

***Lasiobolus macrotrichus* Rea – PDD 126087 (= AEB 1402)**

Collection site: Ngapukeariki, Haparapara River E2015068 N5799705, alt 549m; native forest: hard beech, tanekaha on ridges, tawa, hinau, *N. rata*, kamahi, podocarp

Collection date: 22 April 2025; **Incubated in a moist chamber:** 26 April 2025

Substrate: red deer (*Cervus elaphus*) dung

Collectors: Ian Flux & Merryl Park; **Identifiers:** Dan Mahoney & Ann Bell

Voucher materials: a large dried dung herbarium specimen with numerous fruiting bodies accompanied by 4 Shear's mounting fluid (SMF) glass slides; several in-situ dissecting scope photos of fresh apothecia on the dung and numerous photos of microscopic detail (in water & SMF).

Dan's comments below:

There are 4 PDD records of *Lasiobolus macrotrichus* (as of 2 Feb. 2026). All identified by Ann.

AEB 59 (= PDD 73219): possum dung, collector Marie Taylor at Mt. Luxmore (S. Island along the Kepler Track) in 1970

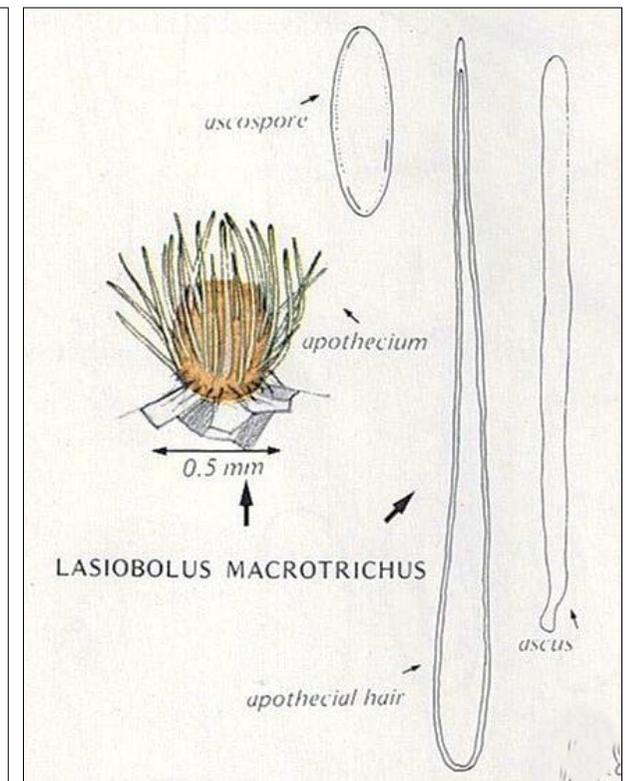
AEB 225 (= PDD 73385): deer dung, collector Jane (Forest Service) in the Urewera's 1974

AEB 442 (= PDD 73611): goat dung, collector Martin Foggo at Auckland Island in 1983

AEB 855 (= PDD 80305): possum dung, collector Steven Whitton at Doughboy's Bay, Stewart Island in 2002

Ann also included *Lasiobolus macrotrichus* in her 1983 publication – Bell, A. 1983. *Dung Fungi* an illustrated guide to coprophilous fungi in New Zealand. Victoria University Press, Wellington. 88pp., 46 figs. **See her illustration copied in at the right (her p.70, Fig. 35)**

She did not find *Lasiobolus macrotrichus* during her ABRS work in Australia (published by Centraalbureau voor Schimmelcultures (CBS) in 2005 – Bell, A. 2005. *An Illustrated Guide to the Coprophilous Ascomycetes of Australia*. Centraalbureau voor Schimmelcultures (CBS) Biodiversity Series No. 3. Utrecht, 172 pp. However, she recorded & illustrated *Lasiobolus ciliatus*, *L. diversisporus*, *L. microsporus* & *L. trichoboloides*.



See portions of pp. 1213, 1220 & 1221 below.

KEY TO THE SPECIES OF LASIOBOLUS

- A. Asci eight-spored.....C
 A. Asci containing more than eight spores.....B
- B. Apothecia multiascal.....*L. cainii* (1)
 B. Apothecia uniascal.....*L. monascus* (9)
- C. Ascospores longer than 20 μG
 C. Ascospores shorter than 20 μD
- D. Setae cylindrical acicular.....E
 D. Setae subventricose at the base.....F
- E. Ascospores 13-18 \times 9-13.5 μ , ectal cells horizontally oriented.....*L. lasioboloides* (6)
 E. Ascospores 8.5-11.5 \times 6-9 μ , ectal cells vertically oriented.....*L. trichoboloides* (11)
- F. Ascospores 13-18 \times 7.5-11.5 μ , setae usually smooth.....*L. intermedius* (5)
 F. Ascospores 9-11 \times 6.6-8.0 μ , setae always with cyanophilic markings.....*L. microsporus* (8)
- G. Setae 600 μ long or more.....H
 G. Setae less than 600 μ long.....I
- H. Ascospores 15-23 \times 6-13 μ , narrow ellipsoidal, asci cylindrical.....*L. macrotrichus* (7)
 H. Ascospores 22-30 \times 9-13.5 μ , subfusiform, asci clavate.....*L. ruber* (10)

