Excerpts from Crusts & Jells
Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes
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Tomentella umbrinospora

M.J. Larsen

Figures 1–9

Tomentella umbrinospora M.J. Larsen 1968 [6 : 61] NYS! ≡ *Tomentella crinalis var. umbrinospora* (M.J. Larsen) Krieglst. 1999 [5 : 46] ≡ *Zygodesmus rubiginosus* Peck 1878 [10 : 58]

Basidiome effused, loosely adherent to separable, hypochnoid to tomentose or pelliculose, soft, up to 0.5 (1) mm thick.
Hymenophore discontinuous to continuous, tufted to granulose, rarely smooth, soon yellowish red, orange brown to dark reddish brown (2.5–5YR 4–3/4–6).
Subiculum scanty to well developed, araneose to hypochnoid or byssoid, yellowish to yellowish brown (10–5YR 6–5/8), paler than the fertile areas.
Margin sterile or fertile throughout, shortly to indefinitely thinning out, araneose to byssoid, yellow, yellowish red, yellowish brown, paler than the fertile areas, almost concolorous or slightly paler than the subiculum.
Rhizomorphs present, common in subiculum, at the margin and in the substrate, up to 0.1 mm thick, yellow to golden yellow, rarely yellowish brown.

Hyphal system dimitic with skeletal hyphae associated with rhizomorphs; generative hyphae mostly fibulate.
Subhymenial hyphae regular, 2–3.5 (4.5) µm wide, thin-walled, subhyaline to pale yellowish or yellow, content sometimes ochraceous.
Subicular hyphae regular, 2.5–3 (4) µm wide, with thin to slightly thickening wall, subhyaline to yellowish, rarely ochraceous.
Rhizomorphs starting as thin strands of generative hyphae like the subicular ones, soon associated with some skeletal hyphae; old rhizomorphs with a core of slightly wider hyphae up to 8 µm surrounded by generative hyphae and coated by a surface layer of straight skeletal hyphae. Individual generative hyphae with fibulate or sparse simple septa, 2.5–4 µm wide, sometimes with closely spaced secondary septa, subhyaline to

yellowish, thin-walled and infrequent simple-septate hyphae 1–1.5 (2) µm wide, simulating skeletal hyphae, thin-walled, hyaline to subhyaline; skeletal hyphae straight, 0.8–1.5 µm wide, with thick to solid wall, with rare 'elbows' and very rare branching, yellow to golden yellow.
Cystidia absent.
Basidia narrowly clavate to subcapitate, slightly sinuous, 30–50 (65)× (5.5) 6.5–8 (9) µm, fibulate at the basal septum, subhyaline to pale yellowish, often with yellowish to ochraceous content; 4 sterigmata up to 7 long and 1–1.8 µm wide at the base.
Basidiospores normally with somewhat irregular to lobed outline; lateral face ellipsoid to broadly ellipsoid with regular to sinuous outline, sometimes broadening toward the base; frontal face triangular or slightly ovoid to more or less distinctly three-lobed; polar face globose to irregularly globose, rarely somewhat lobed, (6.5) 7–8.5 (9)×(5) 5.5–6.5 (7.2) ×(6.5) 7–8 (8.5) µm, Q^1 = 1.1—1.3 (1.4), Q^2 = 0.9–1.15, shortly echinulate, yellow-orange brown to yellowish brown or light brown; apiculus lateral; aculei up to 0.8 (1.2) µm long, normally blunt.
Chlamydospores absent.
Chemical reactions: IKI–; CB– but some young spores cyanophilous; KOH: without noticeable changes.
Incrustation: in water with a lot of yellow, orange to reddish-yellow resinous material that partially dissolve in KOH-mounts producing a yellowish to yellowish brown diffusate. Better preparations to study microscopic details are obtained with Hydrochloric acid pretreatment.

