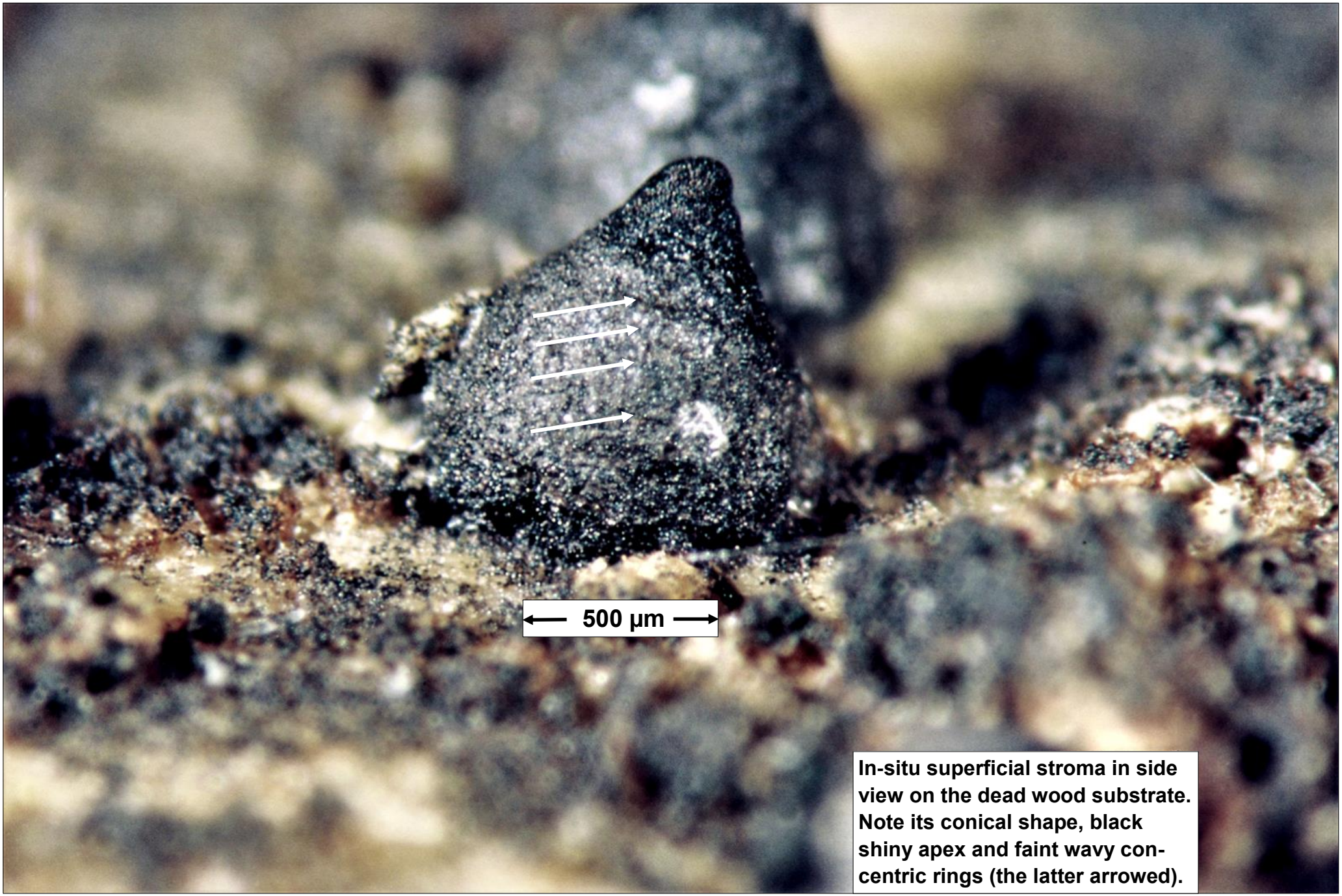
AEB 880 (= PDD 82102), **AEB 972** (= PDD 92314), **AEB 1181** (= PDD 102623), **AEB 1227** (= PDD 110469), **AEB 1238** (= PDD 110480), **AEB 1313** (= PDD 117242), **1325** (= PDD 117243) and **AEB 1335** (= PDD 118710) – the latter also reported under *Vermiculariopsiella immersa* **AEB 1335** (= PDD 117241).



