#### Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes

№ 182

## Thelephora giacomoi

Kõljalg, I. Saar & Svantesson

Figures 1–8

Thelephora giacomoi Kõljalg, I. Saar & Svantesson 2024 [4:70]

 $\equiv$  Hypochnus bresadolae Brinkmann 1903 [2:108]  $\equiv$  Tomentella bresadolae (Brinkmann) Höhn. & Litsch. 1908 [3:77]  $\equiv$  Tomentella jaapii subsp. bresadolae (Brinkmann) Bourdot & Galzin 1924 [1:155]

**Basidiome** effused, when fresh separable, at least in small pieces, flocked to soft membranaceous, tomentose or slightly felted, when dry adherent and mostly detaching in small incoherent or tufted granules, up to 0.3 (0.5) mm thick.

**Hymenophore** smooth, mostly finely discontinuous to very finely porulose and irregular at 10X, rarely almost continuous, when fresh brown to dark brown with a light greyish or purplish tint (7.5–10YR 4–3/2–3), when dry brown to dark brown (10YR 4–3/3–4).

**Subhymenium** not compact, slightly thickening, up to 0.1 (0.2) mm thick.

**Subiculum** arachnoid to tomentose, up to 0.2 (0.3) mm thick, brown to dark brown (10YR 4–3/3), when fresh more or less differently coloured than the fertile surface, when dry almost concolour.

Margin indefinitely thinning out, fibrillose and discolour (whitish) in fresh and actively growing specimens, otherwise indistinct, almost fertile throughout, porulose, discontinuous.

**Hyphal system** monomitic; hyphae with mostly fibulate primary septa; simple septa rarely found in subicular hyphae.

Subicular hyphae regular, frequently branched and arranged in all directions, distinct, (4.5) 5–6.5 (7)  $\mu m$  wide, with thickening to thick wall (0.5–1  $\mu m$ ), often with localized thickenings, branching at some distance from septa, yellowish brown to brown or umbrinous; few basal hyphae running more or less parallelly to the substratum, infrequently branched and rarely with thick walls (1.5–2  $\mu m$ ) and some repetitive adventitious septa.

Subhymenial hyphae short-celled, mostly irregular, 4–10  $\mu$ m wide, sometimes becoming triangular or botryose in deep subhymenium near the subiculum and then widened up to 20  $\mu$ m, with thin to thickening wall (0.5  $\mu$ m), often branched from clamps, subhyaline to distinctly pigmented some shade of brown.

Rhizomorphs absent.

Cystidia absent.

Basidia when immature often somewhat obpyriform, then subcylindrical to utriform, often stout, 40–65 (75)  $\mu$ m long, (10) 11–13 (15)  $\mu$ m at top, (8) 10–14  $\mu$ m at the lower middle, almost thin-walled, subhyaline to pale brown, often guttulate; (2) 4 sterigmata 10–14 (15)  $\mu$ m long and (2.5) 3–4  $\mu$ m wide at the base.

Basidiospores with regular outline, aculeate, normally with a large drop, walls about 0.5–1  $\mu$ m thick, yellowish brown to brown, 10–13  $\mu$ m across or, more precisely, (9.5) 10–13 (13.5) $\mu$ m long; lateral face broadly ellipsoid to subglobose with slightly flattening adaxial side, 8.5–11.2 (11.5)  $\mu$ m diam, Q = 1.1–1.3; frontal face subglobose to broadly ellipsoid or broadly ovoid, 9.5–12.5 (13)  $\mu$ m, Q = 0.9–1.15; in polar view globose.

Aculei 2–3 (3.5)  $\mu$ m long and 0.5–1.2  $\mu$ m wide at the base, single, tapering, almost evenly distributed.

**Apiculus** lateral near the base in side view, (1.8) 2–2.5 (2.8)  $\mu$ m across; hilum often distinct.

Macrospores infrequent 14–16 µm across.

Chlamydospores absent.

Incrustation: none.

Chemical reactions: IKI: often localized thickenings becoming bluish or bluish grey, all other elements inamyloid. CB: inconsistent, some young spores and thin-walled hyphae cyanophilous, thick-walled elements acyanophilous but sometimes thin wall layers seemingly cyanophilous (hyphae and aculei). KOH: a slight darkening of all elements that loose some yellow hue (as normal).

## Specimens examined

FRANCE — **Jura** – Parc Naturel du Haut Jura, La Rixouse, Les Prés de la Rixouse, on bark of a lying, rather hard branch of *Picea abies*, leg. E. Martini, 13.IX.2012 (em-11883)

GERMANY – [Unknown locality], on wood of a broadleaved tree, leg. W. Brinkmann 328, lectotype of *Hypochnus bresadolae* Brinkmann (S: herb. Bresadola [no specimen found in the packet, as already noted by Larsen on a label]) — **Nordrhein-Westphalen** – Lengerich, on wood and bark of a broadleaved tree, leg. W. Brinkmann, VII.1900 (BPI 290687)

LIECHTENSTEIN – Balzers, Ellholz, on inner side of bark of a decayed stump of a coniferous tree, leg. E. Martini, 4.X.1995 (em-4040) – Ruggell, Halden, on bark of a lying, decayed branch of a broadleaved tree, leg. E. Martini, 7.X.1995 (em-4037)



