

## NEW RECORD OF *PHAEOLLYBIA JENNYAE* IN SPAIN

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**ABSTRACT.** *Phaeocollybia jennyae* (Cortinariaceae, Basidiomycetes) was found in Spain growing in a *Fagus sylvatica* forest in Catalonia. The species is known to inhabit northern Europe, but it hasn't been recorded from Spain yet. A description and illustrations of the catalan material is presented. The type collection from Finland, as well as two samples collected by P. Karsten, were also studied. The microscopic observations on these collections are included.

**Keywords:** Cortinariaceae, Catalonia, taxonomy, type study, *Phaeocollybia*.

**RESUMEN.** *Phaeocollybia jennyae* (Cortinariaceae, Basidiomycetes) fue encontrada en Cataluña en un bosque de *Fagus sylvatica*. La especie es conocida en distintas localidades de Europa pero no había sido registrada en la Península Ibérica. Se presenta una descripción e ilustraciones de la recolección catalana. También se incluyen observaciones del estudio microscópico efectuado sobre el ejemplar tipo procedente de Finlandia, así como de dos muestras recolectadas por P. Karsten.

### INTRODUCTION

In this paper we report a record of *Phaeocollybia jennyae* (P. Karsten) Romagnesi based on specimens collected in a forest dominated by *Fagus sylvatica* L., in Catalonia. After a revision of the literature dealing with the species, we found that, in Europe, it is known from different northern localities but unreported from Spain (BANDALA & MONTOYA 1994; BON 1992; BREITENBACH & KRÄNZLIN 2000; GULDEN 1983, 1992; HEIM 1930; HORAK 1977; JACOBSSON & STRIDVALL 1982-1983; KARSTEN 1881; KONRAD & MAUBLANC 1948; KÜHNER & ROMAGNESI 1957; LABER 1982, 1991; MOSER 1978; MOSER & JÜLICH 1988; NEZDOJMINOGO 1986; REDHEAD & MALLOCH 1986; SINGER 1950; SMITH 1957; WATLING & GREGORY 1993). We give a description derived from the examination of the Spanish specimens, and the result of microscopic observations of three of Karsten's collections from Finland labeled as *N. jennyae*, kept at the University of Helsinki fungal herbarium (H).

### MATERIALS AND METHODS

Macroscopic data were recorded from fresh material. For microscopic analysis sections of dry basidiomes were soaked in 5% KOH and 1% congo red. Line drawings were made with the aid of a drawing tube. In describing basidiospore dimensions, the total range of variability is presented, and the following notations are used: L × W represents the mean values of length and width, and *Q* the mean of the length/width ratio. For scanning electron microscope (SEM) preparations, small pieces of dry hymenophore fixed in glutaraldehyde were critically point dried and later coated with gold-palladium. Herbaria acronyms follow HOLMGREN *et al.* (1990).

## DESCRIPTION OF THE SPANISH COLLECTION

***Phaeocollybia jennyae*** (P. Karsten) Romagnesi; *Bull. Soc. Myc. Fr.* 58.: 127, 1942. Figs. 1-6, 9-11, 13.

Basionym: *Naucoria jennyae* P. Karsten, *Hedwigia* 12: 178, 1881.

Misappl. - *Naucoria cidaris* sensu Ricken, *Die Blätterpilze*: 216, 1915. *Phaeocollybia cidaris* sensu Singer, *Lilloa* 22: 566, 1949; Kühner et Romagnesi, *Bull. Soc. Nat. d'Oyonnax* suppl. 10-11: 48, 1957. *Naucoria christinae* sensu Heim, *Bull. Soc. Myc. Fr.* 46, Atl 38, 1930. *Phaeocollybia christinae* sensu Konrand et Maublanc, *Encycl. Mycol* 14: 163 pro parte, 1948; Smith, *Brittonia* 9: 209, 1957; Bresinsky, *Zeit. Pilzk.* 26: 114, 1960; Bigelow & Barr, *Rhodora* 65: 297, 1963.

Misinterpret. - *Naucoria jennyae* sensu Lange, *Fl. Ag. Dan.*, Tab. 123a, 1935-1940; Pearson, *Trans. Br. Myc. Soc.* 35: 112, 1952. *Phaeocollybia jennyae* sensu Konrand et Maublanc, *Encycl. Mycol* 14: 164, 1948; Smith, *Brittonia* 9: 212, 1957; Bresinsky, *Zeit. Pilzk.* 26: 113, 1960; Dennis *et al.*, *Bibl. Myc.* 42: 133, 1974; Moser, *Die Röhrlinge Blätterpilze* II: 417, 1978.