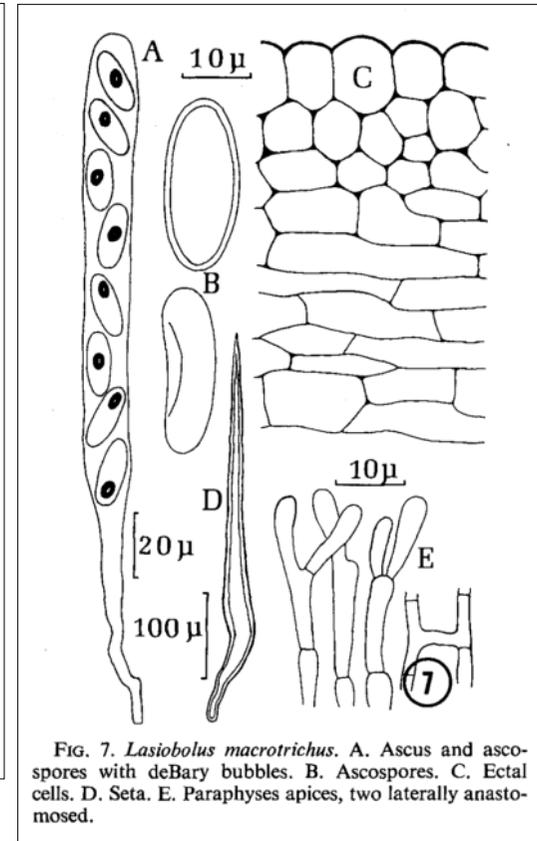
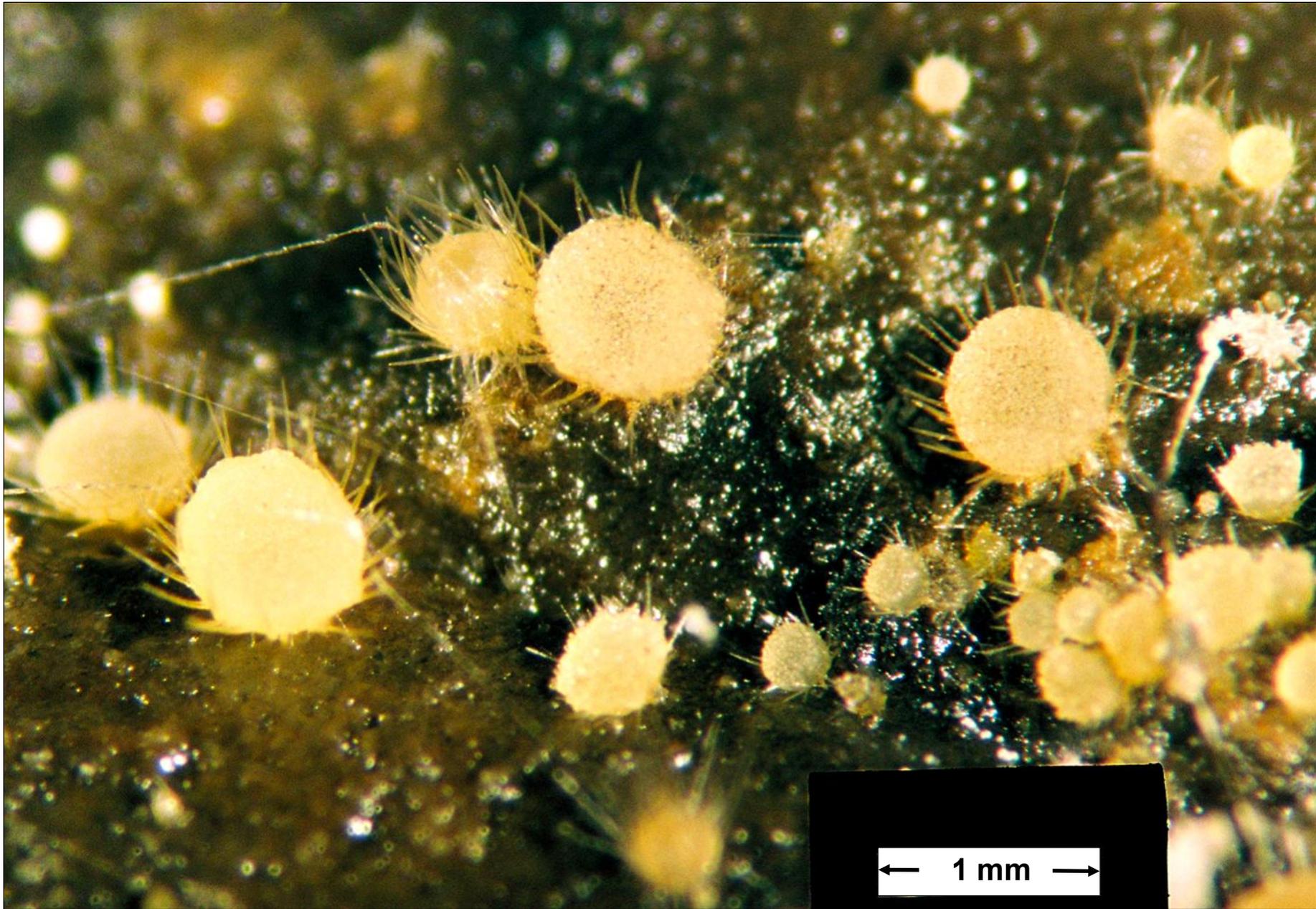


