

№ 163

Caldesiella italica

Sacc.

Figures 1–11

Caldesiella italica Sacc. 1877 [8 : 7] PAD! \equiv *Caldesiella ferruginosa* subsp. *italica* (Sacc.) Bourdot & Galzin 1924 [1 : 128] \equiv *Tomentella italica* (Sacc.) M.J. Larsen 1967 [5 : 511]

Basidiome effused, at first somewhat pellicular and thin, soon membranaceous to soft tomentose and up to 0.5 (1 mm) thick.

Hymenophore rarely smooth with scattered colliculi, aculei or teeth, normally becoming distinctly hydroid with crowded aculei.

Aculei conical to irregularly cylindrical, with acute or blunt apex, almost smooth or pruinose, up to 1 mm long and 0.5 wide at the base, single or concrescent, easily peeled off from the subiculum and separable from each others; when compressed assuming a peculiar flattened shape; when bruised often turning very dark.

Hymenial surface discontinuous on smooth and young surfaces, continuous at maturity, very pale brown to pale brown or yellowish brown (10YR 7–5/3–4) or slightly olivaceous (5Y 7–5/3–4) or more greyish (10YR 7–5/2), here and there sometimes up to dark brown (10YR 4/3–2), sometimes in spots almost bistre.

Subiculum byssoid to soft-fibrous, normally well developed, yellowish brown or rusty-brown, darker than the hymenial surface, up to 0.5 (1) mm thick.

Margin abrupt, shortly thinning out or wide and sterile, byssoid to soft membranaceous, sometimes fimbriate, concolorous with the subiculum.

Rhizomorphs normally frequent in subiculum, sometimes in cracks of the substrate and at the margin, sometimes infrequent or obscure, soft, soft-fibrous, cottony, fragile, pubescent to smooth, up to 0.1 (0.2) mm thick, sometimes fasciculate and up to 0.5 mm, pale brown to yellowish brown or brownish.

Hyphal system monomitic; most hyphae with fibulate primary septa,

but often subicular hyphae with scattered simple septa.

Subicular hyphae regular or almost so, 4–7 μm , loosely arranged, with spaced septa, sometimes with simple anastomosis, with thin to thickening wall, subhyaline to pale yellowish brown.

Tramal hyphae more or less parallelly arranged in the centre of aculei, same as subicular ones, sometimes filled with oily, refractive, ochraceous content.

Subhymenial hyphae regular, 3–5 (6) μm , mostly with thin walls, hyaline to pale yellowish.

Rhizomorphs very pale brown to pale yellowish brown in water, individual hyphae more or less regular, fibulate with large clamps or with some simple and secondary septa, 3–6 μm wide, branching at some distance from septa, often with simple, short anastomosis, with thin to thickening walls, subhyaline to yellowish brown in mass; when well developed with a core of wider hyphae, regular to sausage-shaped, fibulate and with some secondary simple septa, up to 16 μm wide, cells of variable length, sometimes reaching 300 μm , with relatively thin walls up to 1 μm thick, often with homogeneous light to ochraceous content.

Cystidia absent.

Basidia immature narrowly clavate to cylindrical, then narrowly clavate to irregularly cylindrical, sinuous, often slightly swollen toward the base, (30) 40–70 (90) \times 7–10 (12) μm wide, with thin to distinctly thickening or thick wall (embedded in subhymenium), fibulate at the basal septum; 4 sterigmata up to 7 (10) μm long and 2–3 μm wide at the base.

Basidiospores with almost regular to lobed basic shape, mostly irregular because of warts, infrequently more or less distinctly lobed; in lateral view irregularly ellipsoid to obliquely pyriform, sometimes slightly 2 or 3-lobed; in frontal view mostly irregularly ovoid, rarely 3-lobed; in polar view mostly irregularly globose or transversally subglobose; (6.8) 7.4–8.3–9.5 (10) \times (5.4) 5.7–6.4–7.2 (7.5) \times (6.4) 6.8–7.5–8.4 (8.6) μm , $Q^1 = 1.2$ –1.3–1.4, $Q^2 = 1$ –1.1–1.2; almost thin-walled (walls rarely reaching 0.5 μm), hyaline to subhyaline when empty, with yellowish oily and refractive content, normally lighter than other hymenial elements in mass; distinctly warted, aculei and echinuli single to divergent on warts, tapering to cylindrical, up to 1.5 μm long and sometimes forked at apex.

