Descriptions and reports of resupinate Aphyllophorales and Heterobasidiomycetes

1st November, 2023

№ 172

Septobasidium galzinii Bourdot

Figures 1–12

Septobasidium galzinii Bourdot 1922 [1:574]

Basidiome (dry) effused, covering all sides of small twigs, soft membranaceous mostly up to 0.3 mm, rarely becoming thicker, up to 0.5 (1) mm. Hymenium starting as small, thin patches at top of a tufted to hirsute or spiculose basal layer, then confluent, becoming continuous in smooth, rather polished overlapping plates or mounds becoming more or less distinctly layered in old parts, brownish, some parts (or entirely) assuming a grey tint.

Context relatively soft, tufted, built up by hyphae running either vertically, obliquely or horizontally, short and rather indistinct pillars about 0.1 mm tall, strands, appressed-overgrowing plates, building an interrupted tissue full of holes and tunnels, brown to dark brown.

Subiculum irregularly present, strongly adherent to the substrate, built by thin threads and irregular patches with few to many horizontally oriented hyphae forming a compact layer up to 50 (70) μ m giving rise to the more thick context, very dark brown to almost blackish.

Margin determinate, distinct or indistinct, almost abrupt to progressively thinning out and discolour, becoming very thin. Between the outlying marginal zone and the forming hymenium a tufted, tomentose to hirsute, irregular, reddish brown to brown rather wide area.

Hyphal system monomitic; all hyphae regular, with scattered simple primary and adventitious septa, with some simple anastomoses. Subhymenial ones entangled but relatively loosely arranged, 2–4 μm diam, with thin to thickening walls (0.2–0.8 μm), hyaline to ochraceous, progressively becoming darker toward the context. Subicular hyphae compactly arranged, 3–4 (4.5) μm , mostly thick-walled (0.5–1.5 μm), brown to dark brown.

Haustoria present in parasitised insects as irregularly coiled or spiralled

hyphae, 2–3 µm wide, thin-walled, hyaline or subhyaline.

Probasidia often arranged in clusters but not disposed in a distinct hymenium, sessile, shortly peduncolate or terminal, globose, rarely obpyriform or collapsing with a new probasidium growing inside, (9.2) 10.5–15.5 \times (8) 9–13.5 μ m, with thickening walls, hyaline or subhyaline.

Basidia really rare in the specimen examined, cylindrical, straight, $40-50 \times 4-5 \mu m$, with 3 septa, thin-walled, hyaline; sterigmata not seen (reported to be short, about 3 μm long by Couch [2].

Basidiospores elongated and curved, (11.3) 11.7–[15.9]–19 (20)×(2.45) 2.67–[3.56]–4.3 (4.4) μ m, Q = (3.23) 3.43–[4.50]–5.52 (6.06) [n=76, from spore print ex Bourdot 20204; not seen in the other collections; annotated on label «spores regues en masse sur verre: 10–15–19×2.5–3.5–5 μ » by Bourdot for coll. 20230]. Apiculus positioned on the convex side in lateral view.

Conidia not seen.

Incrustation: often present as granular to rosette-like crystals up to 5 μ m across, often merging in rather large aggregates, very dark brown to almost blackish (this possibly is the origin of the unusual grey, plumbeus colour of the hymenium.

Chemical reactions: IKI—. CB—.

Specimen examined

FRANCE — **Aveyron** – Béno, on bark of a hard twig of *Calluna vulgaris*, leg. A. Galzin, 9.VI.1913, original material of *Septobasidium galzinii* Bourdot (Bourdot 20219) – Bouisson, on bark of a hard twig of *Calluna vulgaris*, leg. A. Galzin, 23.VII.1913, original material of *Septobasidium galzinii* Bourdot (Bourdot 20230) – Forques, on *Calluna vulgaris*, leg. A. Galzin, VII.1917, original material of *Septobasidium galzinii* Bourdot (Bourdot 20204)

Materials and methods

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

References

- BOURDOT, H. (1922). 'Materiaux pour la flore mycologique de France'. Comptes Rendus de l'Association Française pour l'Avancement des Sciences, 45: 575–578
- [2] COUCH, J.N. (1938). The genus Septobasidium. Chapel Hill. 480 p.



