

№ 112

***Tomentella ferruginea***  
(Pers.) Pat.

Figures 1–10

*Corticium ferrugineum* Pers. 1800 [17 : 2 : 18] L! ≡ *Thelephora ferruginea* (Pers.) Pers. 1801 [18 : 578] ≡ *Hypochnus ferrugineus* (Pers.) Fr. 1818 [5 : 280] ≡ *Stereum ferrugineum* (Pers.) Gray 1821 [6 : 1 : 653] ≡ *Tomentella ferruginea* (Pers.) Pat. 1887 [13 : 154]

= *Grandinia coriaria* Peck 1873 [15 : 61] teste Larsen [9] ≡ *Hypochnus coriarius* (Peck) Burt 1916 [3 : 228] ≡ *Tomentella coriaria* (Peck) Bourdot & Galzin 1924 [1 : 159]

= *Hypochnus fulvocinctus* Bres. 1897 [2 : 116] S!, also teste Larsen [10], Svrček [23] pro syn., Burt [3] pro syn.

= *Grandinia rufa* Peck 1878 [16 : 47] teste Larsen [8]

= *Tomentella suberis* Pat. 1894 [14 : 221] teste Larsen [9] ≡ *Thelephora suberis* (Pat.) Sacc. 1895 [20 : 117] ≡ *Hypochnus suberis* (Pat.) Sacc. & Syd. 1899 [21 : 228]

= *Tomentella ferruginea* var. *laevis* Skovst. 1950 [22 : 22] teste Larsen [9]

**Basidiome** effused, separable, hypochnoid, soft and fragile to tomentose, becoming membranaceous, up to 0.3 (0.5) mm thick.

**Hymenophore** mostly continuous, granulose to colliculose, dark yellowish brown to brown (10YR 4/3–6), normally becoming olive brown to dark olive (5Y 4–3/4).

**Subhymenium** rather thin, normally poorly developed.

**Subiculum** thin to well developed, yellow to yellowish brown, reddish-yellow, rarely brown, araneose to hypochnoid.

**Margin** indistinct, fertile throughout and shortly thinning out or distinct, almost sterile and indefinitely thinning out, finely byssoid to fibrofusoid, rarely somewhat fimbriate, yellow to yellow orange or yellowish brown, mostly concolorous or paler than the subiculum.

**Rhizomorphs** common in subiculum where they can be readily seen on the underside, if the basidiome can be turned upside-down; often present and well developed in the substratum, especially if strongly decayed, and at the margin, up to 0.05 (0.1) mm, compact, hard and flexible, richly branched and often fan-shaped, slightly pilose or smooth between branchings, yellow to brown or very dark brown.

**Hyphal system** system monomitic to dimitic or trimitic with skeletal hyphae associated with rhizomorphs.

**Subhymenial hyphae** regular, fibulate, 3–4 (5)  $\mu\text{m}$  wide, subhyaline to pale yellowish, sometimes with yellowish-ochraceous content.

**Subicular hyphae** regular, mostly fibulate, sometimes with simple septa and repetitive adventitious septa, 2.5–5  $\mu\text{m}$  wide, infrequently with some localized thickenings, thin-walled or with slightly thickening wall, subhyaline to yellowish.

**Rhizomorphs** starting as strands of fibulate and simple-septated thin-walled hyphae, 2–4  $\mu\text{m}$  in diam. that later develop wider in the core (up to 10  $\mu\text{m}$ ) and mix with 1–3  $\mu\text{m}$  wide hyphae with thickening wall, sparse clamps and frequent simple or adventitious septa, that originate straight skeletal hyphae common on the surface of the rhizomorphs; some old rhizomorphs may show also infrequent richly branched pseudoskeletal hyphae forming an incomplete labyrinthiform net on the surface. Rhizomorphs with numerous skeletal hyphae on surface are yellowish, otherwise brownish.

**Cystidia** absent.

**Basidia** subcylindrical or narrowly clavate to slightly suburniform, infrequently capitate, sometimes more or less sinuous,  $40\text{--}60 \times 6.5\text{--}8 \mu\text{m}$ , with a fibulate basal septum, subhyaline to pale yellowish or ochraceous, often with yellowish to ochraceous content; (2) 4 sterigmata, 4–5  $\mu\text{m}$  long and 1–1.5  $\mu\text{m}$  wide at the base.

