

## A NEW SPECIES IN COPRINUS SUBSECTION SETULOSI

C. B. ULJÉ<sup>1</sup> & A. VERBEKEN<sup>2</sup>

*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 *Ulje* 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 ad pallide ochraceobrunneus, in centro ochraceobrunneus, marginem versus pallidior, primo pruinosis, tum laevis. Lamellae anguste adnatae ad subliberae, ex albo nigricantes. Stipes 20–30 × 0.5–1.5 mm, albidus, ab setulis pubescens, 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(–7). 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.

Holotypus: Belgium, Wingene, VII.2000, *R. Walley*n 1831 (GENT; isotype: L).

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, l = 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

1) Van Dijkstraat 21, NL-2405 XE Alphen aan den Rijn, The Netherlands.

2) Gent University, Dept. Biology, K.L. Ledeganckstraat 35, B-9000 Gent, Belgium.

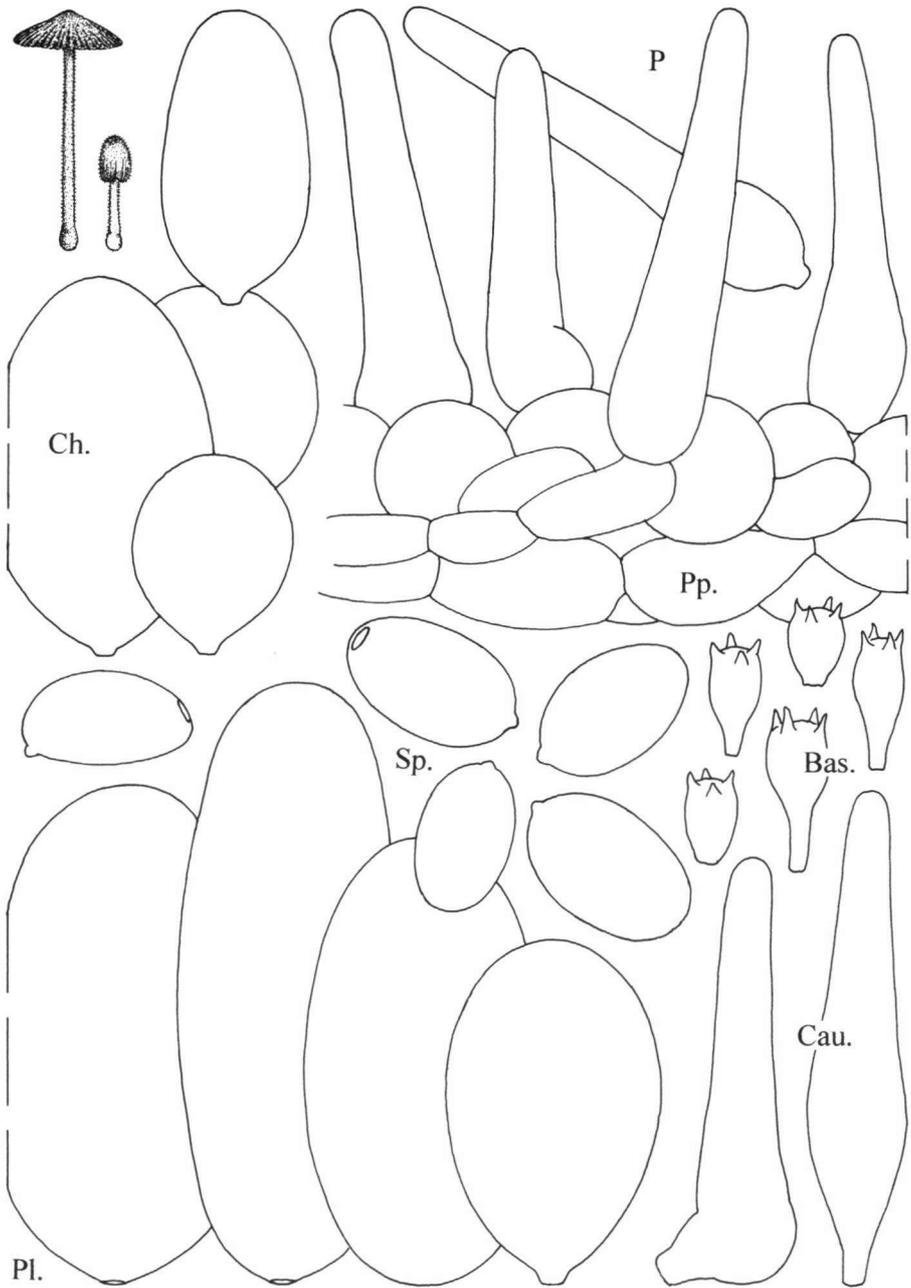


Fig. 1. *Coprinus canistri*. Sp. = spores,  $\times 2000$ ; Bas. = basidia; Cau. = caulocystidia; Ch. = cheilocystidia; P. = pileocystidia; Pl. = pleurocystidia; Pp. = pileipellis (Bas., Cau., Ch., P., Pl. and Pp.,  $\times 800$ ).

wide. Basidia 14–28 × 8.5–10.5 µm, 4-spored. Pseudoparaphyses 4–6(–7) per basidium. Cheilocystidia 30–70 × 17–42 µm (sub)globose, ellipsoid, oblong, a few slightly broadly utriform. Pleurocystidia 50–110 × 27–45 µm, ellipsoid, oblong to slightly utriform. Pileocystidia 60–90 × 11–20 µm, lageniform, less frequent (sub)fusiform, with tapering neck, 4–7.5 µm wide at apex. Sclerocystidia absent. Caulocystidia 60–95 (–110) × 14–21, lageniform or fusiform, with tapering neck, 4–8 µm wide at apex. Clamp-connections absent.

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

*Collections examined.* BELGIUM: Wingene, VII.2000, *R. Walleyn 1831* (holotype, GENT). — THE NETHERLANDS: prov. Zuid-Holland, Oegstgeest, Laan v. Poelgeest, 26.VII.1987, *Uljé 877*.

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 basidiocarps. 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.  $Q \geq 1.70$  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 be traced again).

#### REFERENCES

- Lange, M. 1953 ('1952'). Species concept in the genus *Coprinus*. *Dansk bot. Ark.* 14 (6): 1–164.  
Uljé, C.B. & C. Bas. 1991. Studies in *Coprinus* II. Subsection *Setulosi* of section *Pseudocoprinus*. *Persoonia* 14: 275–339.