Chlamydospores absent.

Incrustation: frequent small yellowish to ochraceous or light brown crystals are scattered in hymenial layers; subicular and rhizomorphal hyphae strongly and finely encrusted in water mounts and partially also in KOH.

Chemical reactions: IKI—.

CB: spores with cyanophilous walls, hyphae acyanophilous, thick-walled basidia are more or less distinctly cyanophilous.

KOH: almost none; very faint pH related colour change of basidia and hyphae.

Specimens examined

FRANCE — **Meuse** – Marecourt-sur-Orne, on wood of a lying, decayed trunk of a deciduous tree, leg. G. Trichies, 10.X.2002 (em-8277) — **Moselle** – Moyenvie-Petite, Vallée du Courroy, Pérotin, on wood of a lying, decayed trunk of *Acer pseudoplatanus*, leg. G. Trichies, 8.VIII.2005 (em-8610) — **Seine-et-Marne** – Noisiel Champ, on a deciduous tree, leg. E. Fichet, 23.X.1994 (em-4310)

ITALY – [Unknown locality], on wood (BPI 324980, Sacc. Mycoth. Veneta 1306?) – Padova, Horto Botanico Patavino, on soil, leg. G. Bizzozzero, 1873, holotype of *Caldesiella italica* Sacc. (PAD) – *ibid.*, on wood, leg. Bizzozzero, X.1878 (BPI 261718, Saccardo, Myc. Ven. 1306)

SWITZERLAND — **Ticino** – Novazzano, Valle della Motta, on wood and bark of a lying branch of a deciduous tree, leg. E. Zenone, 6.IX.1990 (em-2828) — **Zürich** – Obfelden, bei Reussbrücke, on wood of a lying, strongly decayed trunk of *Abies alba*, leg. J. Duc, 20.XI.2006 (em-9610)

Materials and methods

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

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] CÍŽEK, K. (1998). '[Tomentelloid fungi in the Czech Republic and Slovakia. IV. *Tomentella italica*]'. *Mykologické Listy*, (66): 1–5
- [3] 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>
- [4] KÖLJALG, U. (1996). '*Tomentella* (Basidiomycota) and related genera in Temperate Eurasia'. *Synopsis Fungorum*, 9: 1–213
- [5] LARSEN, M.J. (1967). '*Tomentella* and related genera in North America IV. Taxonomy and nomenclature of *Caldesiella*'. *Taxon*, 16 (5): 510–511. DOI: [10.2307 / 1216955](https://doi.org/10.2307/1216955)
- [6] LARSEN, M.J. (1974). 'A contribution to the taxonomy of the genus *Tomentella*'. *Mycologia Memoirs*, 4: 1–145
- [7] 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>
- [8] SACCARDO, P.A. (1877). 'Commentarium mycologicum fungos in primis Italicos'. *Michelia*, 1: 1–116. URL: <http://www.cybertruffle.org.uk/cyberliber/index.htm>
- [9] WAKEFIELD, E.M. (1969). '*Tomentelloideae* in the British Isles'. *Transactions of the British Mycological Society*, 53 (2): 161–206. DOI: [10.1016/S0007-1536\(69\)80053-7](https://doi.org/10.1016/S0007-1536(69)80053-7)



Fig. 1: Dried basidiome. Image width = 37 mm [em-9610]



Fig. 2: Dried basidiome. Image width = 35 mm [em-8610]



Fig. 3: Detail of the hymenophore (dry). Image width = 9 mm [em-9610]

