

№ 125

Odontia fibrosa
(Berk. & M.A. Curtis) Kõljalg

Figures 1–9

Zygodesmus fibrosus Berk. & M.A. Curtis 1875 [1 : 145] K! ≡ *Kneiffiella fibrosa* (Berk. & M.A. Curtis) M.J. Larsen 1968 [10 : 35] ≡ *Tomentellina fibrosa* (Berk. & M.A. Curtis) M.J. Larsen 1974 [11 : 115] ≡ *Tomentella fibrosa* (Berk. & M.A. Curtis) Kõljalg 1996 [9 : 122] ≡ *Odontia fibrosa* (Berk. & M.A. Curtis) Kõljalg 2014 [16 : 87]

= *Kneiffiella bombycina* var. *slovaca* Svrček 1958 [14 : 77] teste Larsen [10], Larsen [11] ≡ *Tomentellina bombycina* var. *slovaca* (Svrček) Svrček 1960 [15 : 241]

= *Tomentellina ferruginosa* f. *saxicola* Bourdot & Galzin 1924 [2 : 129] teste Larsen [10], Larsen [11]

= *Hypochnus canadensis* Burt 1916 [4 : 211] teste Larsen [10], Larsen [11]

= *Kneiffiella bombycina* P. Karst. 1895 [8 : 1] H!, also teste Larsen [11] and auct. pl. ≡ *Tomentellina bombycina* (P. Karst.) Bourdot & Galzin 1928 [3 : 473] ≡ *Tomentella bombycina* (P. Karst.) J. Erikss. 1958 [6 : 159]

= *Tomentellina bombycina* f. *saxicola* Bourdot & Galzin 1928 [3 : 473] teste Larsen [10], Larsen [11]

= *Tomentellina ferruginosa* Höhn. & Litsch. 1906 [7 : 1604] teste Larsen [10], Larsen [11] ≡ *Tomentella ferruginosa* (Höhn. & Litsch.) Sacc. & Trotter 1912 [13 : 418] ≡ *Hypochnus ferruginosus* (Höhn. & Litsch.) Burt 1916 [4 : 212]

= *Kneiffiella bombycina* var. *calcareo* Pouzar & Svrček 1958 [14 : 77] teste Larsen [10], Larsen [11] ≡ *Tomentellina bombycina* var. *calcareo* (Pouzar & Svrček) Svrček 1960 [15 : 241]

Basidiome effused, loosely adherent to separable, araneose to byssoid or loosely tomentose, soft membranaceous, up to 0.5 (1) mm thick.

Hymenophore discontinuous to continuous, tufted, irregular, granulose, becoming indistinctly hydroid, ferruginous brown (5YR 4/6), rarely dark

reddish brown (7.5YR 3/3–4).

Aculei conical, not well formed, often con crescent, up to 0.1 (0.2) mm long, penicillate at the apex because of the projecting cystidia-like hyphae.

Subiculum poorly to well developed, araneose to hypochnoid or soft fibrous, light yellowish brown (10YR 6/4) to strong brown (10YR 4/3), normally paler than the fertile surface.

Margin indistinct, almost fertile throughout or indefinitely thinning out, araneose to byssoid, yellowish to yellowish orange or brownish, distinctly paler to almost concolorous with the subiculum.

Rhizomorphs frequent in subiculum and substrate if well decayed, obscure or easily found at the margin, flexible, compact, slightly pilose to almost smooth, up to 0.1 (0.2) mm in diam., light yellowish brown to ochraceous (10YR 6–5/4–6).

Hyphal system dimitic with skeletal hyphae in subiculum and rhizomorphs; generative hyphae with simple septa.

Subhymenial hyphae almost regular, 2.5–4 (5) μm wide, thin-walled, subhyaline to pale yellowish brown.

Subicular hyphae of two kinds: **1**) generative hyphae regular, (1.5) 2–3.5 (4) μm in diam., with thin or slightly thickening wall, subhyaline to pale yellowish brown; **2**) skeletal hyphae regular, straight, 1–1.5 (2) μm in diam., infrequently with some elbow-like bends, with solid wall, yellowish.

Rhizomorphs starting as thin strands of generative like the subicular ones, soon associated with some skeletal hyphae; old rhizomorphs developing a core of slightly wider hyphae up to 7 μm in diam., surrounded by compactly arranged generative hyphae like the subicular ones; outer layer built up by numerous yellowish skeletal hyphae.