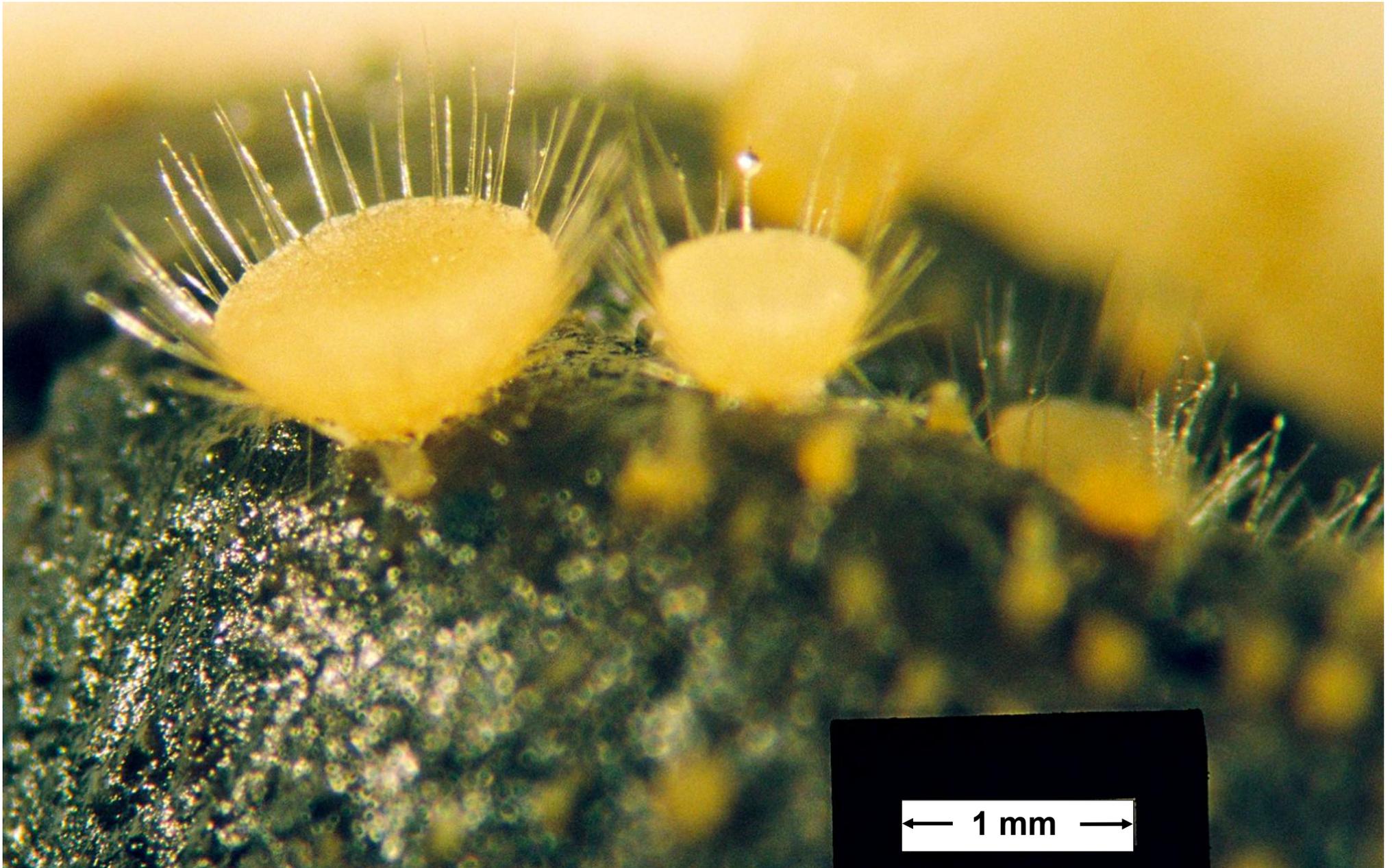
FIG. 7. *Lasiobolus macrotrichus*. A. Ascus and ascospores with deBary bubbles. B. Ascospores. C. Ectal cells. D. Seta. E. Paraphyses apices, two laterally anastomosed.