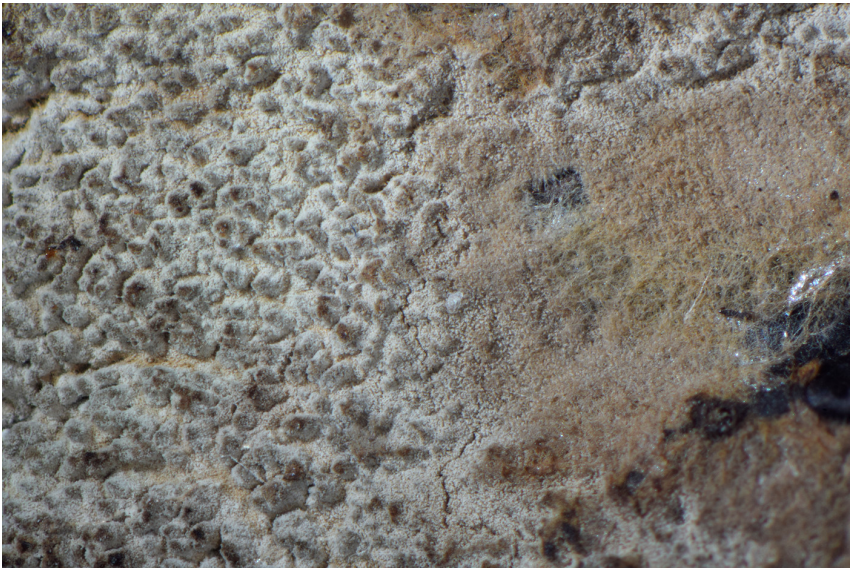


Fig. 4: Detail of the hymenophore and margin (dry). Image width = 9 mm [em-9610]



Fig. 5: What is left of the holotype collection. Bar = 2 mm [PAD]



Fig. 6: Rhizomorphs (dry). Image width = 9 mm [em-8277]