Cystidia absent, but with evident, differentiated hyphae projecting from hymenium and more or less parallelly arranged in the core of aculei, mostly arising from subicular and tramal hyphae, cylindrical, with thick wall, up to 200 (250) μm long and 5–6 (8) μm wide, with repetitive simple septa along their length, yellowish brown.

Basidia clavate to narrowly clavate, sometimes almost tubular, sinuous, (35) 45–70 (100) \times (5) 6–9 (13) μm , hyaline to subhyaline, often with ochraceous content; (2) 4 sterigmata up to 5 μm long, and 1–2 μm wide at the base.

Basidiospores with regular to irregular or slightly lobed outline, frontal face globose to more or less indistinctly 4–7-lobed, lateral and polar face mostly ellipsoid; dimensions strongly varying between specimens: from (5.5) 6–7.5 \times 4.5–6 \times 6–7.5 μm or 6–7 μm across [e.g. types of *Z. fibrosus* and *K. bombycina*] to 8–10 \times 6.5–8 \times 8.5–9.5 μm or 8–10 μm across [e.g. em-9997], $Q^1 = 1.1\text{--}1.4$ (1.5), $Q^2 = 0.9\text{--}1.1$ (1.2), verrucose to bluntly echinulate, often with bi- or trifurcate warts or small lobes, rarely with forked aculei, with slightly thickening wall, yellowish brown to brownish;

apiculus almost central in side view; single aculei up to 0.5 (1) μm long, 0.3–0.6 (0.8) μm wide at the base.

Chlamydospores absent.

Chemical reactions: IKI–. CB–. KOH: faint darkening of all elements with KOH; sometimes generative hyphae in rhizomorphs assuming a pale grey to bluish tint.

Incrustation: some segments of hyphae (and cystidia-like hyphae) with a discontinuous sheath of yellowish brown resinous matter that partly dissolve in KOH-mounts producing a yellowish or ochraceous diffusate.

Specimens examined

FINLAND – Mustiala, on decayed bark of *Populus sp.*, leg. P.A. Karsten, 5.X.1887, holotype of *Kneiffiella bombycina* P. Karst. (em-8371)

FRANCE – Massif du Tanneron, on wood of a decayed twig of a deciduous tree, leg. J. Duc, 30.X.1997 (em-6375.1) — **Aveyron** – Millau, on stones, leg. E. Martini, 1.XI.1999 (em-7114.1) – Millau, Le Cade, on bark of a lying, rather hard branch of *Pinus sp.*, leg. E. Martini, 9.XI.2008 (em-10747) — **Basses-Alpes** – Meolans-Revel, Les Clarions, Torrent du Col de lerre, on bark of a lying, strongly decayed branch of *Picea abies*, leg. E. Martini, 27.IX.2016 (em-12986) — **Isère** – Autrans, Bois du Claret, on wood of a lying, decayed branch of *Picea abies*, leg. E. Martini, 7.IX.2014 (em-12267) – Autrans, Gève, on wood and bark of a lying, decayed branch of a coniferous tree, leg. F. Martini, 11.IX.2014 (em-12322) — **Jura** – Bonlieu, lac de Bonlieu, on wood of a lying, rather hard trunk of a coniferous tree (*Abies alba?*), leg. E. Martini, 15.IX.2012 (em-11821) – *ibid.*, on wood of a lying, decayed trunk of a coniferous tree, leg. E. Martini, 15.IX.2012 (em-11838) – Moirans-en-Montagne, Grange de la Penne, on bark of a lying, decayed trunk of a coniferous tree (*Abies alba?*), leg. E. Martini, 11.IX.2012 (em-11804) – Parc Naturel du Haut Jura, La Rixouse, Les Prés de la Rixouse, on wood of a lying, strongly decayed trunk of a coniferous tree, leg. E. Martini, 13.IX.2012 (em-11886) — **Loire** – Saint-Juste-en-Bas, on bark of a lying, rather hard branch of a coniferous tree, leg. E. Martini, 29.X.2000 (em-7188) — **Seine-et-Marne** – Forêt de Fontainebleau, on lying, strongly decayed wood of a coniferous tree, leg. H. Voiry, 20.VI.2007 (em-9997) – Forêt de Fontainebleau, La Solle, parcelle 253, on wood of a lying, strongly decayed trunk of a deciduous tree, leg. E. Martini, 30.X.2006 (em-9436) — **Var** – Saint-Paul-en-Forêt, on bark of a decayed branch of *Corylus avellana*, leg. E. Martini, 30.X.1997 (em-6362) — **Vendée** – Longeville, Les Conches, on wood of a lying, strongly decayed trunk of *Pinus sp.*, leg. E. Martini, 31.X.1998 (em-6796.1)