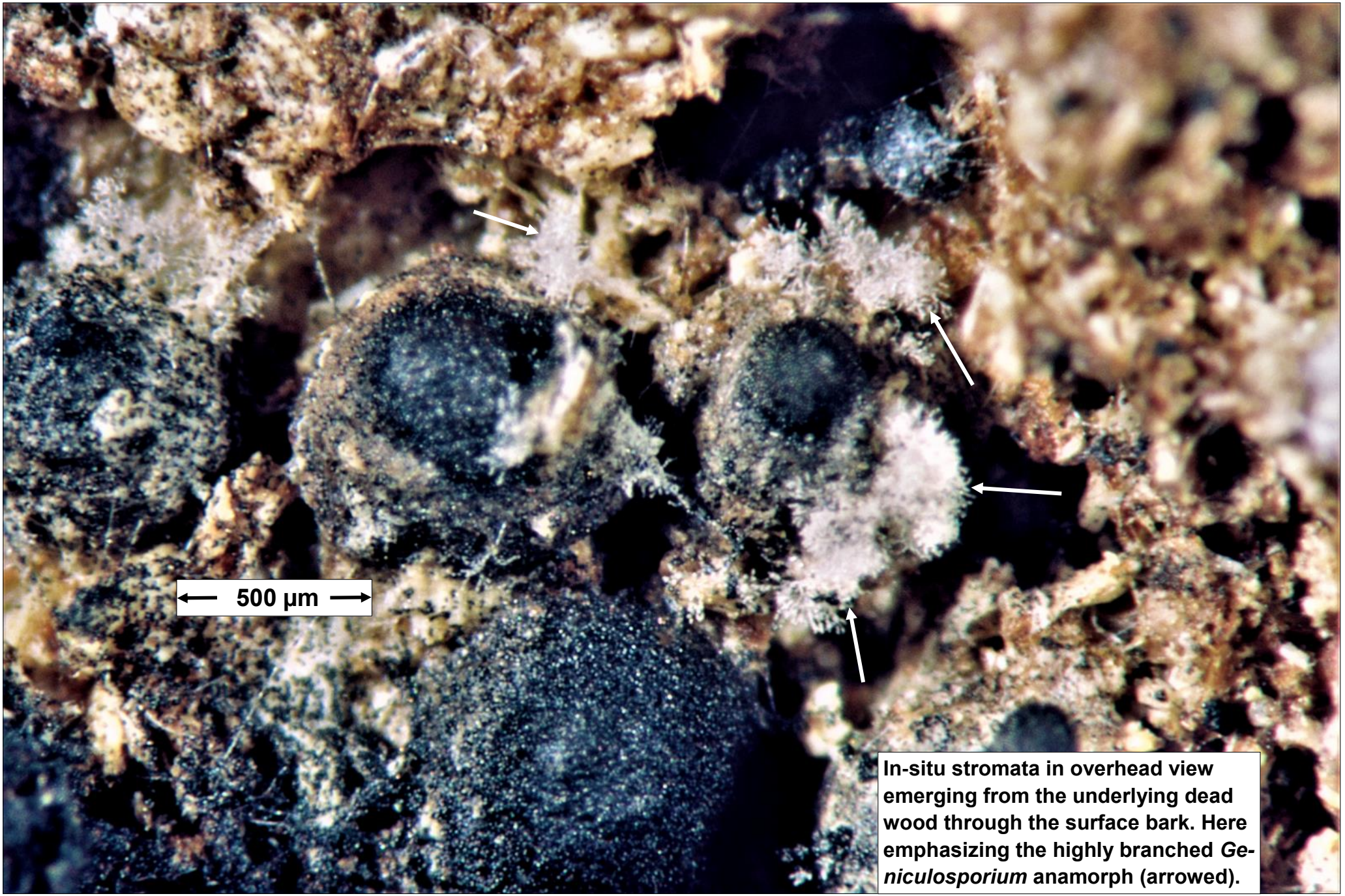
In-situ superficial stromata on the dead wood substrate. Here shown in partial overhead/side view. The next page illustrates the opposite sides of the same stromata.