Specimens examined

FRANCE — **Aveyron** – Sainte-Eulalie-de-Cernon, on bark of a lying, decayed branch of *Quercus sp.*, leg. E. Martini, 29.X.2001 (em-7800) – *ibid.*, on wood of a lying, decayed trunk of a deciduous tree, leg. E. Martini, 29.X.2001 (em-7796) — **Isère** – Autrans, Bois du Claret, on wood of a lying, decayed branch of *Picea abies*, leg. E. Martini, 7.IX.2014 (em-12268) — **Rhône** – Sérézin-du-Rhône, Ile de la Table Ronde, on wood of a lying, rather hard branch of *Fraxinus excelsior*, leg. E. Martini, 13.X.2015 (em-12784) — **Val-de-Marne** – Bois de Vincennes, on bark of *Pinus sp.*, leg. G. Essartier, 6.XI.2004 (em-8544) — **Var** – Brignoles, Camps La Source, on bark of a lying, hard twig of *Juniperus sp.*, leg. J. Duc, 14.XI.2013 (em-12059) – Brignoles, Forêt de la Ste. Baume, on wood of a lying, rather hard branch of *Pinus sp.*, leg. E. Martini, 12.XI.2013 (em-12023) – *ibid.*, on wood of a lying, hard branch of a broadleaved tree, leg. E. Martini, 12.XI.2013 (em-12086) – *ibid.*, on bark of a lying, rather hard trunk of *Quercus sp.*, leg. E. Martini, 12.XI.2013 (em-12020) – Saint-Paul-en-Forêt, on bark of a deciduous tree, leg. E. Martini, 30.X.1997 (em-6349) – *ibid.*, on wood and bark of a rather hard branch of a deciduous tree, leg. E. Martini, 30.X.1997 (em-6371) — **Yvelines** – Forêt de Saint Germain, parcelle 54, on bark of a lying, rather hard trunk of *Betula sp.*, leg. R. Hentic, 25.X.2008 (em-10592)

PAKISTAN – [Unknown locality], on bark of a rather hard twig, 1955 (LY 2066, em-7552)

SWITZERLAND — **Jura** – Welschenrohr, on bark of a lying, decayed branch of *Fagus*

Fig. 1: Basidiome [em-7800]

sylvatica, leg. E. Martini, 29.IX.1993 (em-3581.1) — **Ticino** – Casima, Ponte Breggia, on wood of a lying, strongly decayed branch of *Fraxinus excelsior*, leg. F. Delmenico, 30.XII.2013 (em-12101) – Cavigliano, on wood of a lying, strongly decayed trunk of *Populus tremula*, leg. E. Zenone, 13.II.2002 (em-7879) – Cevio, Consorzio, on bark of a lying, decayed trunk of *Salix sp.*, leg. E. Zenone, 21.XI.2001 (em-7902) – Meride, Fornace, on bark of a decayed stump of a deciduous tree, leg. E. Martini, 30.VI.2007 (em-9971) – Ritorto, Dréom (Valle Bavona), on bark of a decayed trunk of *Tilia cordata*, leg. E. Martini, 4.IX.1994 (em-3892) – ***ibid.***, on wood of a lying, strongly decayed trunk of a deciduous tree, leg. E. Martini, 14.VI.2001 (em-7472)

USA — **New York** – Greenbush, on wood of a broadleaved tree, leg. C.H. Peck, holotype of ***Zygodesmus rubiginosus*** Peck (NYS) – Letchworth State Park, on *Tilia sp.*, leg. M.J. Larsen, 9.X.1965 (NYS: M.J.Larsen 1893)

Materials and methods

Specimens sampling and methodological details are described separately in this issue: Excerpts from Crusts & Jells, n° 0

Fig. 2: Detail of the hymenophore and margin. Image width = 9 mm [em-12023]