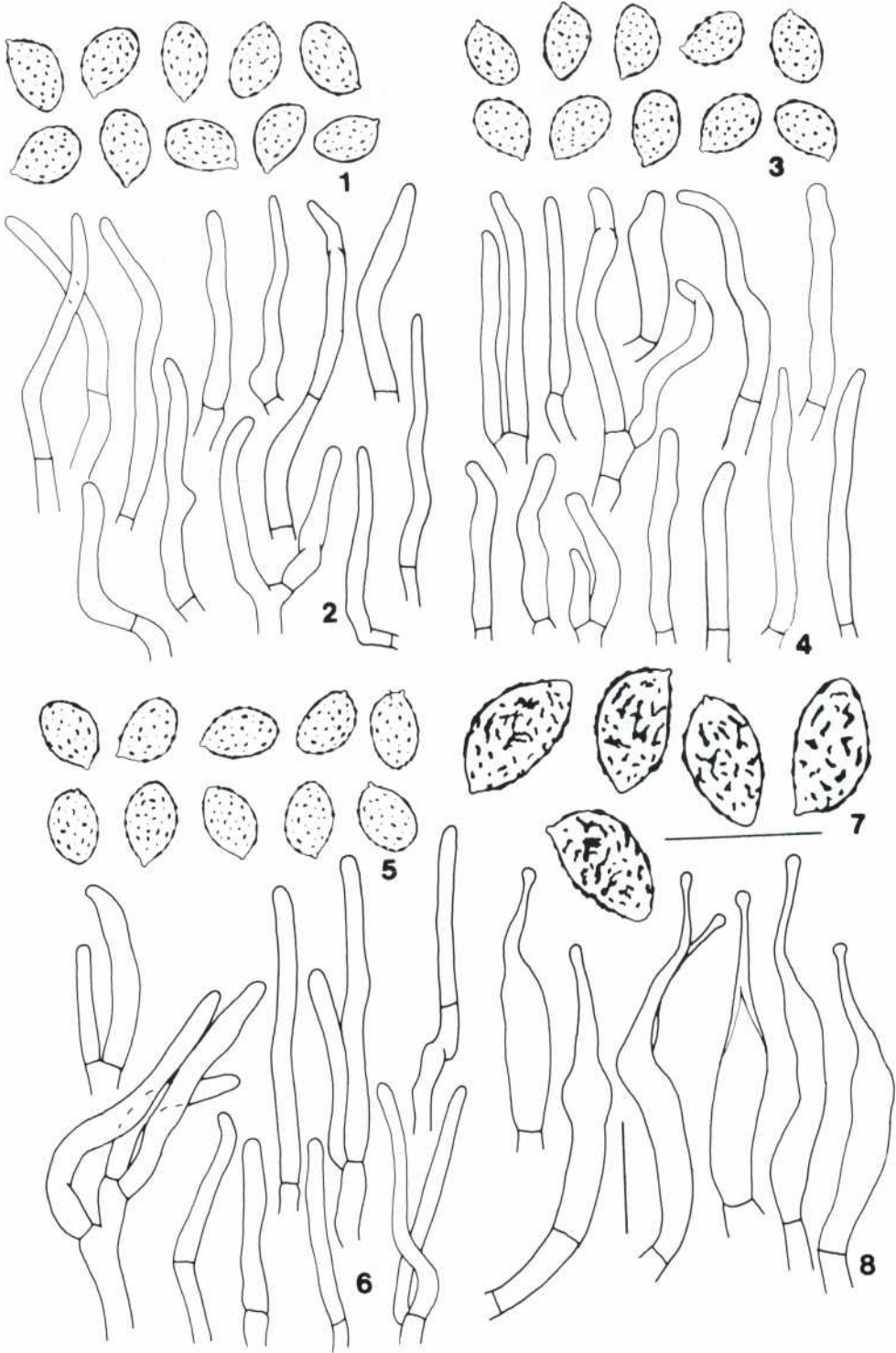
Sel. Descr. - Kühner & Romagnesi, *Bull. Soc. Nat. d' Oyonnax* suppl. 10-11: 48, 1957; Redhead & Malloch, *Can J. Bot.* 64: 1253, 1986; Watling & Gregory, *Br. Fungus Fl.* 7: 77, 1993.