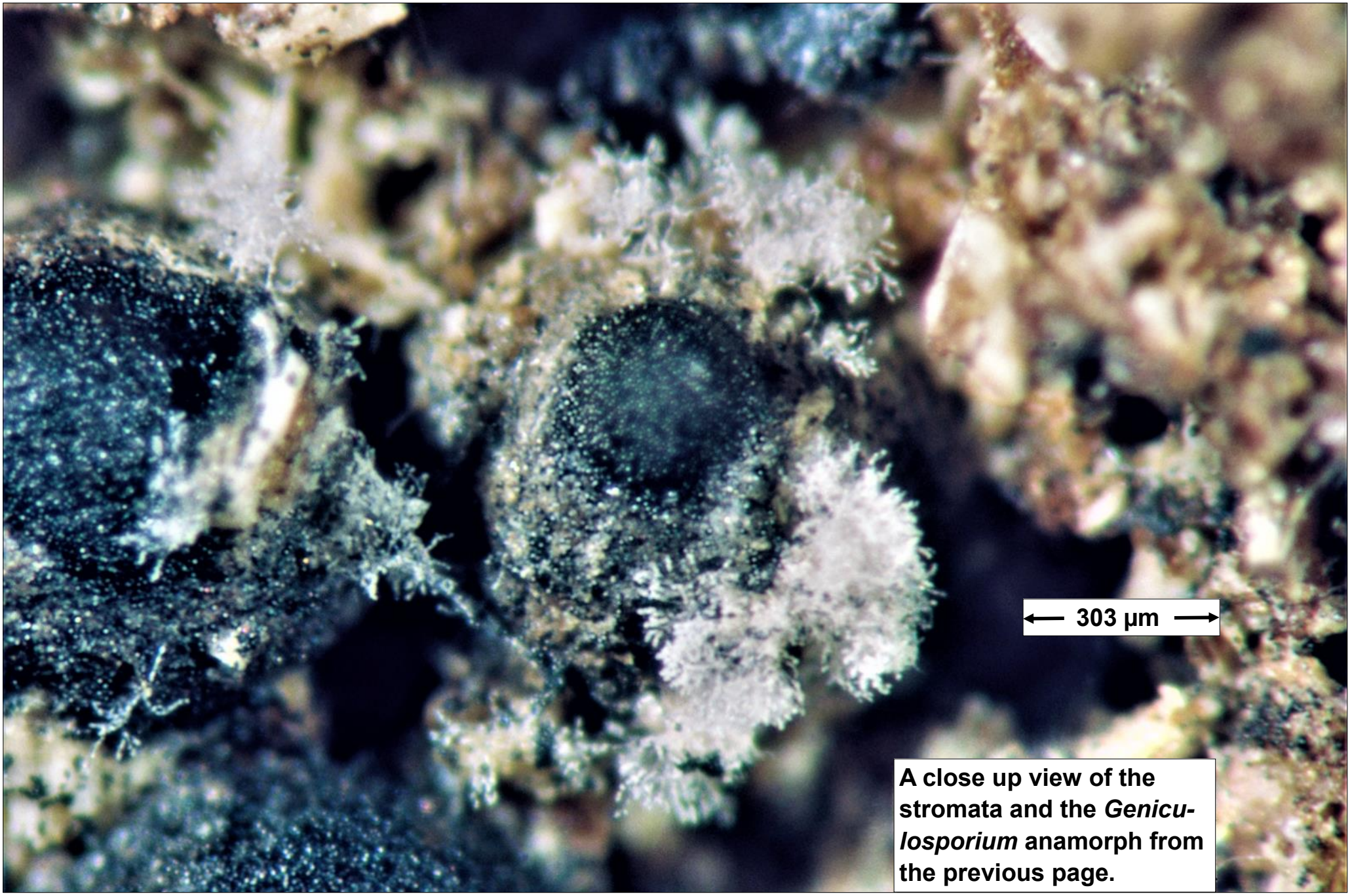
In-situ superficial stromata on the dead wood substrate. Here showing the opposite sides of stromata from the previous page. Note the wavy concentric rings on their side walls (arrowed).



