

Cystolepiota cystophora: first record from the Czech Republic

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The first Czech and probably also extra-Mediterranean collection of *Cystolepiota cystophora* (Malenç.) Bon is reported and completed with drawings of microfeatures.

Key words: Basidiomycetes, Agaricaceae, *Cystolepiota cystophora*, Czech Republic.

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Autor publikuje první nález *Cystolepiota cystophora* (Malenç.) Bon v České republice a zřejmě i mimo Středomoří. Je uveřejněn popis podle nalezených plodnic, doplněný kresbami mikroznaků.

In late autumn 1993, I have found very interesting species, *Cystolepiota cystophora* (Malenç.) Bon, in a thermophilous oak forest of southern Moravia (Czech Republic).

Microscopical features are described from material mounted in Melzer's reagent and NH₄OH. For the basidiospores the following factors are used: E (quotient of length and width in any one spore); Q (mean of E-values).

DESCRIPTION OF THE CZECH CARPOPHORES:

Carpophores solitary. Pileus up to 25 mm broad, conical-hemispherical, then convex, almost undulate-applanate when old, without a distinct papilla, with involute when young, later inflexed margin decorated with white velar remnants, connected by velum with the stipe when young, surface entire or often divided into small appressed squamules, forming more or less concentric, small, granulose-woolly squamules towards margin, squamules only fimbriate to missing at margin when old; surface whitish, squamules lilac, lilac-brownish to brownish at centre, paler (almost white) towards margin. Lamellae moderately close, $l = 3$, free, cream-coloured, with concolorous, dentate-pubescent edge. Stipe up to 40 x 4 mm, cylindrical, slightly broadened at the top, slightly bulbous at base, entirely finely longitudinally fibrillose, often fibrillose-squamulose or fibrillose-tomentose, with white basal tomentum, sometimes with radial mycelial strains around base;