Sel. Illustr. - Horak, *Sydowia* 29: 50 & 69, 1977; Heim, *Bull. Soc. Myc. Fr.* 46, Atl 38, 1930; Kühner & Romagnesi, *Bull. Soc. Nat. d' Oyonnax* suppl. 10-11: 48, 1957; Redhead & Malloch, *Can. J. Bot. Can.* 64: 1253, 1986; Laber, *Zeit. Mykol.* 48: 92, 1982; Breitenbach & Kränzlin, *Fungi of Switzerland* 5: 308, 2000.

Illustr. type specimen: Horak, *Sydowia* 29: 69, 1977; Bandala & Montoya, *Mycotaxon* 52: 408, 1994.

Pileus 10-30 mm broad, conic, becoming campanulate to convex, umbonate, glabrous, somewhat viscid, shiny, hygrophanous, reddish-brown to orange, with pallid shades of these colors when they lose moisture (especially in young specimens). Lamellae adnexed, close, at first ochre to yellowish, with age becoming reddish-ochre with reddish-brown shades. Stipe 80-120 × 3-8 mm, cylindrical,  $\frac{3}{4}$  buried in the ground and showing a moderate pseudorrhiza, solid, cartilaginous, smooth, reddish-brown, pale orange yellow in or near the apex. Context pallid in pileus, thin, in stipe moderately colorous; odor slightly raphanoid, taste somewhat bitter.

Basidiospores 4-5 (-5,5) × 3-4 μm (L × W: 4,7 × 3,5; Q = 1,36), ellipsoidal to ovoid or subovoid, apex not or slightly attenuated and then rather amygdaliform, finely verrucose or punctate to rugulose, light ochraceous to yellowish-brown, brownish in mass, thin walled (up to 0,5 μm thick) but the presence of ornamentation causes the wall appear more or less thick-walled, some bearing a very weakly suprahilar depression; seen under SEM, the ornamentation consists of short, isolate, rounded verrucae, which sometimes are connected or joined forming small patches or irregular lines, often both verrucae and patches are somewhat flattened. Basidia 22-28 (-30) × 5-6 (-7) μm, clavate, tetrasporic, sometimes slightly constricted near the apex, hyaline, thin-walled, clampless. Pleurocystidia absent. Cheilocystidia (10-) 15-30 (-35) (-43) × (1-) 1,5-3,5 (-4) μm, cylindrical to more or less filamentous, sometimes slightly clavate or fusiform, rarely rostrate or bifurcate, straight to slightly sinuous, some of them septate or with a more or less (but never clear) capitate apex, abundant, nearly continuous on the lamella edge, thin-walled or thickened in places, sometimes, parts of the single cystidium are covered with a gelatinous matter, clampless. Pileipellis an ixocutis, as a thin or interrupted gelatinized layer of more or less loosely arranged, hyaline, clampless, radially oriented, somewhat interwoven hyphae 1,5-3 (-4) μm wide, narrow, thin-walled, smooth or, some of them, minutely incrustated, at times pale yellowish. Subpellis a layer variable in depth, composed of compactly arranged, orange-brown or yellowish-brown to reddish-brown, clampless, incrustated, more or less cylindrical hyphae, 3-5 (-7) μm wide, thick-walled. Pileus trama hyphae 5-20 (-25) μm wide, hyaline to pale yellowish, somewhat thick-walled (0,5-1 μm), simple or bifurcate, compactly arranged, often with interparietal pigment, near the subpellis, the hyphae sometimes bear incrustations; some scattered, yellowish-brown or ochraceous hyphae, 4-7 μm wide, can be present. Lamellar trama regular to subregular, with hyaline, thin-walled hyphae, 3-8 μm wide, some hyphae or segments with thickened walls [0,5 (-1) μm], not gelatinized, or weakly gelatinized at the edge or near it clampless.



Figs. 1-8. Basidiospores and cheilocystidia. 1-6. *Phaeocollybia jennyae* (1-2: Karsten H 1612, Holotype; 3-4: Karsten H 1597; 5-6: BCN-SCM 3846.). 7-8: *Ph. lugubris* (Karsten H 3797) (scale bar = 10  $\mu$ m).