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Coprinopsis xantholepis in Bosnia and Herzegovina

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Agaricales,
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Abstract: A collection of *Coprinopsis xantholepis* is reported from the Bosnian region with a morphology-based description and photographs of basidiomes *in situ* and most relevant microcharacters.

INTRODUCTION

Coprinopsis xantholepis is a European species distinguished by a set of morphological characters that make its identification easy (Voto 2024); however, this collection is reported and documented due to the fact that it seems that there are not many iconographies and full descriptions in the literature and on the internet about it.

As far as we know, this is the first report from the Balkans.

MATERIALS AND METHODS

The basidiomes were photographed in habitat; the micro characters were studied on fresh material in Congo red.

TAXONOMY

Coprinopsis xantholepis (P.D. Orton) Redhead, Vilgalys & Moncalvo
Taxon 50(1): 232

Basionym: *Coprinus xantholepis* P.D. Orton, Notes from the Royal Botanic Garden Edinburgh 32: 150 (1972)







Macroscopic characters

Pileus up to 6 mm high and 2 – 4 mm broad when still closed, up to 11 mm broad when expanded; at first narrowly ovoid then, while the margin opens, ellipsoid then cylindrical then campanulate, finally campanulate-convex with revolute margin; striate-sulcate up to a smooth discal area, not deliquescent; at first pure white, with age grey-brown with a pale ochraceous grey discal area; veil of white felty floccules turning brownish-yellowish.

Lamellae crowded, free, white then grey, finally black, deliquescing, edge concolorous.

Stipe 15 – 20 × 1 – 1.5 mm, cylindrical or somewhat swollen at base; white, turning (brownish) grey with age; veil of white felty floccules more conspicuous and turning brownish-yellowish at base.

Context not examined.



Microscopic characters

Basidiospores 6.0 – 7.5 × 4.5 – 5.5 μm, subglobose to pruniform or broadly ellipsoid or shortly ovoid, thick-walled, reddish brown; germ pore central, distinct.

Basidia 4-spored.

Pleurocystidia 80 – 100 × 31 – 52 μm, ellipsoid, apex rounded to tapering or mucronate.

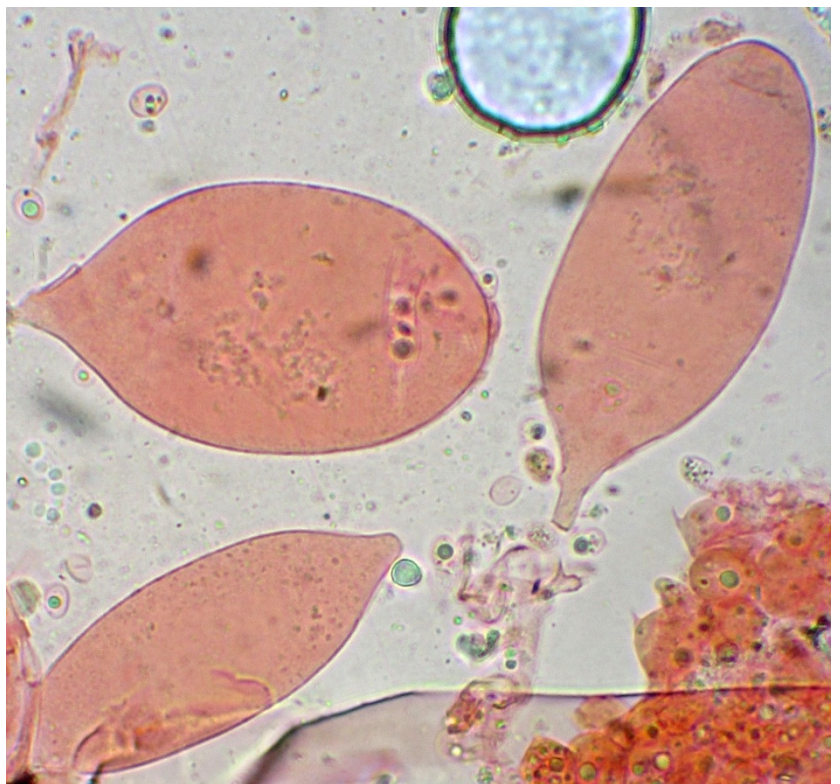
Cheilocystidia similar to *pleurocystidia*.

Pileipellis composed of a cutis.