Lasiobolus macrotrichus Rea, Trans. Br. Mycol. Soc. 16: 440. 1917. Fig. 7
 = *Lasiobolus longisetosus* Povah, Pap. Mich. Acad. Sei., Arts Lett. 9: 258. 1929.

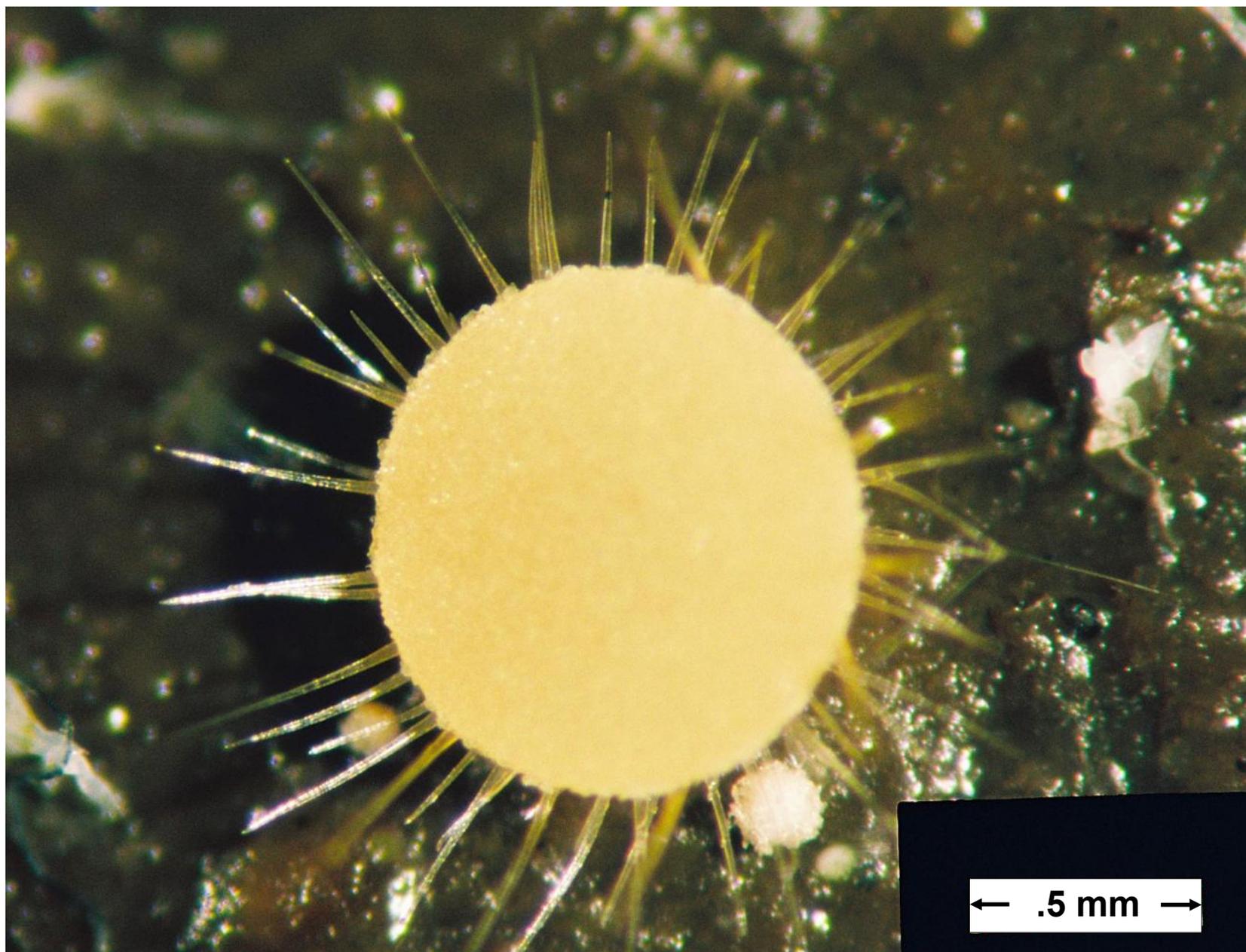
Apothecia gregarious to crowded, sessile, (300-)420-800(-1000) μ m diam. Disc flat, without distinct margins, pale orange to tan. Receptacle obconical to funnel-shaped, setose, concolorous with the disc; anchoring hyphae subhyaline, non-septate, unbranched, 3.0-5.5 μ m diam. **Setae** arising superficially from the lower and median parts of the receptacle, non-septate, bristly, straight, pointed, ventricose, 300-1000(-1380) μ m long by 20-48 μ m diam at the widest part; walls smooth, 3.0-7.5 μ m thick. **Ectal excipulum** of small, elongated, sometimes lobed, horizontally arranged cells, 6.5-20.0 \times 3.0-7.5 μ m, a textura epidermoidea. **Medullary excipulum** of hyaline, narrow cells. Subhymenium inconspicuous. Hymenium multiascal, iodine negative. **Asci** cylindrical, rounded or truncate above, attenuate below, usually long pedicellate, 110-240 \times 15-27 μ m, eight-spored. **Ascospores** obliquely uniseriate, hyaline, ellipsoidal, rounded at both ends, smooth-walled, (15-)17-22(-24) \times (5.5-)9.0-12.0(-13.5) μ m, each with a conspicuous deBary bubble. **Paraphyses** hyaline, filiform, septate, branched, slightly inflated to 2-3 μ m diam at their apices. **Habitat**: On dung of various animals. **Name**: Referring to the long setae.



