

***Tomentella italica* (Sacc.) M. J. Larsen 1967**

Syn.: *Caldesiella italica* Sacc. 1877

**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 conrescent, 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, concolour 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  $\mu\text{m}$ , 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)  $\mu\text{m}$ , 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  $\mu\text{m}$  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  $\mu\text{m}$  wide, cells of variable length, sometimes reaching 300  $\mu\text{m}$ , with relatively thin walls up to 1  $\mu\text{m}$  thick, often with homogeneous light to ochraceous content.

**Cystidia** absent.

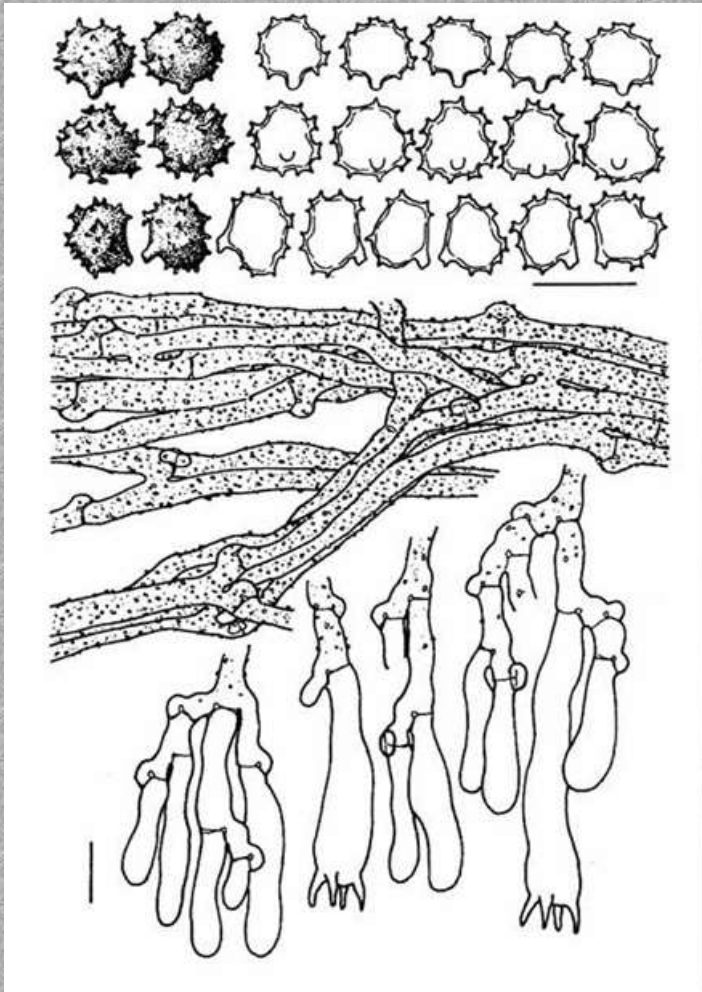
**Basidia** immature narrowly clavate to cylindrical, then narrowly clavate to irregularly cylindrical, sinuous, often slightly swollen toward the base, (30) 40-70 (90) x 7-10 (12)  $\mu\text{m}$  wide, with thin to distinctly thickening or thick wall (embedded in subhymenium), fibulate at the basal septum; 4 sterigmata up to 7 (10)  $\mu\text{m}$  long and 2-3  $\mu\text{m}$  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) x (5.4) 5.7-6.4-7.2 (7.5) x (6.4) 6.8-7.5-8.4 (8.6)  $\mu\text{m}$ ,  $Q^1 = 1.2-1.3-1.4$ ,  $Q^2 = 1-1.1-1.2$ ; almost thin-walled (walls rarely reaching 0.5  $\mu\text{m}$ ), 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  $\mu\text{m}$  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.



drawing and Photo: E. Martini