ITALY — **Sardegna** – [Unknown locality], on litter, leg. A. Bernicchia, 6.XI.1997 (em-6482) — **Trentino-Alto Adige** – Rabbi, Malga Fratte, on litter, leg. E. Martini, 20.IX.1997 (em-6181.2) – Terzolas, Le Tovare (Val di Sole), on litter, leg. E. Martini, 18.IX.1997 (em-6160)

SWITZERLAND — **Bern** – Baräu, Chammerschusgraben, on wood and bark of a lying, rather hard branch of a coniferous tree, leg. E. Martini & E. Zenone, 26.IX.1996 (em-5951) – Hofstetten, Stipfi Eywald, on bark of a lying, decayed branch of *Fagus sylvatica*, leg. E. Martini, 16.X.1999 (em-7087) – *ibid.*, on lying, decayed bark of *Picea abies*, leg. E. Martini, 16.X.1999 (em-7091) — **Solothurn** – Biberist, Chriziweier, on bark of a lying, decayed branch of a deciduous tree, leg. E. Martini, 28.IX.2001 (em-7672.1) — **St. Gallen** – Mogelsberg, Aach, on bark of a lying, strongly decayed branch of a coniferous tree, leg. E. Martini, 27.IX.2010 (em-11381) — **Ticino** – Bolle di Magadino, on wood of a lying, decayed trunk of *Alnus sp.*, leg. E. Zenone,

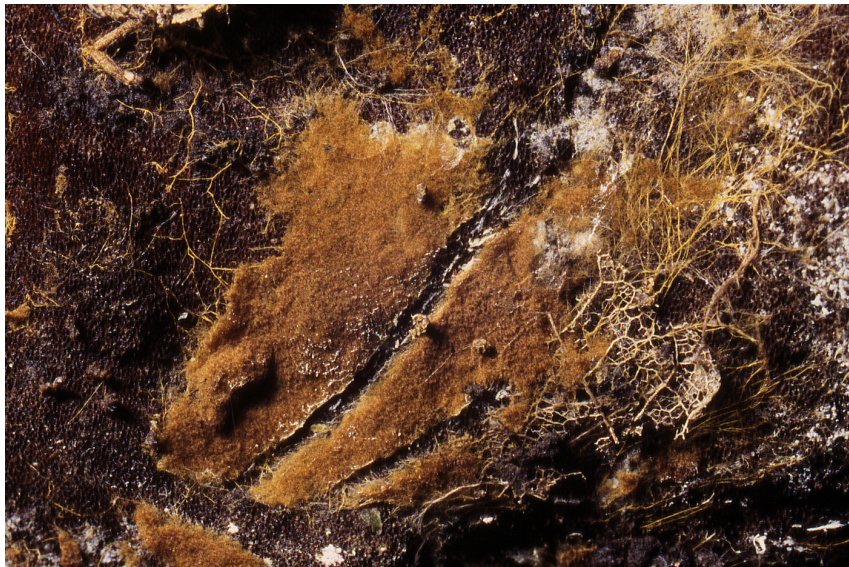


Fig. 1: Basidiome. Image width = 40 mm [em-6362]

9.X.1986 (em-733, LUG 6159) – Casima, Ponte Breggia, on strongly decayed wood of a broadleaved tree, leg. F. Delmenico, 3.I.2012 (em-11689) – *ibid.*, on lying, decayed wood of a broadleaved tree, leg. F. Delmenico, 3.I.2012 (em-12846) – Golino, on decayed bark of a deciduous tree, leg. E. Zenone, 6.XII.1986 (em-742) – Malvaglia, Piantagione, on rather hard bark of a coniferous tree, leg. S. Damiani, 24.XI.1999 (em-7098) – *ibid.*, on strongly decayed wood of a deciduous tree, leg. S. Damiani, 8.XI.2001 (em-7816) – Olivone, Campra, Cass, on bark of a lying, decayed branch of *Picea abies*, leg. E. Martini, 29.VIII.1986 (LUG 7732) – *ibid.*, on wood of a lying, strongly decayed trunk of *Picea abies*, leg. E. Martini, 18.IX.2005 (em-8653) – Ritorto, Dréom (Valle Bavona), on wood of a lying, strongly decayed branch of *Tilia cordata*, leg. E. Martini, 27.III.1989 (em-2260) – Sabbione, Splüieti (Valle Bavona), on bark of a lying, decayed branch of a deciduous tree, leg. E. Martini, 19.VIII.2014 (em-12246)