**Basidiospores** with regular to irregular or lobed outline, lateral face ellipsoid to broadly ellipsoid sometimes with a broader base, frontal face ovoid to 3-lobed, polar face globose, subglobose or slightly 3-lobed, (6.3) 6.5–8.3 (8.7)  $\times$  (5.2) 5.5–6.5  $\times$  (6) 6–7.5 (8)  $\mu\text{m}$ ,  $Q^1 = 1.1\text{--}1.45$ ,  $Q^2 = 0.9\text{--}1.25$ , echinulate, yellow to ochraceous; aculei blunt to tapering, up to 0.8 (1.2)  $\mu\text{m}$  long, single and sparse, paired at the base or grouped on not well defined secondary lobes.

**Chlamydospores** absent.

**Chemical reactions:** IKI–. CB: thin-walled hyphae and very young basidiospores somewhat cyanophilous. KOH: subhymenial hyphae and basidia with content and adhering matter turning more or less distinctly greenish, olivaceous to very dark green, greyish green or even blackish with KOH.

**Incrustation:** sometimes with deposits of yellow to brown resinous matter in hymenium and subhymenium that dissolve in KOH.

## Voucher specimens

FRANCE — [Unknown locality], on wood, type of *Corticium ferrugineum* Pers. (L 0044022) — Basses-Alpes — Uvernet-Fours, Pra Loup, on bark of a lying, rather hard branch of a deciduous tree, leg. E. Martini, 26.IX.2016 (em-12977) — Loire — Pommières, Bois Ardillieus, on bark of a lying, decayed branch of a deciduous tree, leg. E. & F. Martini, 31.X.2000 (em-7197) — Var — Collobrières, vers Chartreuse de la Verne, on wood of a lying, strongly decayed twig of *Quercus sp.* (Q. suber?, ilex?), leg. E. Martini, 11.XI.2013 (em-12005) — Ile de Porquerolles, Hyères, on bark of a lying, decayed trunk of *Quercus suber*, leg. B. Rivoire, 13.XI.2004 (em-8548) — Mons, confluence entre Siagne et Siagnole de Mons, on wood of a lying, decayed branch of a deciduous tree, leg. E. & F. Martini, 29.X.1997 (em-6450) — Vaucluse — Goult, Lumières, on bark of a lying, decayed branch of *Quercus pubescens*, leg. E. Martini, 10.XI.2007 (em-10328)

ITALY — Trentino-Alto Adige — Dimaro, on bark of a lying, decayed branch of a deciduous tree, leg. E. Martini, 21.IX.1997 (em-6299)

LUXEMBOURG — Malatavern, on bark, leg. B. Schultheis, 15.VI.1997 (em-6341)

SLOVAKIA — Prenčov, on lying, decayed wood and bark of an angiosperm, leg. A. Kmet, 21.IX.1889, type of *Hypochnus fulvocinctus* Bres. (S F14894)

SWITZERLAND — Thurgau — Ermatingen, Wolfsberg, on bark of a lying, decayed branch of a deciduous tree, leg. E. Martini, 4.X.2006 (em-9069) — Ticino — Bolle di Magadino, on wood of a branch of *Alnus sp.*, leg. E. Zenone, 14.X.1986 (em-1096.1) — Cevio, Consorzio, on bark of a lying, hard trunk of *Picea abies*, leg. E. Zenone, 18.X.1988 (em-2133) — Gordevio, Saleggio, on bark of a lying, decayed branch of a deciduous tree, leg. E. Martini, 2.IX.1985 (em-555) — ibid., on bark of a lying, decayed branch of a coniferous tree, leg. E. Martini, 1.IX.1986 (em-645) — Meride, Cassina, on bark of a lying, decayed branch of a deciduous tree, leg. E. Martini, 30.IX.2006 (em-9036) — Meride, Cugnoli, on wood of a lying, strongly decayed branch of a deciduous tree, leg. E. Martini, 30.IX.2006 (em-8967) — Meride, Fontana, on wood of a lying, decayed branch of a deciduous tree, leg. E. Martini, 2.IX.2006 (em-8853) — Meride, Meriggio, on bark of a lying, decayed trunk of a deciduous tree, leg. E. Martini, 16.VI.2007 (em-9898) — Ritorto, Dréom (Valle Bavona), on bark of a trunk of *Tilia cordata*, leg. E. Martini, 4.IX.1994 (em-3759) — ibid., on wood of a lying, decayed branch of *Tilia cordata*, leg. E. Martini, 11.IX.1999 (em-6983) — Ritorto, Rivera (Valle Bavona), on wood of a lying, decayed branch, leg. E. Martini, 20.IX.1986 (em-853) — ibid., on bark of a lying, decayed trunk of *Prunus avium*, leg. E. Martini, 9.X.2005 (em-8686) — Someo, Da l'Ovi, on bark of a lying branch of *Hippophae rhamnoides*, leg. E. Zenone, 19.X.1992 (em-3359)