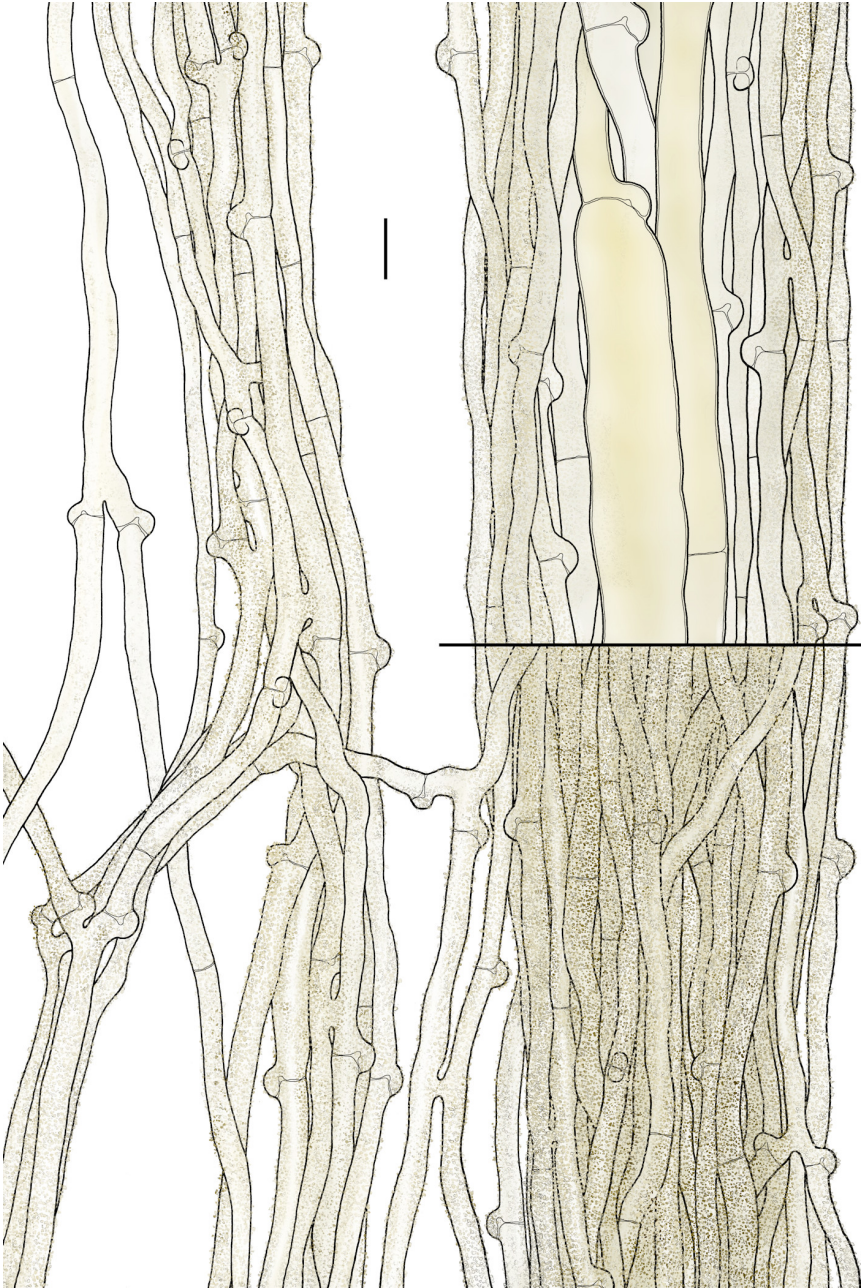


Fig. 7: Rhizomorphs; ex holotype of *Caldesiella italica* Sacc. Bar = 10 μm [PAD]