USA — **South Carolina** – Society Hill, on lying, decayed leaves of a broadleaved tree, leg. M.A. Curtis 2427, III.1849, holotype of *Zygodesmus fibrosus* Berk. & M.A. Curtis (K(M) 69213)

Materials and methods

Specimens sampling and methodological details are described separately in this issue:
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Fig. 2: Basidiome. Image width = 33 mm [em-11381]

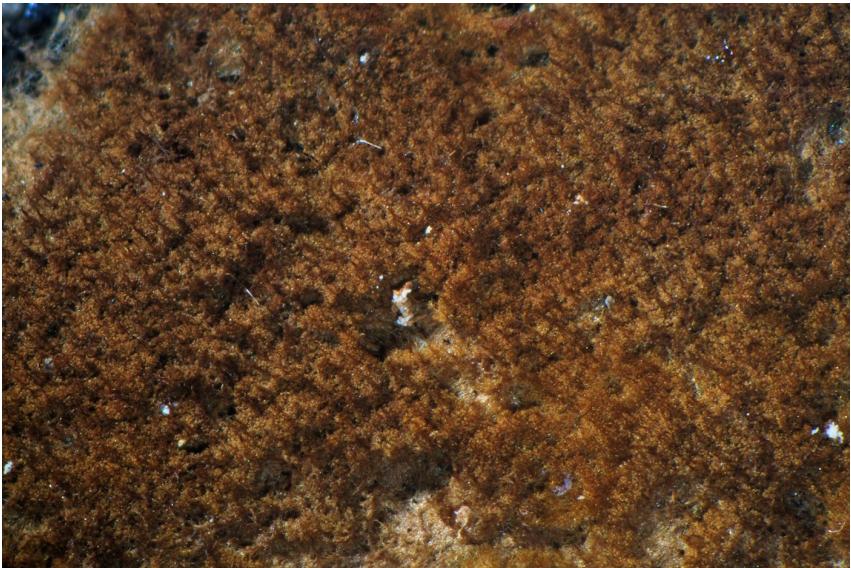


Fig. 3: Detail of the hymenophore. Image width = 9 mm [em-12246]

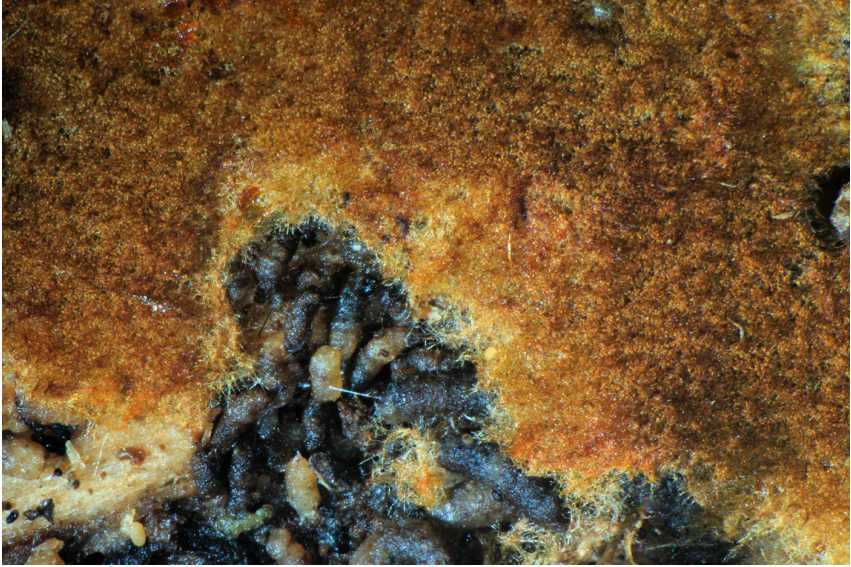


Fig. 4: Detail of the hymenophore and the margin. Image width = 9 mm [em-11838]