USA — Kentucky — Crittenden, on wood, leg. C.G. Lloyd, 1.IX.1907 (BPI 332063)

## Materials and methods

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

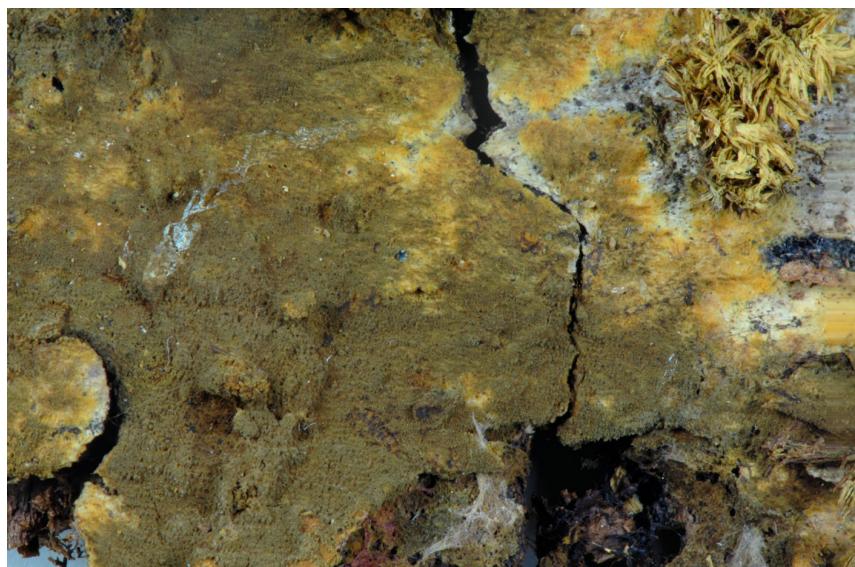


Fig. 1: Dried basidiome. Image width = 45 mm [em-853]

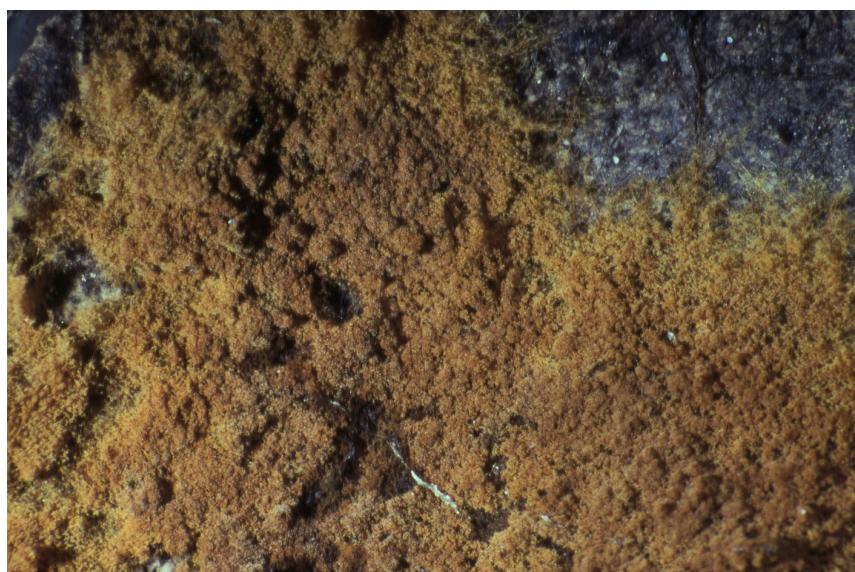


Fig. 2: Imenophore toward the margin. Bar = 2 mm [em-7197]



Fig. 3: Strongly granulose hymenophore (dried basidiome). Image width = 9 mm [em-645]