In-situ superficial stroma in side view on the dead wood substrate. Note its conical shape, black shiny apex and faint wavy concentric rings (the latter arrowed).

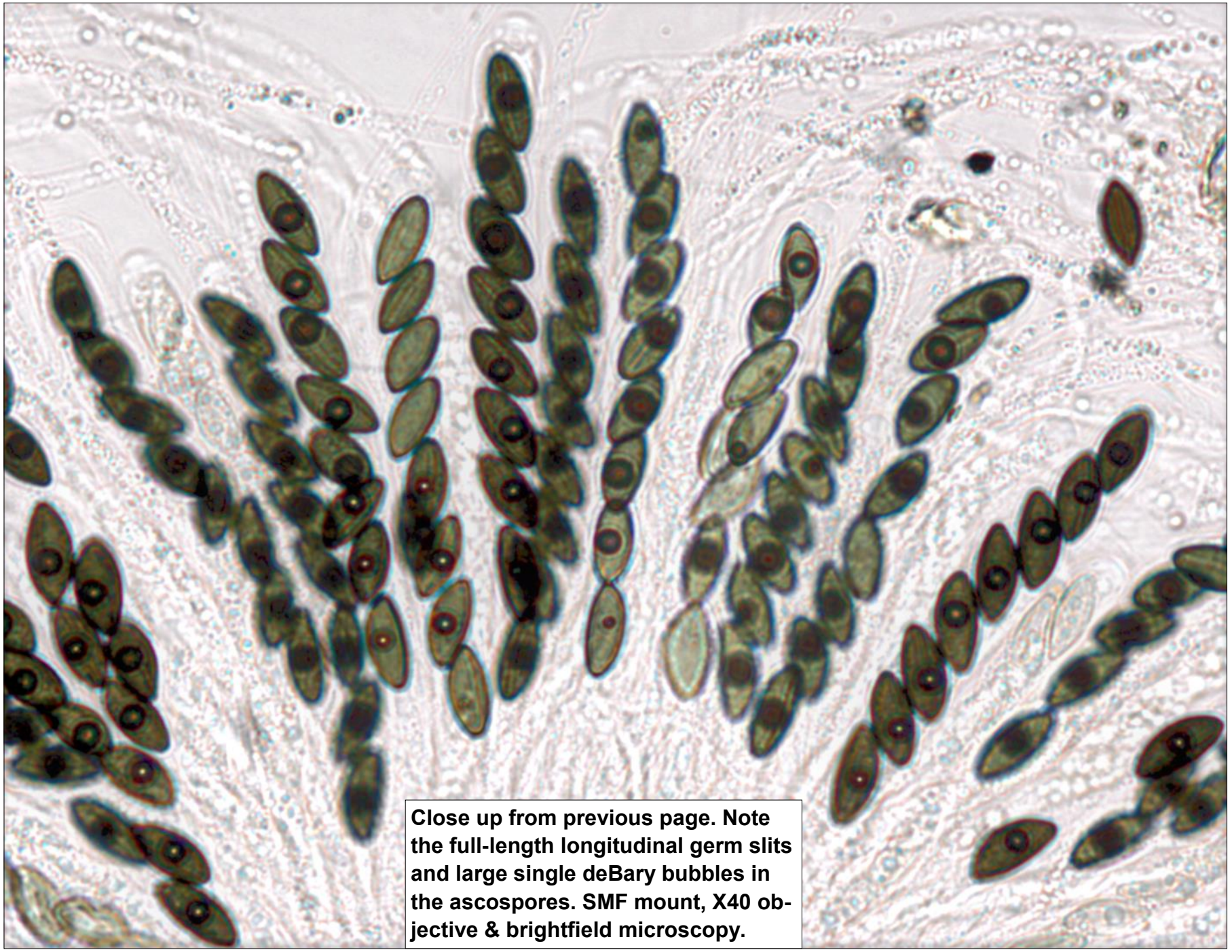


In-situ stromata in overhead view emerging from the underlying dead wood through the surface bark. Here emphasizing the highly branched *Geniculosporium* anamorph (arrowed).