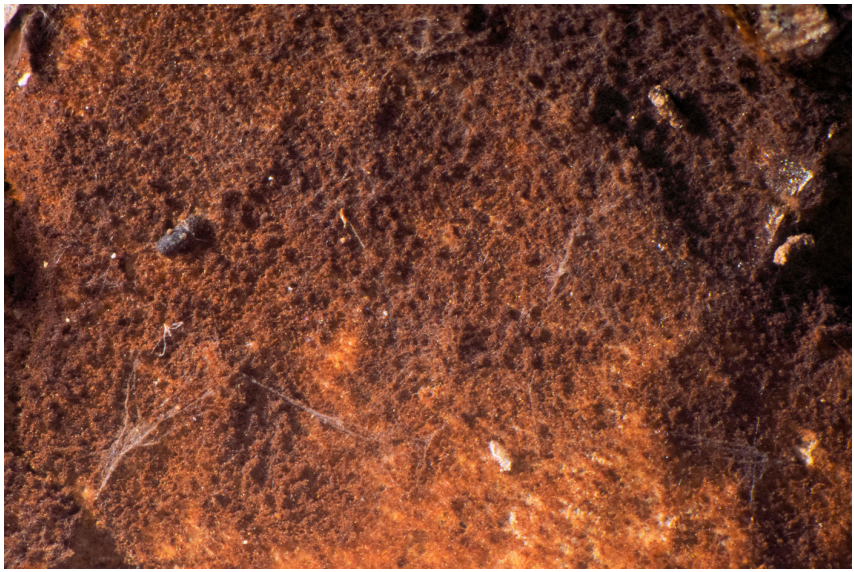

Fig. 3: Detail of the granulose hymenophore (dried basidiome). Image width = 9 mm [em-12020]

Fig. 4: Basidiome at the margin with yellow rhizomorphs. Image width = 9.5 mm [em-12020]

Fig. 5: Basidiome turned upside down to show the rhizomorphs in subiculum. Image width = 9 mm [em-12023]

Fig. 6: Rhizomorph. Bar = 10 µm [em-6349]

