A NEW SPECIES IN COPRINUS SUBSECTION SETULOSI

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Coprinus canistri spec. nov. is proposed. It belongs to the subsection Setulosi because of the presence of pileo- and caulocystidia. A comparison is given with C. subimpatiens and C. congregatus, on account of similar microscopical characters.

During the studies in the genus Coprinus by the first author several taxa have been provisionally described without a formal name in earlier papers, awaiting more material to establish their specific status. A recent Coprinus find from Belgium supplied by the second author made it possible to evaluate the differences of collection Uljé 877 with similar species and to describe this taxon formally as a new species.

In the following description the notation [100,5,2] stands for ‘100 spores from 5 basidiocarps in 2 collections’. L × B × W means: length × breadth in frontal view × width in side view. QB stands for ‘length divided by breadth’ (B), QW for ‘length divided by width’ (W).

Coprinus canistri Uljé & Verbeken, spec. nov. — Fig. 1

Pileus primo 3.5–7 × 3–5 mm, expansus ad 16 mm latus, cremeus adpallide ochraceobrunneus, in centro ochraceobrunneus, marginem versus pallidior, primo pruinose, tum laevis. Lamellae anguste adnatae ad subliberae, ex albo nigricantes. Stipes 20–30 × 0.5–1.5 mm, albidus, ab setulis pubescent, basin versus leviter clavatus, usque ad 2 mm crassus. Sporae 9.3–13.6 × 6.2–8.3 × 6.0–6.8 µm, ellipsoideae ad ovoideae, poro germinativo eccentrico, 1.8 µm lato. Basidia 14–28 × 8.5–10.5 µm, 4-sporigera. Pseudoparaphyses 4–6. Cheilocystidia 30–70 × 17–42 µm, subglobosa ad globosa, ellipsoidea, oblonga vel leviter utriformia. Pleurocystidia 50–110 × 27–45 µm, ellipsoidea, oblonga ad leviter utriformia. Pileocystidia 60–90 × 11–20 µm, lageniformia, interdum fusiformia, apice attenuato, 4–7.5 µm diam. Sclerocystidia absentia. Caulocystidia 60–95(–110) × 14–21 µm, lageniformia vel fusiformia, apice attenuato, 4–8 µm diam. Fibulae absentes.


Etymology: canistrum = small woven basket.

Closed pileus up to 3.5–7 × 3–5 mm, up to 16 mm in diam. when expanded, cream to pale ochre-brown to ochre-brown at centre (Mu. 7.5 YR 4/6, 10 YR 4–5/4, 6/5), paler towards margin (10 YR 4–5/3, 6/6, 7/2), when young entirely pruinose, becoming smooth on age. Lamellae, L = 16–24, I = 1–3, narrowly adnate to almost free, white to blackish. Stipe 20–30 × 0.5–1.5 mm, whitish, pubescent from numerous setulae, base slightly clavate, up to 2 mm.

Spores [100,5,2] 9.3–13.6 × 6.2–8.3 × 6.0–6.8 µm, av. L = 11.8–12.7 µm, av. B = 6.5–7.7 µm, av. W = c. 6.2–6.7 µm, QB = 1.50–1.90, av. QB = 1.60–1.75, QW = 1.85–2.05, av. QW = 1.85–1.95, ellipsoid to ovoid; germ pore eccentric, c. 1.8 µm

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Fig. 1. *Coprinus canistri*. Sp. = spores, × 2000; Bas. = basidia; Cau. = caulocystidia; Ch. = cheilocystidia; P. = pileocystidia; Pl. = pleurocystidia; Pp. = pilepellis (Bas., Cau., Ch., P., Pl. and Pp., × 800).

Habitat — Growing fasciculate; the holotype found on a woven reed basket, the Dutch collection under shrubs, on branches embedded in mud taken from ditch.


The most closely related species is Coprinus subimpatiens M. Lange & A.H. Sm. This species also has pleurocystidia, but grows terrestrial and has usually larger basidioecarps. The pileocystidia in C. subimpatiens are larger, up to c. 140 μm long with (sub)cylindric neck, slightly broadened at apex in majority. The (sub)globose to ellipsoid or vesiculose cheilocystidia are mixed with lageniform ones. Coprinus canistri also reminds of C. congregatus (Bull.) Fr. in both macro- and microscopical characters, but differs in the habitat preference because C. congregatus is a (strictly) coprophilous species. Furthermore, C. canistri has smaller fruit-bodies, smaller and less narrow spores (av. Q ≥ 1.70 in C. congregatus; av. Q < 1.70 in C. canistri), shorter pileocystidia and smaller cheilo- and pleurocystidia. The quotient of the spores in all strains (11) of C. congregatus studied by M. Lange (1953: 149) also exceeds 1.70 (1.75–1.95).

In a previous description of this species (as Coprinus sp.) (Uljé & Bas, 1991: 307) the presence of clamp-connections was mentioned, but careful re-examination of collection Uljé 877 showed no clamp-connections and revealed only spores of more than 6 μm broad (the earlier mentioned minimum-length of 5.8 μm could not been traced again).

REFERENCES