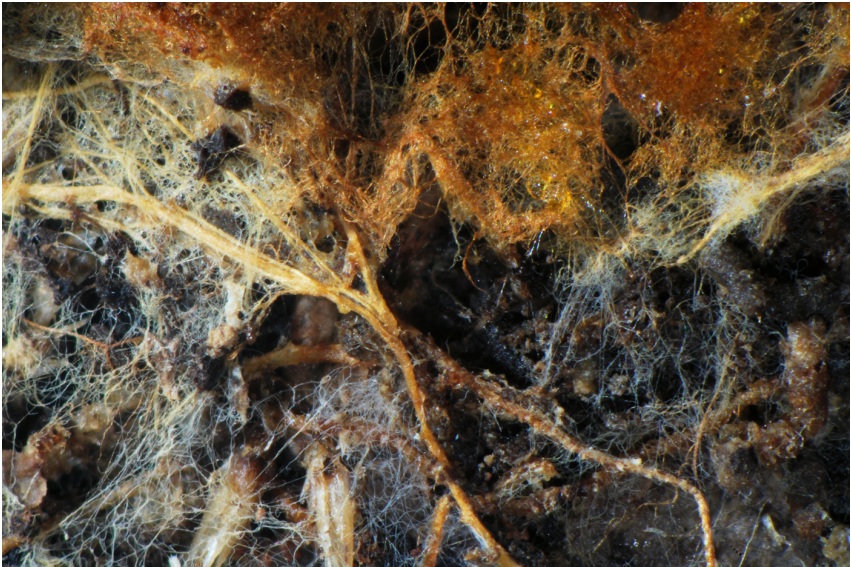


Fig. 5: Rhizomorphs at the margin. Image width = 9.5 mm [em-11804]