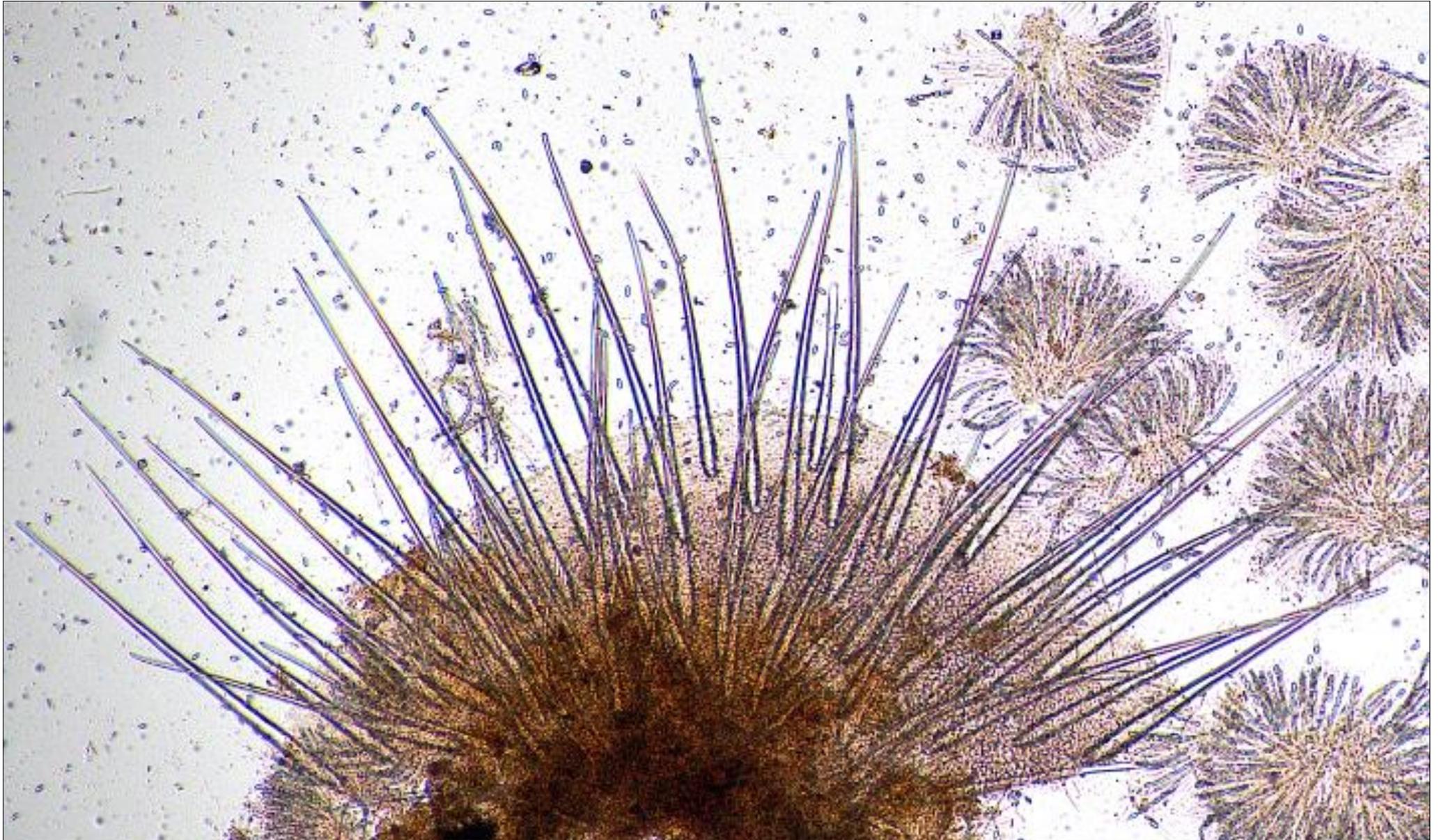
AEB 1402. In-situ various sized apothecia on the surface of red deer dung in a moist incubation chamber.