Fig. 4: Dried basidiome toward the margin. Image width = 9 mm [em-1096.1]



Fig. 5: Detail of the hymenophore and margin. Image width = 9 mm [em-8967]



Fig. 6: Rhizomorphs at the margin (dried basidiome). Bar = 2 cm [em-6450]

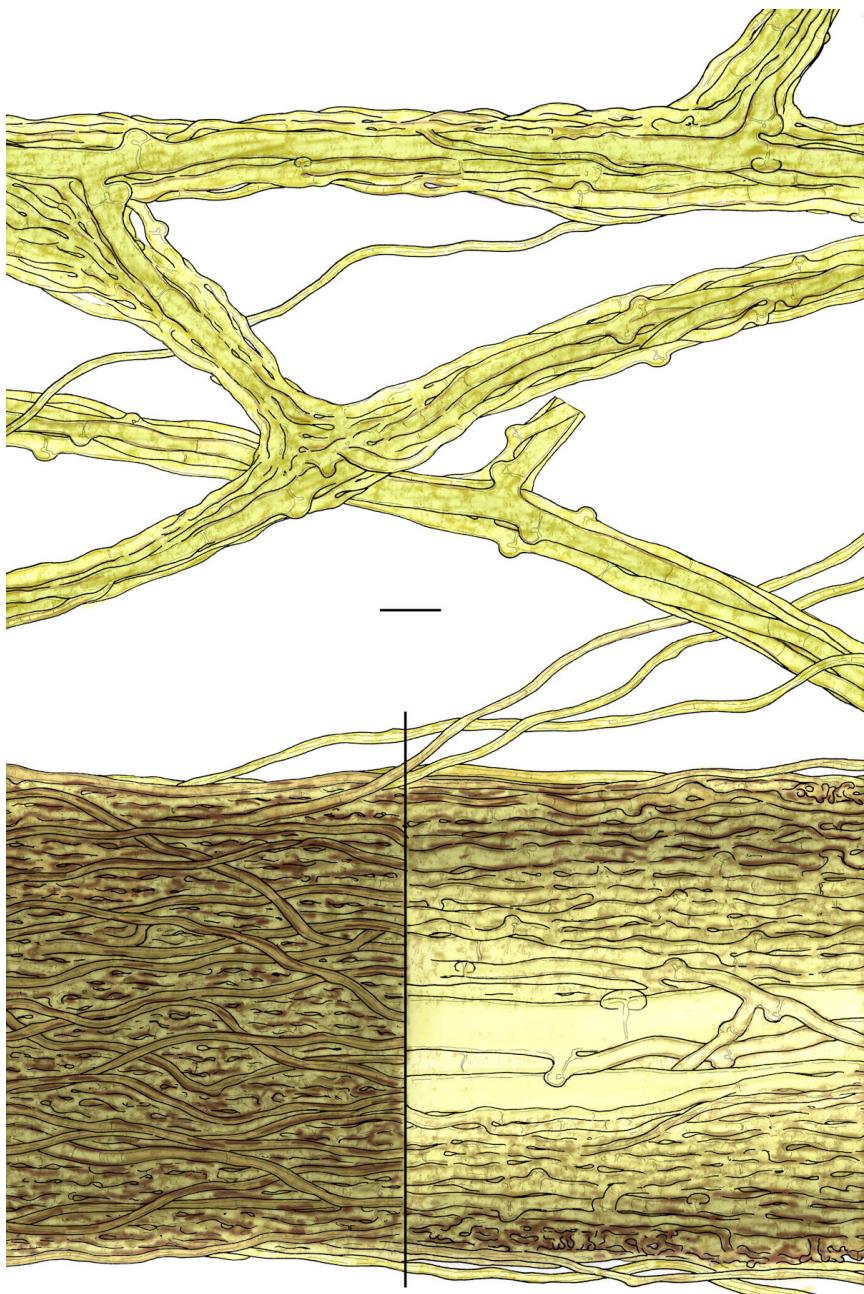


Fig. 7: Rhizomorphs (in KOH). Bar = 10  $\mu\text{m}$  [em-853]