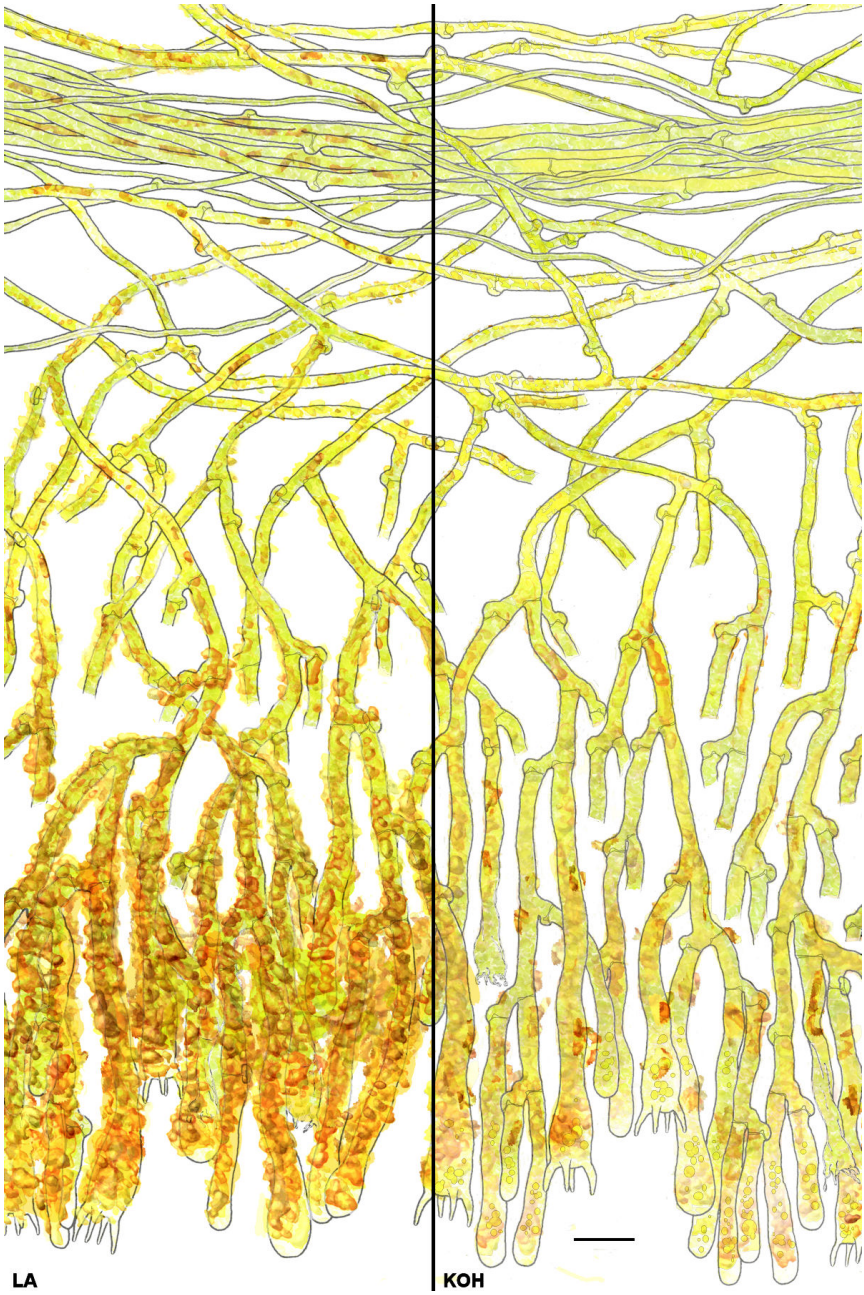

Fig. 7: Simplified vertical section through the basidiome showing basidia, subhymenial and subicular hyphae, and a thin rhizomorph. On the left in lactic acid, on the right in KOH. Bar = 10 µm [em-12023]

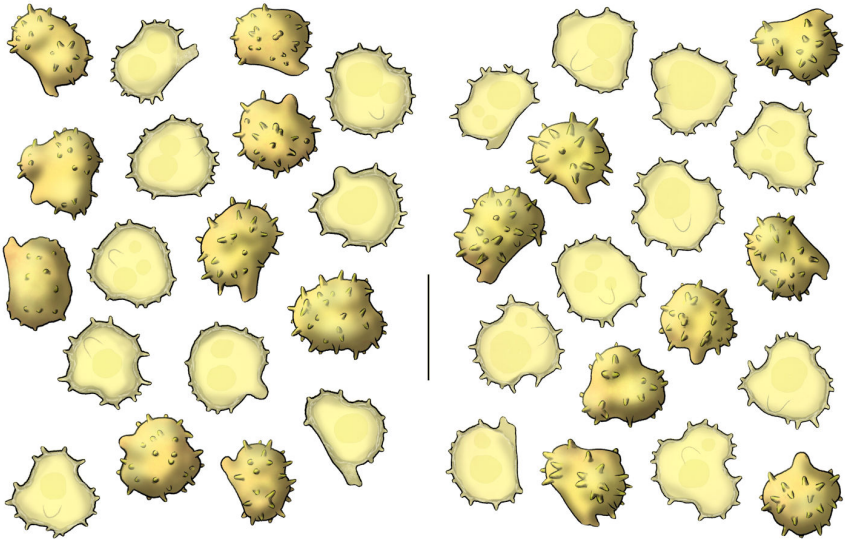

Fig. 8: Basidiospores: on the left ex em-6371, on the right ex em-12059. Bar = 10 µm

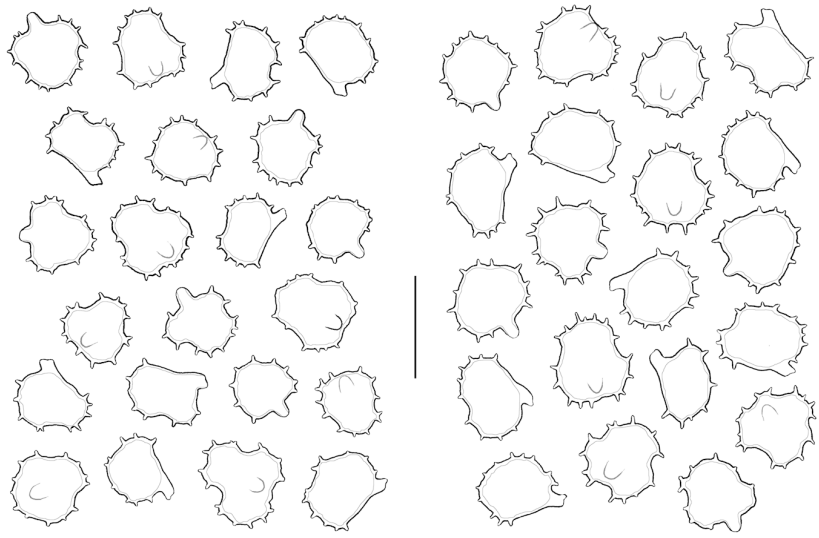

Fig. 9: Basidiospores: on the left ex holotype of *Zygodesmus rubiginosus* Peck; on the right ex M.J.Larsen 1893

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