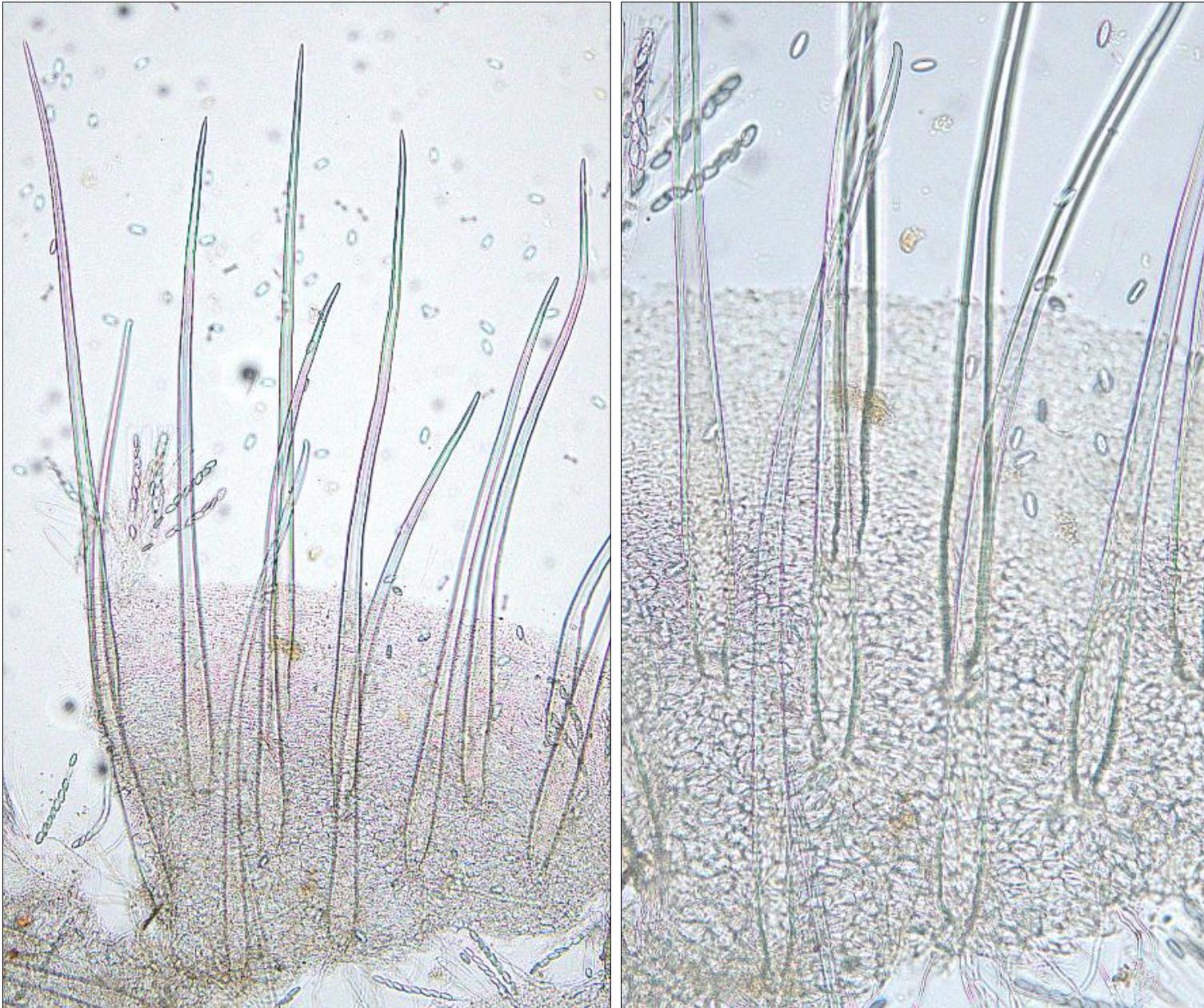
AEB 1402. In-situ various sized apothecia on the surface of red deer dung in a moist incubation chamber.