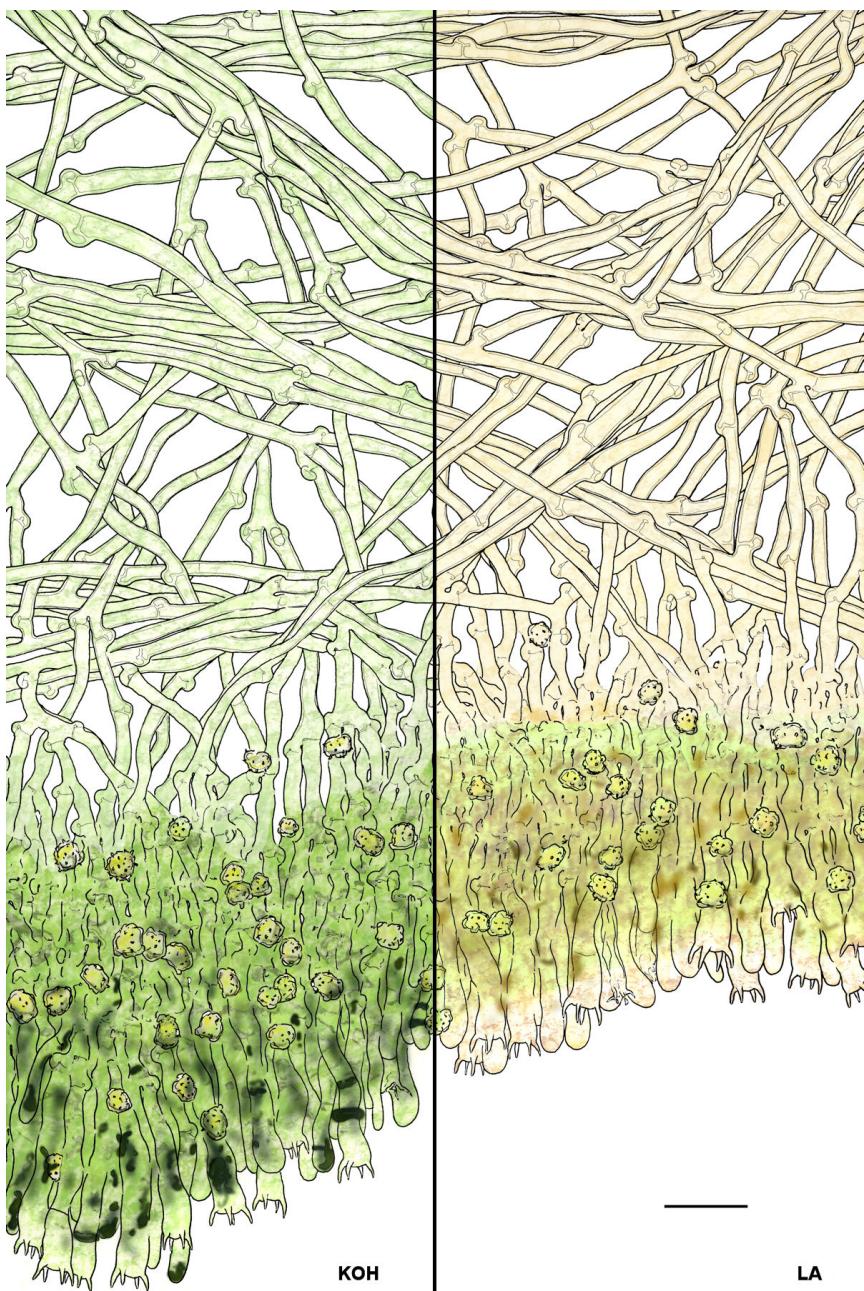


Fig. 8: Vertical section through the basidiome; on the left in KOH, on the right in LA. Bar = 20 µm [em-853]

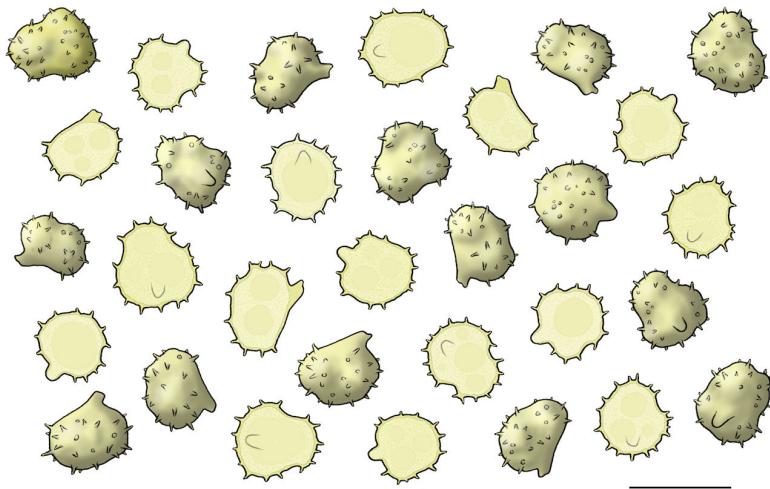


Fig. 9: Basidiospores. Bar = 10  $\mu\text{m}$  [em-853]