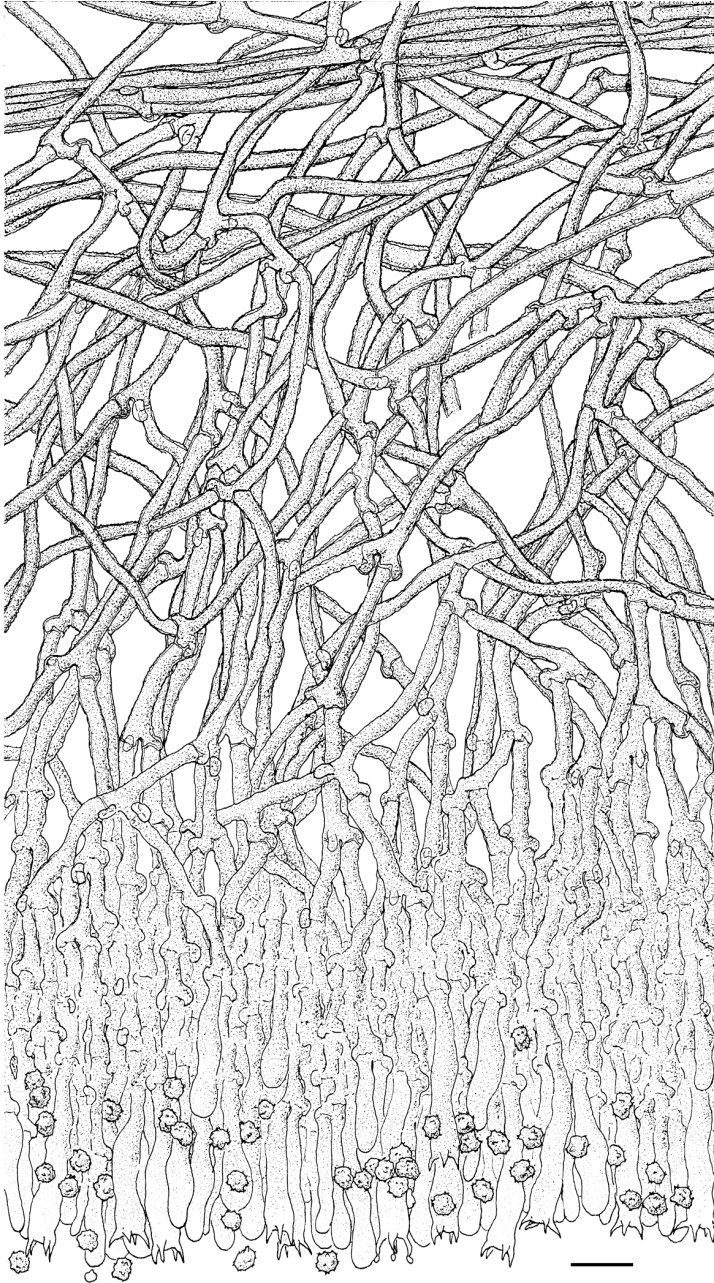


Fig. 8: Simplified vertical section through the basidiome (smooth, young hymenium). Bar = 20 μm [em-2828]