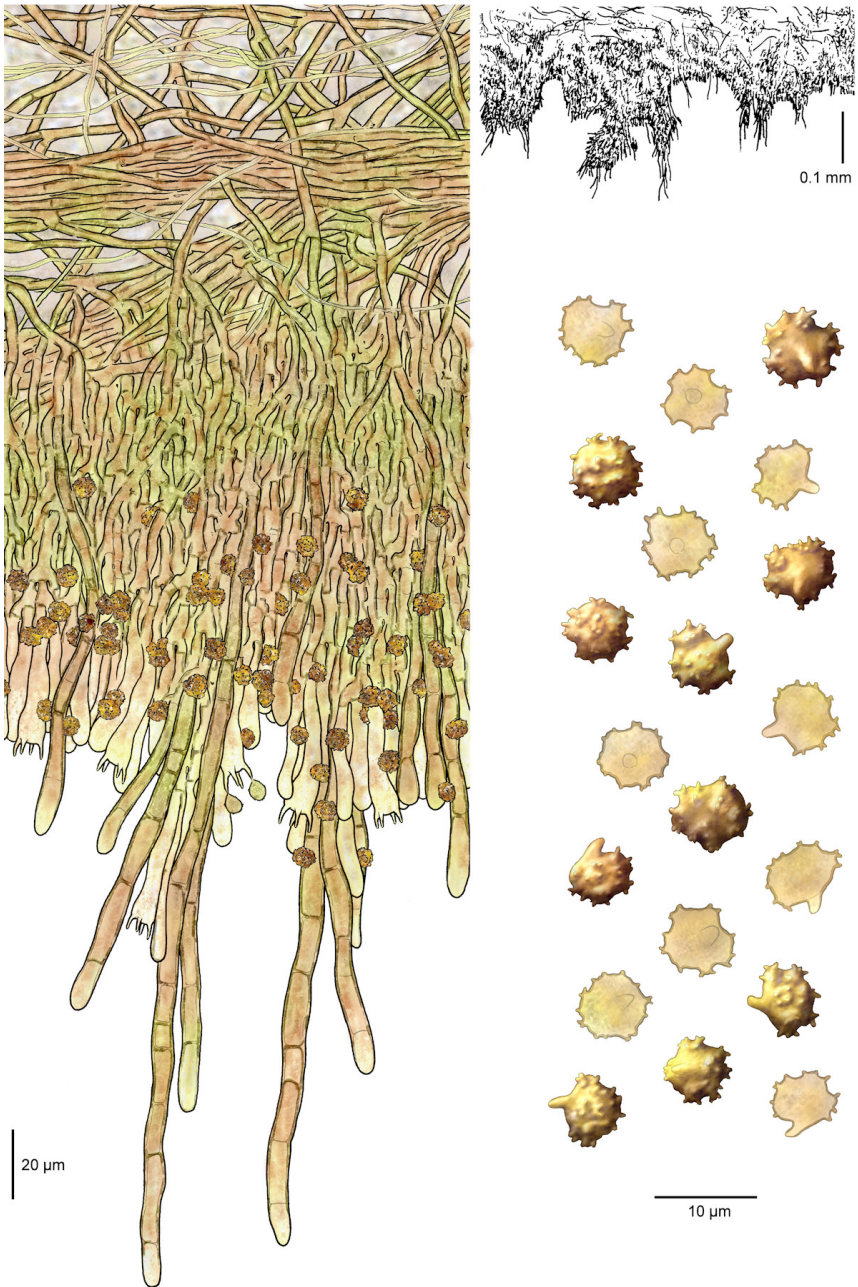


Fig. 6: Sections through the basidiome and basidiospores [em-742]

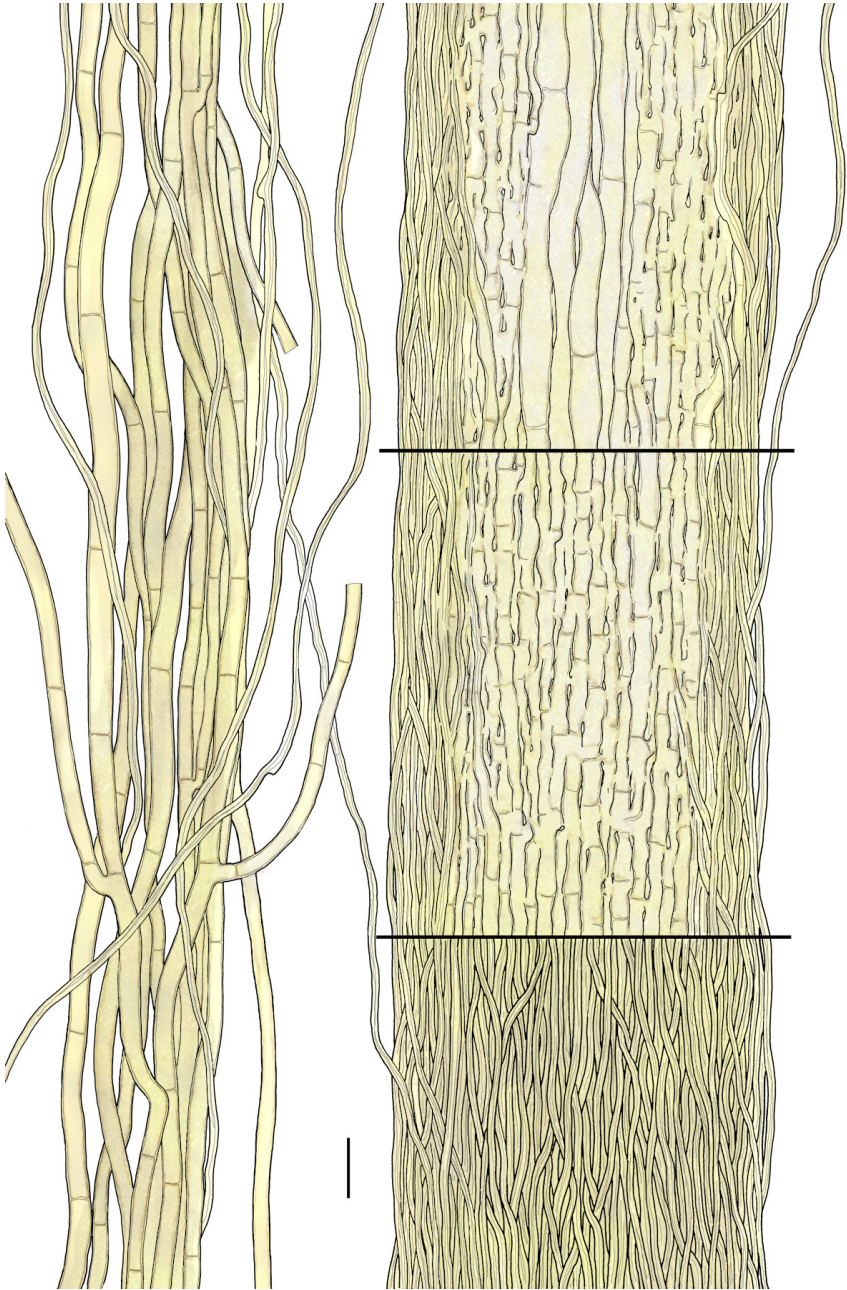


Fig. 7: Rhizomorphs, ex holotype of *Zygodermus fibrosus* Berk. & M.A. Curtis. Bar = 10 mm [K(M) 69213]