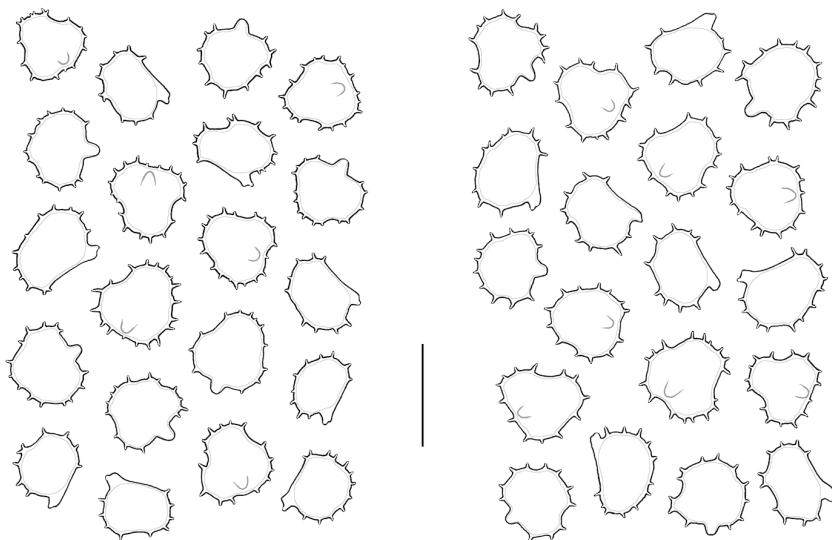


Fig. 10: Basidiospores: on the left ex type of *Corticium ferrugineum* Pers.; on the right ex type of *Hypochnus fulvocinctus* Bres. Bar = 10 cm [L 0044022 and S F14894]