Fig. 1: Basidiomes (dry). Bar = 10 mm [Bourdot 20230]



Fig. 2: Basidiomes (dry) [Bourdot 20219]



Fig. 3: Basidiomes (dry). Bar = 2 mm [Bourdot 20219]



Fig. 4: Detail of the hymenophore (dry). Image width = 9 mm [Bourdot 20230]



Fig. 5: Detail of the marginal area (dry). Image width = 9 mm [Bourdot 20230]

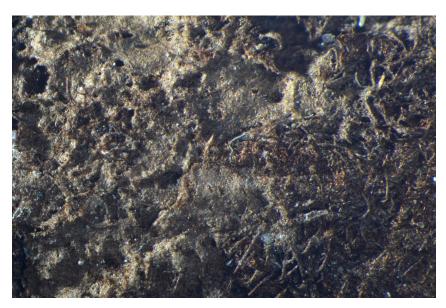


Fig. 6: Detail of the growing top layer over a strongly irregular context with holes, tufted mycelim and thin strands. Image width = 5 mm [Bourdot 20230]



Fig. 7: Detail of the context (top layer still not formed). Image width = 5 mm [Bourdot 20230]

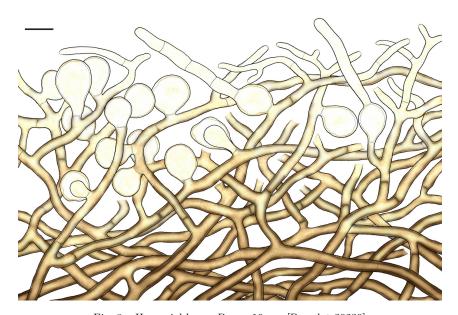


Fig. 8: Hymenial layer. Bar = 10 μm [Bourdot 20230]

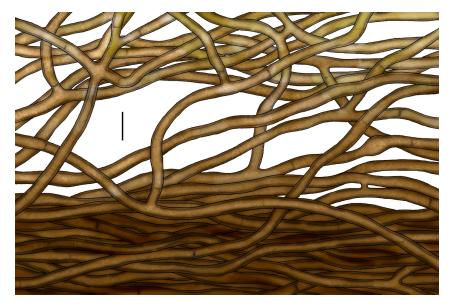


Fig. 9: Subicular hyphae. Bar = 10 μm [Bourdot 20230]

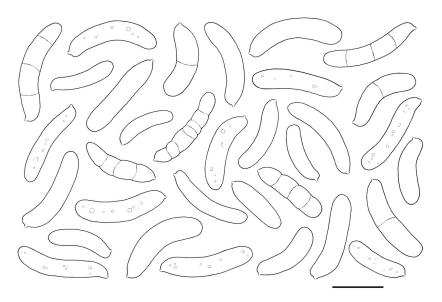


Fig. 10: Basidiospores from spore print. Bar = 10 μm [Bourdot 20204]

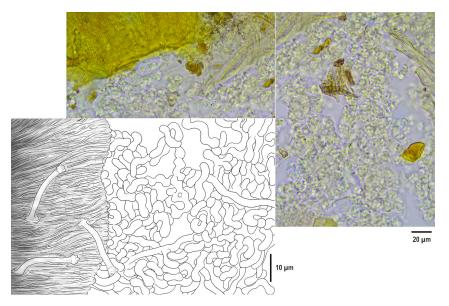


Fig. 11: Haustoria and parts of an insect [Bourdot 20230]

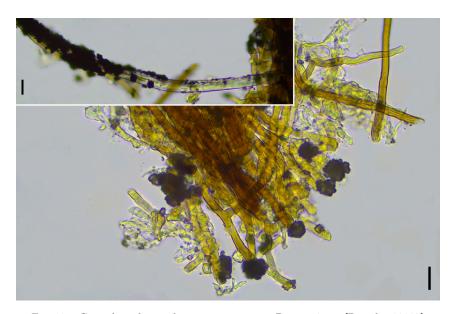


Fig. 12: Crystals and granular matter in water. Bar = 10 μm [Bourdot 20230]



Excerpts from Crusts & Jells

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 $Septobasidium\ galzinii\ {\it Bourdot}$

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