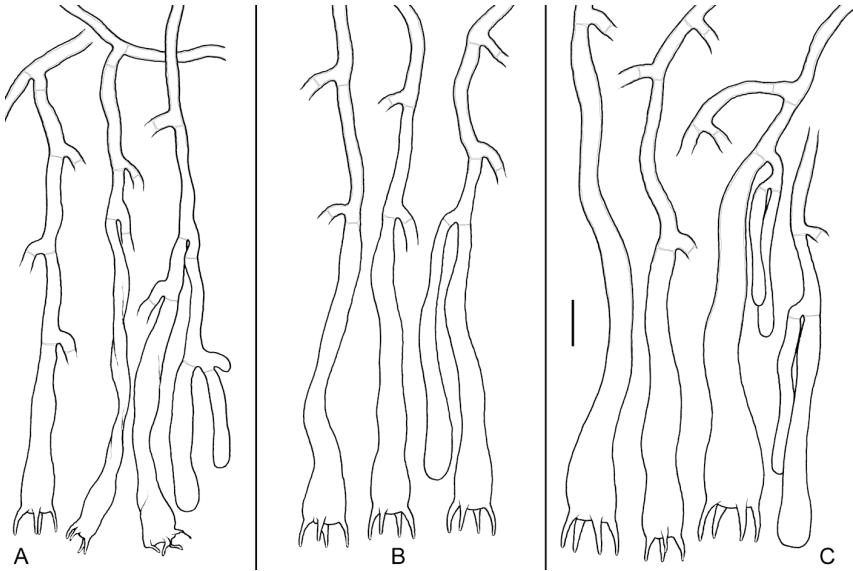


Fig. 8: Basidia and subhymenial hyphae from different collections: A) ex holotype of *Zygodermis fibrosus* Berk. & M.A. Curtis; 8) ex em-6160; C) ex em-11381. Bar = 10 μ m

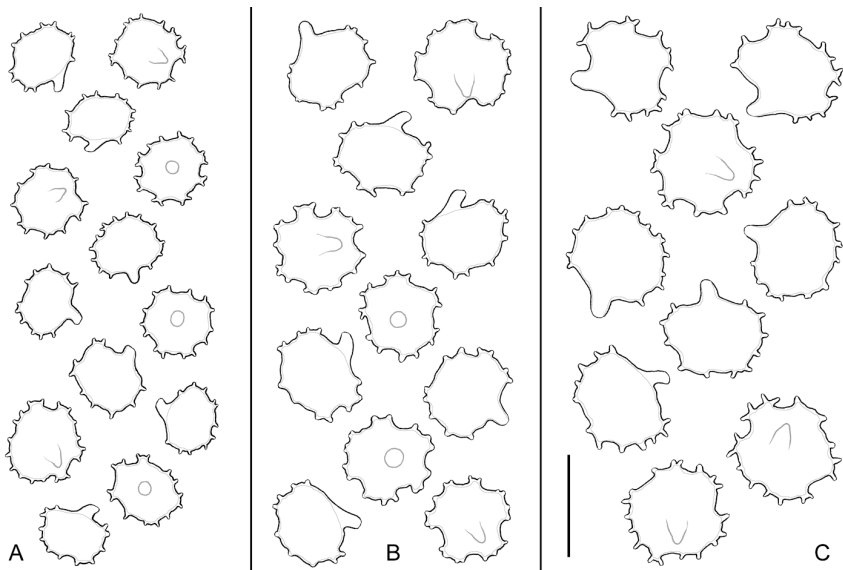


Fig. 9: Basidiospores from different collections: A) ex holotype of *Zygodermis fibrosus* Berk. & M.A. Curtis; 8) ex em-6160; C) ex em-11381. Bar = 10 μ m

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Excerpts from *Crusts & Fells*

Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes

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