## References

- [1] BOURDOT, H. AND GALZIN, A. (1924). 'Hyménomycètes de France. X. Phylactériés'. *Bulletin de la Société Mycologique de France*, 40 (1-2): 105–162
- [2] BRESADOLA, G. (1897). 'Hymenomycetes hungarici kmetiani'. *Atti dell'Imperial Regia Accademia di Lettere e Scienze degli Agiati di Rovereto*, ser. 3, 3 (1): 66–117
- [3] BURT, E.A. (1916). 'The Thelephoraceae of North America VI. *Hypochnus*'. *Annals of the Missouri Botanical Garden*, 3 (2): 203–241. DOI: <http://dx.doi.org/10.2307/2989976>. URL: <http://www.biodiversitylibrary.org/item/21978#page/203/mode/1up>
- [4] DÄMMRICH, F. (2006). 'Studien der tomentelloides Pilze in Deutschland - unter besonderer Berücksichtigung der Zeichnungen von Frau Dr. H. Maser aus den Jahren 1988-1994. Teil 1: Die Gattung *Tomentella*'. *Zeitschrift für Mykologie*, 72 (2): 167–212. URL: <http://www.dgfm-ev.de/sites/default/files/ZM722167Daemmrich.pdf>
- [5] FRIES, E.M. (1815). *Observationes Mycologicae praecipue ad illustrandam Floram Suecicam*. Copenague. 2 vol. (236, 380 p.) DOI: <http://dx.doi.org/10.5962/bhl.title.112534>. URL: <http://www.biodiversitylibrary.org/bibliography/112534#/summary>
- [6] GRAY, S.F. (1821). *A natural arrangement of British Plants*. London. 2 vol. (902, 774 pp.) DOI: <http://dx.doi.org/10.5962/bhl.title.43804>. URL: <http://biodiversitylibrary.org/item/95186>
- [7] KÖLJALG, U. (1996). 'Tomentella (Basidiomycota) and related genera in Temperate Eurasia'. *Synopsis Fungorum*, 9: 1–213
- [8] LARSEN, M.J. (1966). 'Tomentella and related genera in North America II. Studies of nomenclatural types of species described by Peck'. *Mycologia*, 58 (4): 597–613. DOI: <http://dx.doi.org/10.2307/3757040>. URL: <http://www.cybertruffle.org.uk/cyberliber/59350/index.htm>
- [9] LARSEN, M.J. (1968). *Tomentelloid fungi of North America*. Syracuse. 157 p.
- [10] LARSEN, M.J. (1974). 'A contribution to the taxonomy of the genus *Tomentella*'. *Mycologia Memoirs*, 4: 1–145
- [11] LOSI, C. (1997). 'Macrofungus flora of the lagoon of Venice and adjacent areas (Italy). Non-gilled Basidiomycetes. I. Tomentelloid fungi'. *Mycotaxon*, 64: 243–259. URL: <http://www.cybertruffle.org.uk/cyberliber/59575/index.htm>
- [12] MELO, I., SALCEDO, I. AND TELLERÍA, M.T. (1998). 'Contribution to the knowledge of Tomentelloid Fungi in the Iberian Peninsula'. *Folia Cryptogamica Estonica*, 33: 77–84. URL: <http://www.ut.ee/ial5/fce/index.html>
- [13] PATOUILLARD, N.T. (1887). *Les Hyménomycètes d'Europe*. Paris. 166 p. URL: [http://gallica.bnf.fr/ark:/12148/bpt6k57734495\\_r](http://gallica.bnf.fr/ark:/12148/bpt6k57734495_r)
- [14] PATOUILLARD, N.T. (1894). 'Quelques espèces nouvelles de champignons du Nord de l'Afrique'. *Journal de Botanique (Morot)*, 8: 219–221. URL: <http://www.biodiversitylibrary.org/item/18810#page/229/>
- [15] PECK, C.H. (1873). 'V. Description on new species of fungi. Hymenomycetes'. *Bulletin of the Buffalo Society of Natural Sciences*, 1 (2): 41–72
- [16] PECK, C.H. (1878). 'Report of the Botanist (1876)'. *Annual Report of the New York State Museum of Natural History*, 30: 23–78. URL: <http://www.biodiversitylibrary.org/item/110622#page/507/>
- [17] PERSOON, C.H. (1796). *Observationes mycologicae seu Descriptiones tam novorum, quam notabilium fungorum*. Leipzig. 2 vol. URL: <http://gallica.bnf.fr/ark:/12148/bpt6k97368z>
- [18] PERSOON, C.H. (1801). *Synopsis methodica fungorum*. Gottingae. 2 vol. (706 p.) URL: <http://gallica.bnf.fr/ark:/12148/bpt6k97341x>

- [19] RAIDL, S. (1997). ‘Studien zur Ontogenie an Rhizomorphen von Ektomykorrhizen’. *Bibliotheca Mycologica*, 169: 1–183
- [20] SACCARDO, P.A. (1895). ‘Supplementum universale, Pars III’. *Sylloge Fungorum*, 11: 1–753. URL: <http://www.biodiversitylibrary.org/item/25345#page/7/>
- [21] SACCARDO, P.A. AND SYDOW, P. (1899). ‘Supplementum universale, pars IV’. *Sylloge Fungorum*, 14: 1316 p. URL: <http://www.biodiversitylibrary.org/item/102143#page/7/>
- [22] SKOVSTED, A.T. (1950). ‘The Thelephoraceae of Denmark, I. The genus *Tomentella*’. *Comptes Rendus des Travaux du Laboratoire Carlsberg. Sér. physiologique*, 25: 1–34
- [23] SVRČEK, M. (1960). ‘Tomentelloideae Čechoslovakiae. Genera resupinata familia Thelephoraceae’. *Sydomia*, 14: 170–245. URL: <http://www.cybertruffle.org.uk/cyberliber/59633/index.htm>
- [24] YOROU, N.S. AND AGERER, R. (2011). ‘Rhizomorphic resupinate Thelephorales (Agaricomycetes, Basidiomycota) from Italy’. *Nova Hedwigia*, 92 (1-2): 177–204. DOI: <http://dx.doi.org/10.1127/0029-5035/2011/0092-0177>



# Excerpts from *Crusts & Gels*

Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes

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