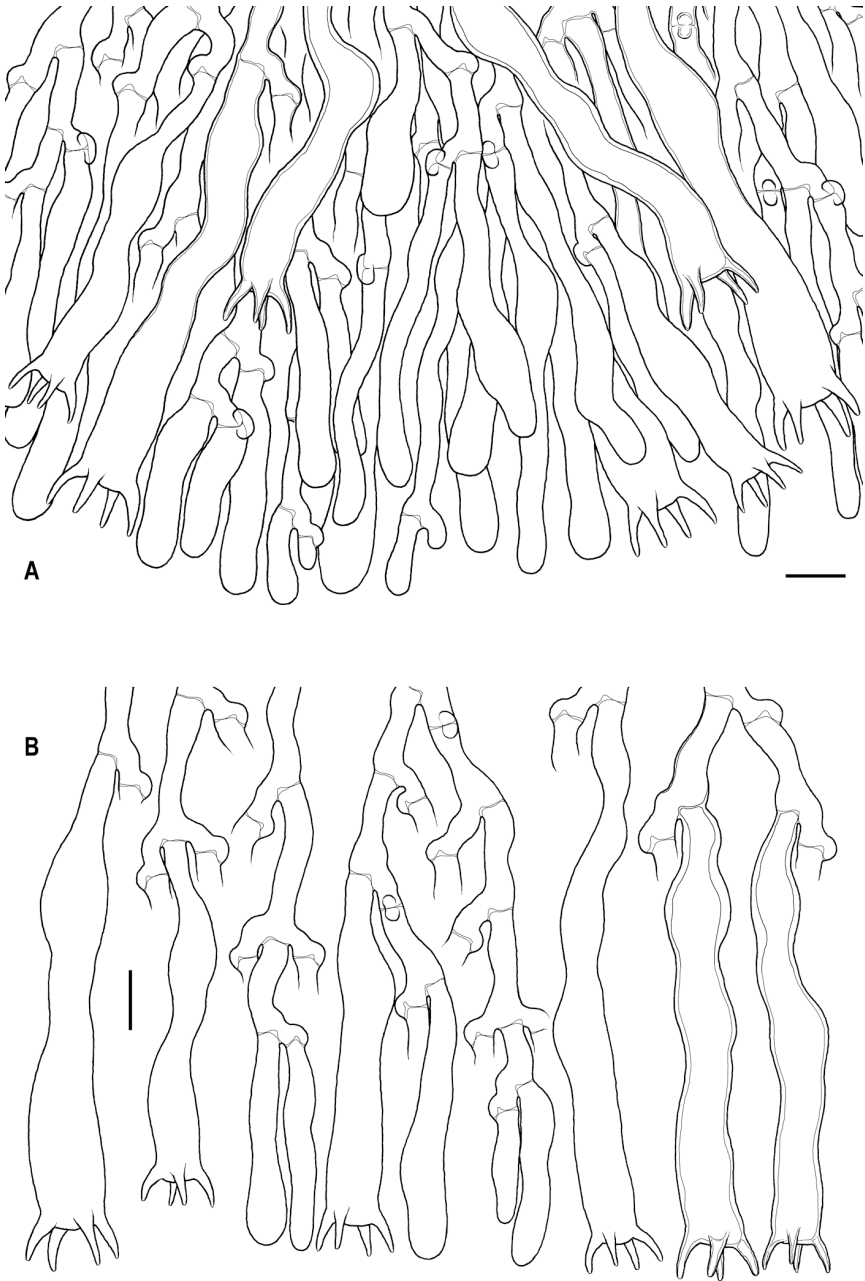


Fig. 9: **A)** Elements at apex of aculei. **B)** Basidioles, basidia and subhymenial hyphae. Bar = 10 μm [em-9610]

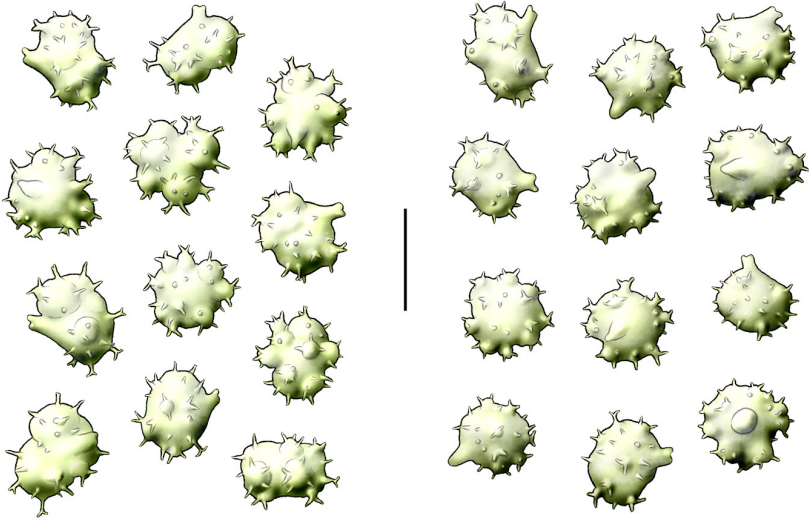


Fig. 10: Basidiospores. On the left side ex em-8610; on the right side ex em-9610.
Bar = 10 μ m

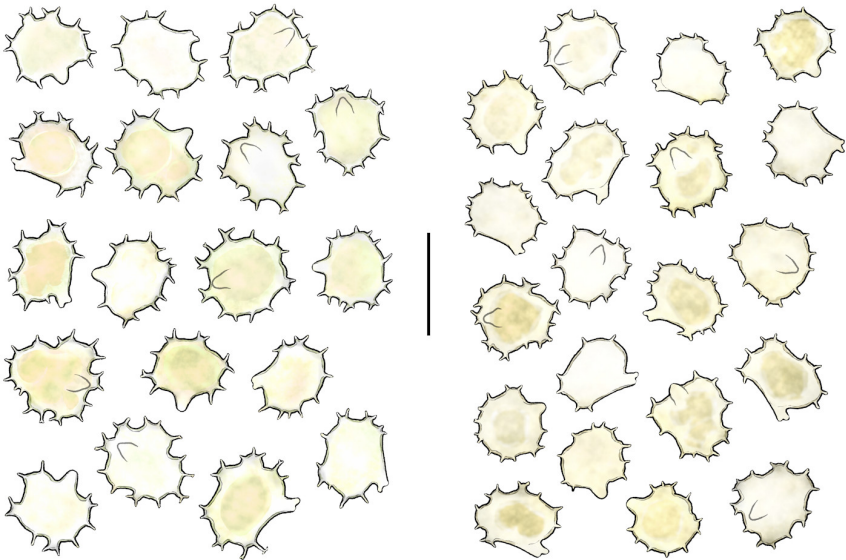


Fig. 11: Basidiospores. On the left ex; ex holotype of *Caldesiella italica* Sacc.; on the right ex em-2828. Bar = 10 μ m [PAD]



Excerpts from *Crusts & Tells*

Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes

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