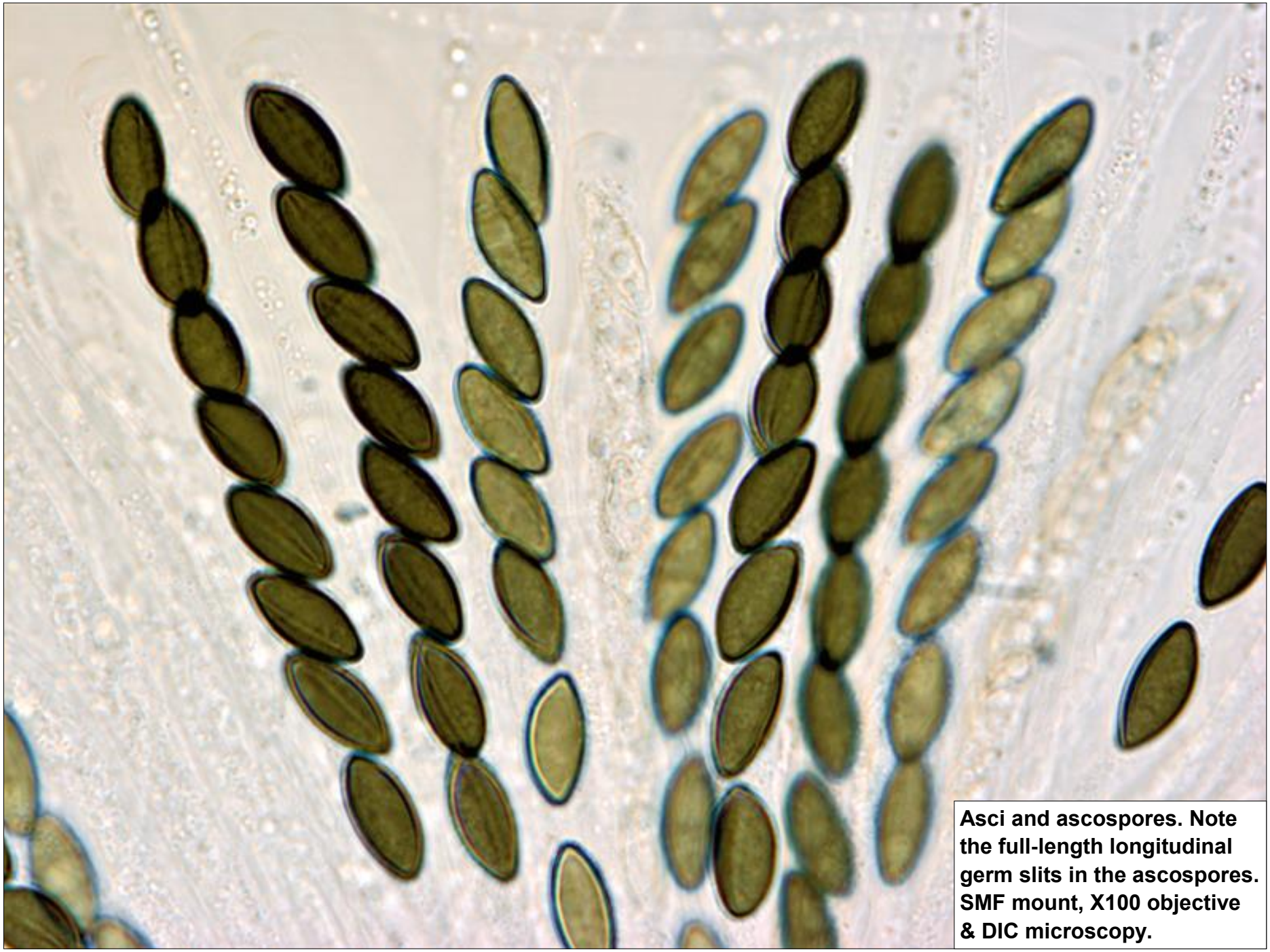


A close up view of the stromata and the *Geniculosporium* anamorph from the previous page.