Fig. 1: Basidiome in situ. Image width = 14 cm [em-13091]

SWITZERLAND — Glarus - Weesen, Gäsi, on wood of a lying, strongly decayed trunk of *Picea abies*, leg. E. Martini, 3.X.2019 (em-13906) — **Solothurn** – Riedholz, Waldhütte, on wood of a lying, rather hard trunk of a coniferous tree, leg. E. Martini, 29.IX.2001 (em-7697) — St. Gallen – Kengelbach, Brugglis, on bark of a lying, rather hard trunk of *Picea abies*, leg. E. Martini, 29.IX.2010 (em-11391) — **Thurgau** – Berlingen, Wildbach, on wood of a lying, decayed trunk of a deciduous tree, leg. E. Martini, 5.X.2006 (em-9172) – Tägerwilen, Tägerwilerwald, on wood of a lying, decayed trunk of a coniferous tree, leg. E. Martini, 6.X.2006 (em-9163) - ibid., on bark of a lying, decayed branch of a coniferous tree, leg. E. Martini, 6.X.2006 (em-9164) — Ticino - Bignasco, Piano di Sopra, on bark of a lying, decayed trunk of Abies alba, leg. E. Martini, 14.VIII.2014 (em-12233) - Cevio, Consorzio, on wood of a lying, rather hard branch of a coniferous tree, leg. E. Zenone, 21.XI.2001 (em-7893) - Gordevio, Saleggio, on wood of a lying, decayed branch of a coniferous tree, leg. E. Zenone, 6.IX.2005 (em-8645) - Lodrino, Bosco, on bark of a lying, hard trunk of Prunus avium, leg. E. Zenone, 4.XI.1993 (em-6548) - Olivone, Camperio, on wood of a lying, strongly decayed trunk of Picea abies, leg. E. Martini, 19.IX.1987 (em-1197) – Olivone, Camperio, Gualdo Maggiore, on wood of a lying, decayed branch of Picea abies, leg. E. Martini, 3.VIII.2017 (em-13091) - Olivone, Campra, Cass, on wood of a lying, strongly decayed trunk of Picea abies, leg. E. Martini, 18.IX.2005 (em-8659) - ibid., on bark of a lying, decayed branch of Picea abies, leg. E. Martini, 18.IX.2005 (em-8657)

#### Materials and methods

Specimens sampling and methodological details are described separately in this issue: Excerpts from  $\text{Ornsts} \not\in \text{Jells}, n^\circ \, 0$ 



Fig. 2: Basidiome (fresh). Image width = 68 mm [em-13091]



Fig. 3: Basidiome (dry). Image width = 40 mm [em-13091]



Fig. 4: Basidiome (fresh). Image width = 22 mm [em-13091]



Fig. 5: Detail of the hymenophore and margin (fresh). Image width = 9 mm [em-13091]

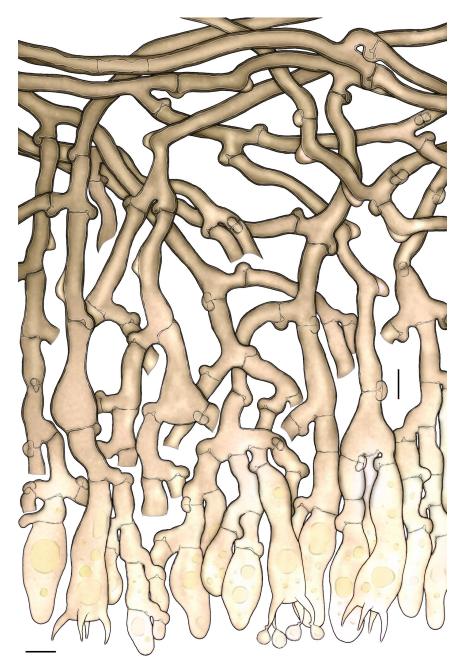


Fig. 6: Basidia, subhymenial and subicular hyphae. Bar = 10  $\mu m$  [em-13091]

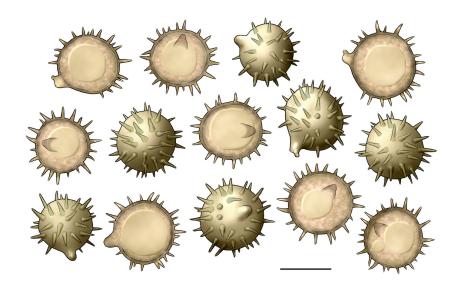


Fig. 7: Basidiospores. Bar =  $10 \ \mu m \ [em-13091]$ 

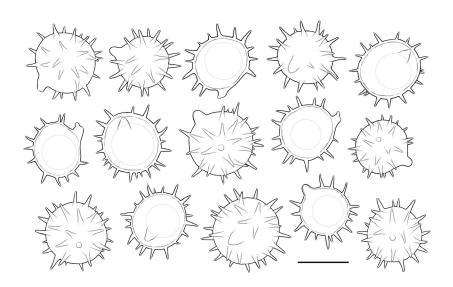


Fig. 8: Basidiospores. Bar = 10  $\mu m \ [BPI \ 290687]$ 

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# Excerpts from Crusts & Jells

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