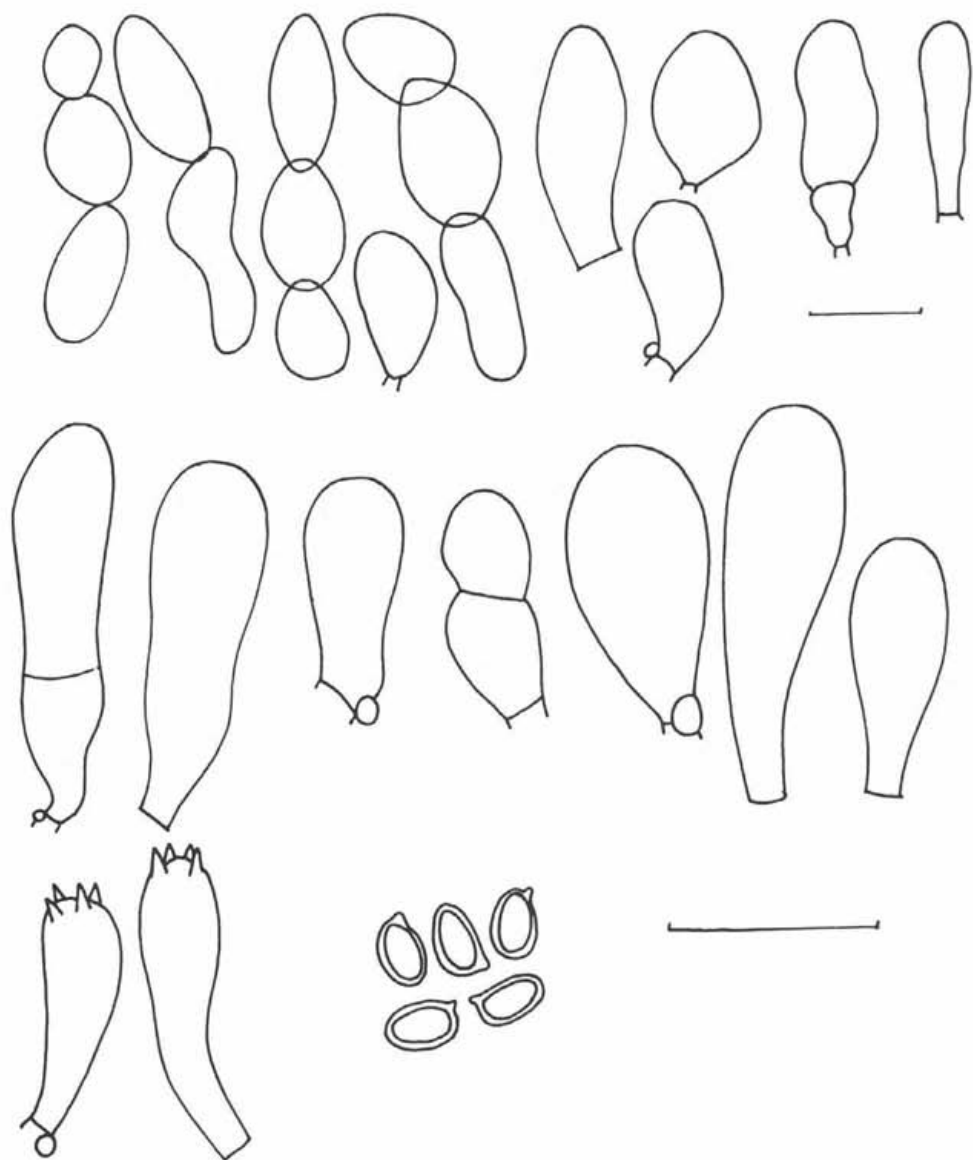


Fig. 1 - 4 *Cystolepiota cystophora*: 1. pileipellis cells, 2. cheilocystidia, 3. basidia, 4. basidiospores. Scale bar = 20 μ m.

white when young, with slightly lilac hue when old or after touching. Annulus white, woolly-pelliculose when young, soon indistinct, consisting of only a few fibrils. Context without any distinct smell.

Basidiospores $6.2-7.7 \times 3.8-4.6 \mu\text{m}$, $E = (1.5-)1.6-1.9 (-2.0)$, $Q = 1.7$, ellipsoid, non-dextrinoid, rarely seeming to be very slightly dextrinoid, thick-walled, without germ-pore, smooth. Basidia $(21.5-)25.4-29.2 \times 6.9-9.2 \mu\text{m}$, 4-spored, clavate, sometimes subcapitate, clamped. Basidioles $12.0-26.2 \times 5.0-8.0 \mu\text{m}$, clavate, thin-walled, clamped. Cheilocystidia $15.5-41.1 \times 7.7-14.6 \mu\text{m}$, clavate, broadly clavate, subfusoid, sometimes with one septum, thin-walled, clamped. Pleurocystidia absent. Trama hyphae thin-walled, cylindrical to subinflated, clamped, up to $15 \mu\text{m}$ wide. Pileipellis made up of $26-53 \times 11-25 \mu\text{m}$ large, globose, subglobose, sphaeropedunculate, broadly clavate to clavate cells (sphaerocysts), thin to slightly thick-walled, sometimes clamped at base, often forming chains. Stipitipellis a cutis of parallel, more or less thin-walled, non-dextrinoid, up to $10 \mu\text{m}$ wide hyphae.

Hab. on soil in a thermophilous oak forest.

Loc. Czech Republic, Moravia, Kobyly na Moravě, forest called "Ochozy", 10. XI. 1993, leg. et det. V. Antonín 93.466 (BRNM 576869).

Cystolepiota cystophora belongs to sect. *Cystolepiota*, subsect. *Floccosinae* (Knudsen) Bon. It is characterized in having a stipe with a typical lilac hue, a typical *Cystolepiota* pileipellis with chains of globose to subglobose cells, and rather large, non-dextrinoid or rarely very slightly dextrinoid basidiospores. The extremely similar species *Lepiota cystophoroides* Jossierand & Rioussset 1972 growing in the same biotope differs especially in having sordid coloured lamellae, a stipe without squamules, a differently formed pileipellis with only rarely globose to subglobose elements, and slightly dextrinoid basidiospores (Bon 1981, 1993; Candusso et Lanzoni 1990). It belongs to *Lepiota* sect. *Lilaceae* Bon.

The macroscopical and microscopical description of the carpophores collected in Moravia (Czech Republic) agree very well with a description by Candusso et Lanzoni (1990). However, the basidiospores seem to be slightly dextrinoid sometimes. This fact corresponds with Bon (1981).

Cystolepiota cystophora was described from Morocco as *Lepiota cystophora* Malençon in Malençon et Bertault (1970), and is also known from oak forests in the Mediterranean region of Europe (Bon 1981). The collection described here represents the first location in the Czech Republic, and probably also the first extra-Mediterranean location.

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