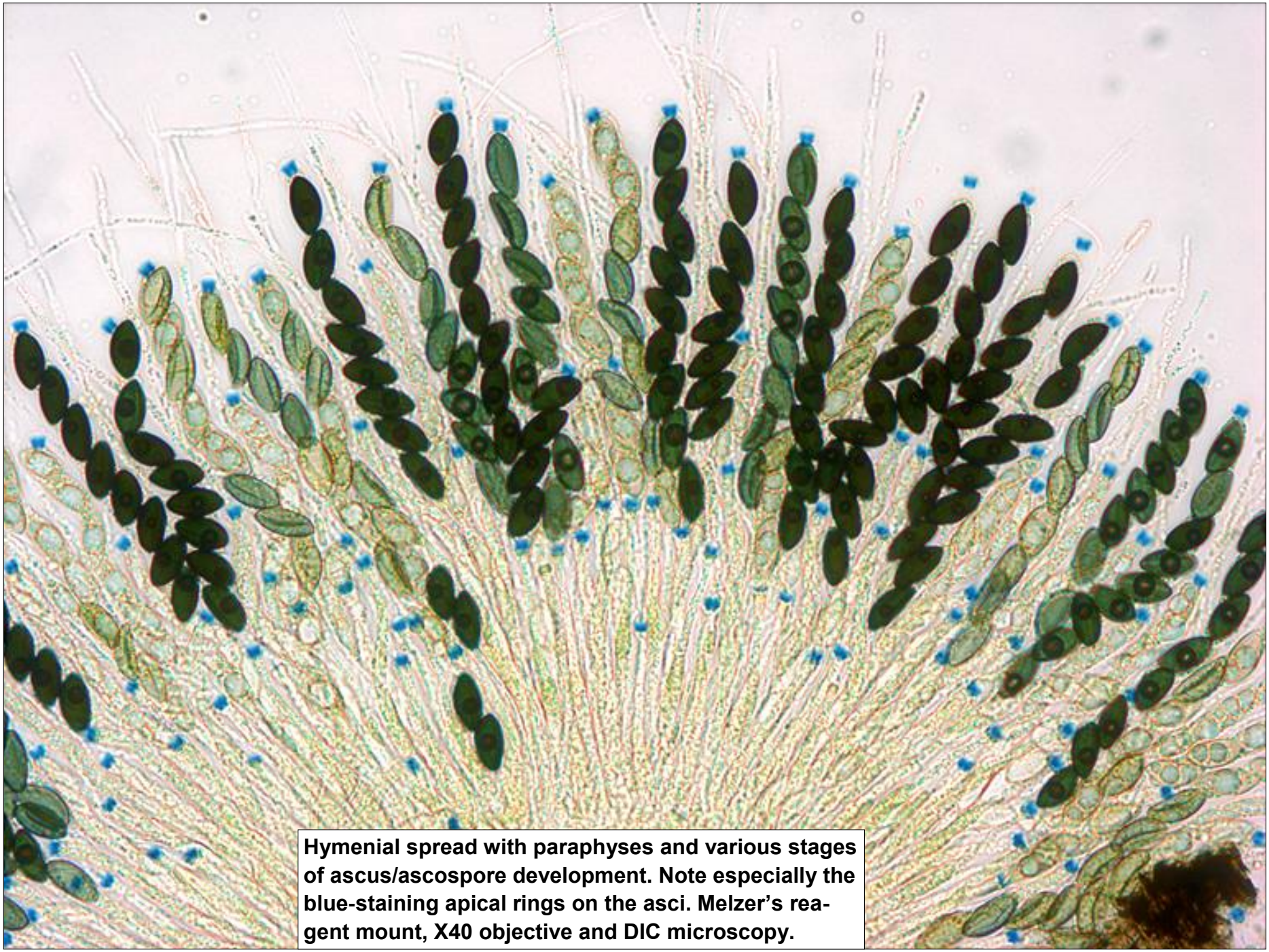
Hymenial spread with paraphyses and various stages of ascus/ ascospore development. SMF mount, X20 objective and DIC microscopy.