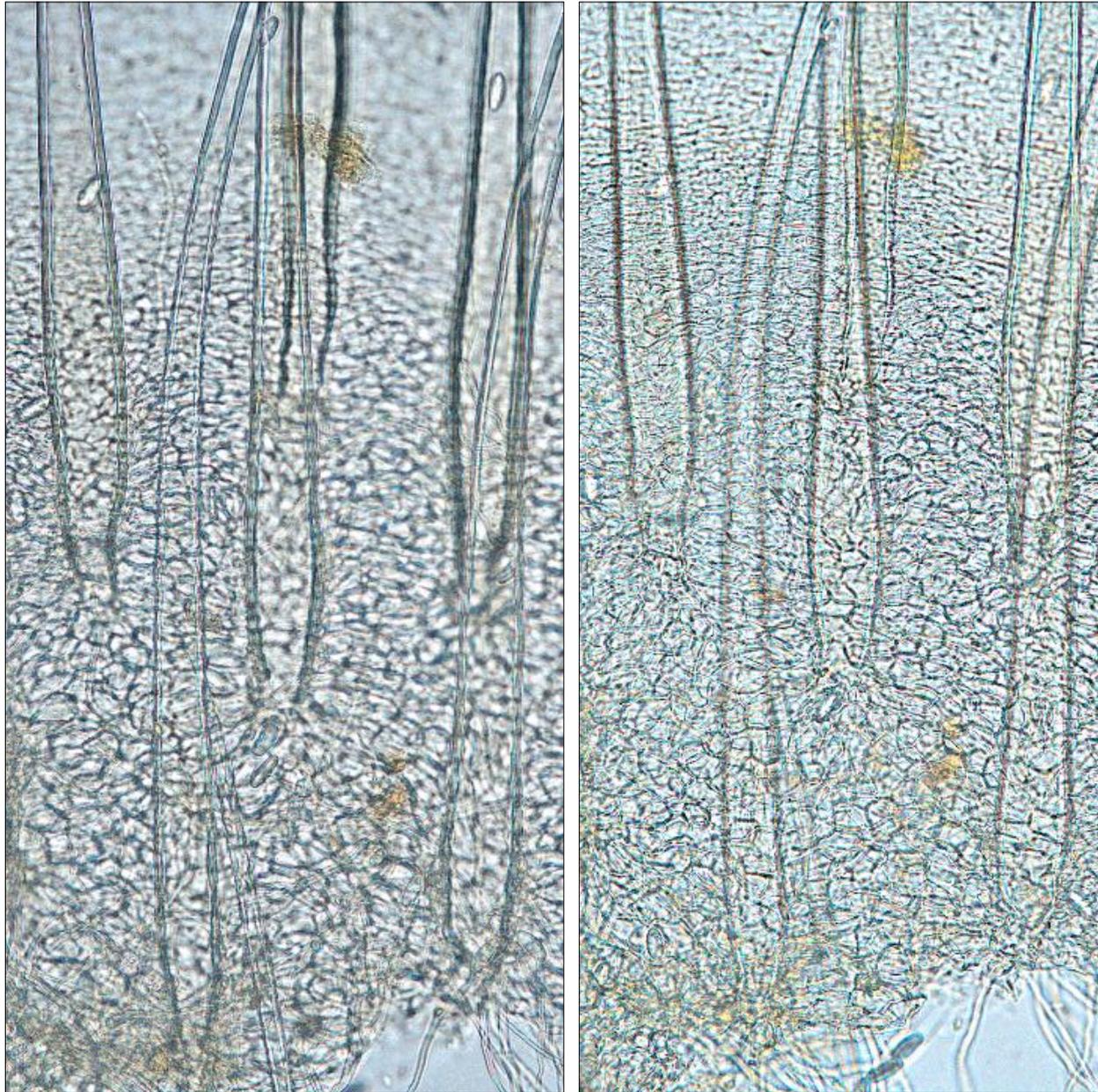
AEB 1402. In-situ overhead view of an apothecium on the surface of red deer dung in a moist incubation chamber.



