

Entoloma subcoracis



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Entoloma subcoracis O.V. Morozova, Noordel. & Dima, *sp. nov.*

Etymology. The epithet refers to the resemblance of *Entoloma coracis* due to its black colour, like a raven (*Corvus corax*).

Classification — *Entolomataceae*, *Agaricales*, *Agaricomycetes*.

Basidiomata medium-sized, collybioid. *Pileus* 10–35 mm diam, hemispherical or abruptly conical with central depression, hardly expanding, with deflexed margin, not hygrophanous, translucently striate almost up to the centre, initially uniformly blackish blue (21F5–8; Kornerup & Wanscher 1978), discolouring to bluish grey (21F3–4), minutely radially fibrillose-squamulose all over. *Lamellae* moderately distant, adnate-emarginate, segmentiform to narrowly ventricose, white, contrasting with the pileus surface, becoming pink, with irregular, serrulate concolorous edge. *Stipe* 30–70 × 1.5–3 mm, cylindrical, sometimes twisted, slightly longitudinally striate, minutely squamulose, especially in the upper part, concolorous with pileus or a little paler (up to 21F3–4), white tomentose at base. *Context* white, greyish under the surface. Smell indistinct, taste not reported. *Basidiospores* 9.5–11 × 6.5–8 µm, av. 10.0 × 7.0 µm, Q = 1.3–1.5, Q_{av} = 1.4; heterodiametrical, with 5–7 angles in side-view, relatively simple. *Basidia* 32–38 × 10–12 µm, 4-spored, narrowly clavate to clavate, clampless. *Lamella edge* sterile. *Cheilocystidia* 37–80 × 8.5–13.5 µm, composed of 3–4 elements, terminal cells mostly lageniform or fusiform, sometimes cylindrical or narrowly clavate, colourless. *Pileipellis* cutis with transition to a trichoderm of cylindrical to slightly inflated hyphae 8–20 µm wide with inflated terminal elements and dark intracellular pigment, brownish in KOH. *Caulocystidia* 35–100 × 5.5–10 µm, as chains of cylindrical or inflated elements, usually with tapered terminal cells. Brilliant granules present. *Clamp connections* absent.

Habitat & Distribution — In small groups on soil in subalpine grasslands. Known from Russia (Caucasus).

Typus. RUSSIA, Karachaevo-Cherkesia Republic, Teberda Nature Reserve, Arkhyz site, near the waterfall, N43.558889° E41.301389°, alt. 1390 m a.s.l., 17 Aug. 2009, O. Morozova (holotype LE312483, ITS and LSU sequences GenBank MW934593 and MW934255, MycoBank MB 839228).

Colour illustrations. Russia, Karachaevo-Cherkesia Republic, Teberda Nature Reserve, Arkhyz site, near the waterfall, type locality (photo credit E. Malysheva). Spores, cheilocystidia, pileipellis, caulocystidia (all from holotype); basidiomata *in situ* (holotype). Scale bars = 1 cm (basidiomata), 10 µm (spores and microstructures).

Notes — *Entoloma subcoracis* belongs to the form-group of *E. corvinum* s. auct. including taxa such as *E. coracis* (also described in present paper) and *E. porphyrogriseum* characterised by blackish blue basidiocarps. *Entoloma subcoracis* is characterised by the voluminous cheilocystidia, and fusiform, septate caulocystidia. The characteristic large cystidia are shared with the North American *E. subcorvinum* (Hesler 1967, Noordeloos 1988). Both species seem, however, to be geographically separated. Unfortunately, no DNA sequence data are available for the holotype of *E. subcorvinum*. Also see the phylogenetic tree for *E. ammophilum* in Supplementary material FP1240.

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