Close up from previous page. Note the full-length longitudinal germ slits and large single deBary bubbles in the ascospores. SMF mount, X40 objective & brightfield microscopy.

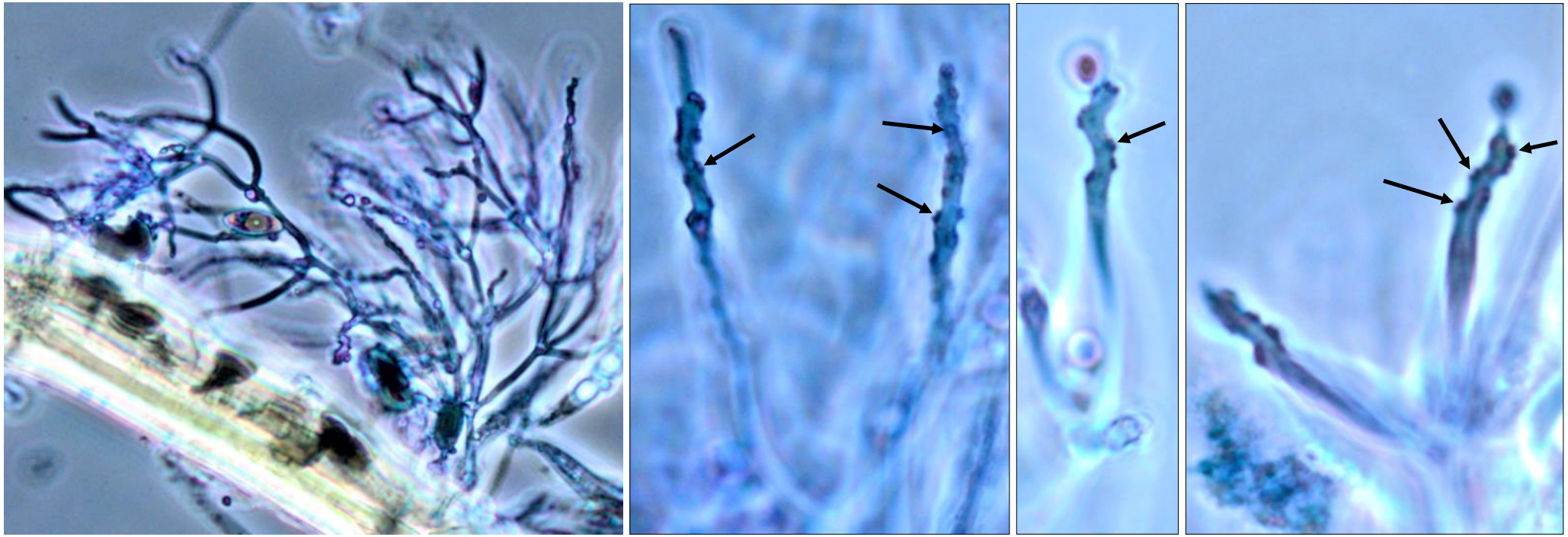


Asci and ascospores. Note the full-length longitudinal germ slits in the ascospores. SMF mount, X100 objective & DIC microscopy.



Hymenial spread with paraphyses and various stages of ascus/ascospore development. Note especially the blue-staining apical rings on the asci. Melzer's reagent mount, X40 objective and DIC microscopy.

Asci and ascospores. Note the blue-staining apical rings on the asci and the full-length longitudinal germ slits and large single deBary bubbles in the ascospores. Melzer's reagent mount, X100 objective & DIC microscopy.



Geniculosporium anamorph. All photos from an aniline blue lactic acid slide mount using phase microscopy. Upper row with highly branched conidiophores (left, X20 objective), others (X100 obj.) showing sympodially extending sporogenous conidiophore apices. Single conidium detachment scars (arrowed) seen scattered in a geniculate fashion with a circular refractive frill at each point of conidial dehiscence. Bottom 2 photos: 3 × 2 µm obovoid conidia, slightly enlarged left and more so on the right. Truncate base with tiny detachment frill (white arrow).