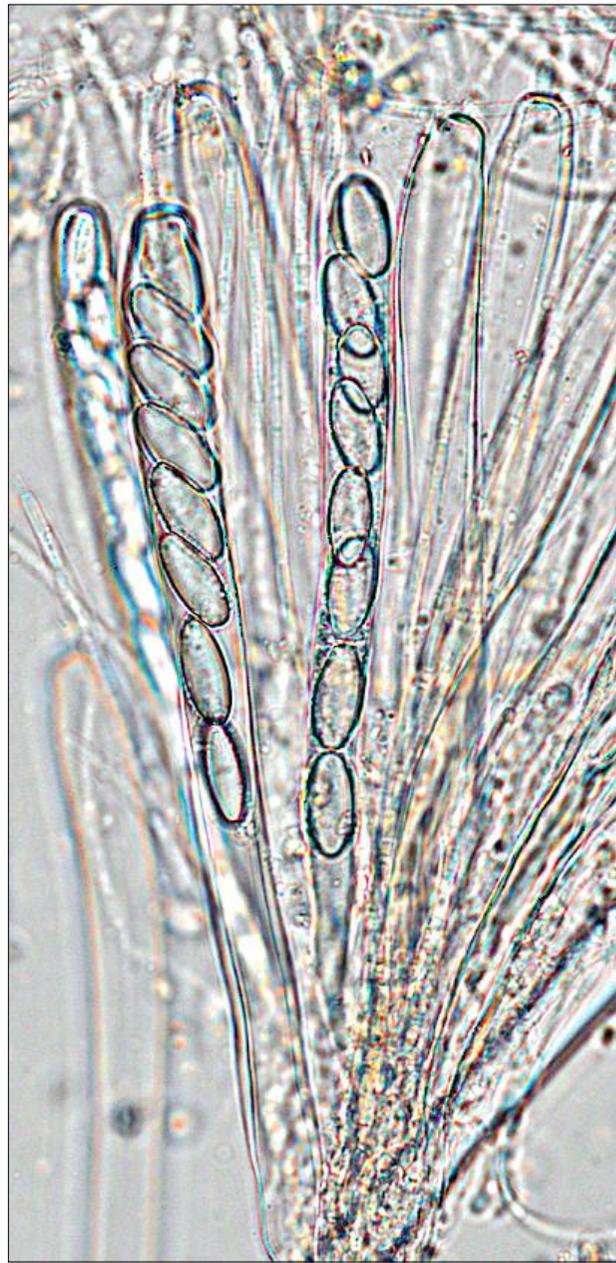
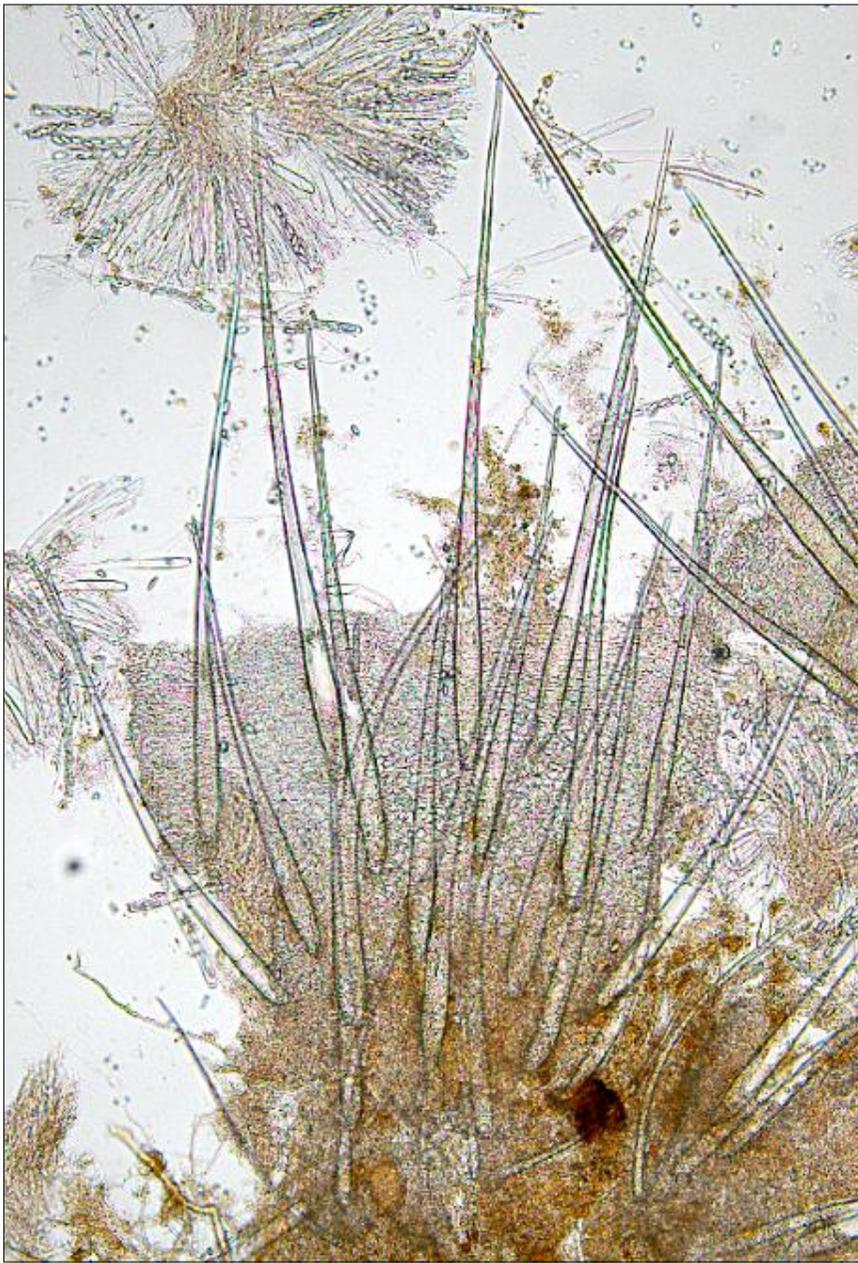
AEB 1402. A mature apothecium seen bottom side up showing numerous setae arising superficially from the lower and median parts of the receptacle – these smooth, non-septate, bristly, straight, pointed, ventricose and mostly longer than 600 μm . Photographed from a SMF slide mount, using the X4 objective and brightfield microscopy.



AEB 1402. Closeup views of setae and the textura epidermoidea of the ectal excipulum. Photographed from a SMF slide mount, using the X20 objective and brightfield microscopy. The right photo an enlargement of the left photo.



AEB 1402. Different focuses of the same closeup view of setae and ectal excipulum – from the field of view seen on the previous page but shown using the X40 objective. The different focuses allow better views of the ectal excipulum/textura epidermoidea and the ventricose bases of the setae.



AEB 1402. Water mount views. Left: setae and ectal excipulum X20 objective. Middle: mature asci and hyaline to faintly yellow, narrow, septate paraphyses X40 obj. Right: ascus $210 \times 12.5 \mu\text{m}$ with ascospores $17.5\text{--}20 \times 7.5 \mu\text{m}$.