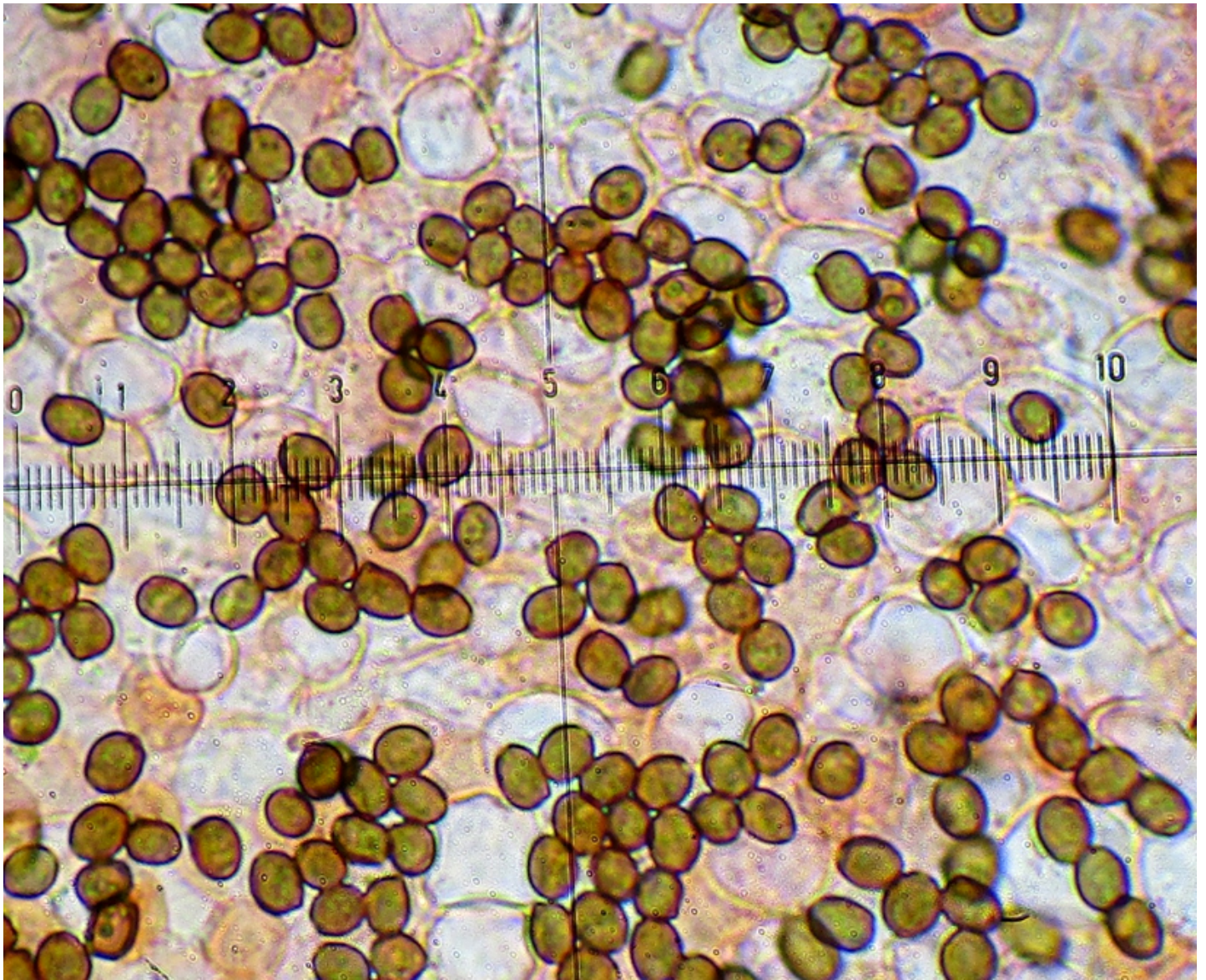
Veil on pileus made of flexuous, branching, nodulose to diverticulate, pigmented thick-walled elements.

Clamp connections present.

Collection examined and habitat: Bosnia and Herzegovina, Banja Luka, Prijedor, gregarious on debris of *Juncus* sp, 23 September 2024, legit D. Trivič, in pers. herb.



Pleurocystidia



Spores (micrometric scale = 1.0 μm)

NOTES

In *Coprinopsis* sect. *Coprinopsis* P. Karst., characterized by branching and diverticulate veil hyphae, *Coprinopsis xantholepis* can be identified by small (5.0 – 7.2 \times 4.5 – 6.2 μm) and subglobose (average Q 1.1-1.2) spores, small basidiomes, a yellowish veil composed of thick-walled hyphae, and habitat connected to herbaceous plants.

C. herinkii (Pilát & Svrček) Redhead, Vilgalys & Moncalvo is generally not much different; however, it features slenderer pleurocystidia, even more globose spores (Q 0.95 – 1.1) and a white veil without yellowish tints.

C. argentea (P.D. Orton) Redhead, Vilgalys & Moncalvo has lentiform spores which are maize-kernel shaped in front view and thin-walled veil hyphae.

Outside of Europe, *C. caribaea* (Pegler) Redhead, Vilgalys & Moncalvo, from the Caribbean area, is characterized by large basidiomes; *C. caesia* Schünemann & R.M.Silveira, from Brazil, is distinguished by a greyish-bluish pileus and habitat connected to leaves of Araucaria tree in moist wood; *C. burkii* (A.H. Sm.) Redhead, Vilgalys & Moncalvo, from USA, is differentiated by a white veil of hyaline hyphae.

C. xantholepis is treated as a synonym of *Coprinopsis phaeospora* (P. Karst.) P. Karst. in some old descriptions but this synonymy is now rejected starting from Uljé & Noordeloos (1997) who demonstrated the morphological differences between them. Ruiz Mateo (2013) describes a Spanish collection of *C. xantholepis* and carries out an in-depth bibliographic research.



Veil on pileus

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