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The first record of *Gymnopus oreadoides* (Basidiomycota, Omphalotaceae) in the Czech Republic

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ANTONÍN V. & KRAMOLIŠ J. 2007: The first record of *Gymnopus oreadoides* (Basidiomycota, Omphalotaceae) in the Czech Republic. *Acta Musei Moraviae, Scientiae biologicae* (Brno) **92:** 217–221. – The first record of *Gymnopus oreadoides* (Pass.) Antonín et Noordel. in the Czech Republic with detailed macroscopic and microscopic descriptions of collected basidiocarps is published. The species was collected on soil under *Quercus robur* close to Pustý rybník pond near Dymokury (Bohemia).

Key words. Basidiomycetes, Omphalotaceae, *Gymnopus oreadoides*, Czech Republic, Bohemia, description

Introduction

During field mycological research, the second author found very pale coloured, whitish to pale greyish orange fruit bodies of a gymnopoid habit. Laboratory studies showed that they represent a very rare species, *Gymnopus oreadoides* (Pass.) Antonín et Noordel. This taxon has not been collected in and/or reported from the Czech Republic to date. Therefore, this collection represents the first record in this country.

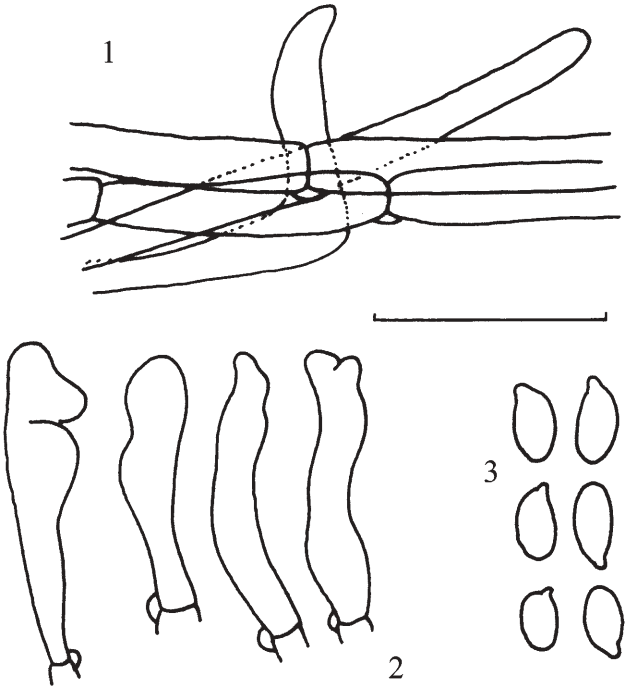
The microscopic features are described from material mounted in Melzer's reagent, and Congo Red. The following factors are used for basidiospores: X (mean of length and width of all basidiospores measured), E (quotient of length and width in any one basidiospore) and Q (mean of E-values). Authors of fungal names are cited according to KIRK & ANSELL (1992), colour terminology after KORNERUP & WANSCHER (1983) and herbarium abbreviation follows HOLMGREN (2003).

***Gymnopus oreadoides* (Pass.) Antonín et Noordel.**
(Photos 1–2; Figs 1–3)

Marasmius oreadoides Pass., *Nuovo Gior. Bot. Ital.* **4:** 109. 1872; *Collybia oreadoides* (Pass.) P. D. Orton, *Trans. Brit. Mycol. Soc.* **43:** 174. 1960; *Gymnopus oreadoides* (Pass.) Antonín et Noordel., *Mycotaxon* **63:** 365. 1997. – *Rhodocollybia stenosperma* Romagn. et Coquand, *Bull. Soc. Mycol. Fr*. **94(2):** 103. 1978.

Description of carpophores collected

Pileus 15–40 mm, hemispherical-conical with involute margin when young, soon conical-convex to convex with deflexed margin, almost applanate with straight to reflexed, slightly undulating margin when older, hygrophanous, not distinctly translucently striate when moist, smooth, glabrous, watery whitish when moist, drying



Figs 1–3. *Gymnopus oreadoides*. 1– pileipellis, 2 – cheilocystidia, 3 – basidiospores. Scale bar = 20 µm.

out from centre towards margin, ± pale greyish orange (± 5B3) at centre and ± dirty whitish at margin. Lamellae moderately distant, L = 28–45, l = 2–3(–4), narrowly adnexed to almost free, white then pale cream-coloured, with entire, concolorous edge. Stipe 25–55×2.5–6 mm, cylindrical, fistulose, elastic, twisted, longitudinally fibrillose, finely pubescent, glabrescent, whitish to cream-coloured then turning pale orange-ochraceous. Context white to cream-coloured, thin.

Basidiospores (6.0–)6.5–7.0(–8.0)×3.0–4.0 µm, X = 6.8×3.6 µm, E = 1.6–2.3, Q = 1.9, ellipsoid-fusoid or ± lacrimoid. Basidia 24–27×5.0–7.0 µm, 4-spored, clavate or subcylindrical, clamped. Basidioles 20–38×3.0–7.0 µm, clavate to subcylindrical, clamped. Cheilocystidia 17–30×5.5–7.0 µm, infrequent, cylindrical to clavate, irregular to subcoralloid, thin-walled, clamped. Pleurocystidia absent. Hymenophoral trama consisting of cylindrical to subfusoid, thin- to slightly thick-walled, up to 11 µm wide hyphae. Pileipellis a slightly gelatinised cutis composed of radially arranged, cylindrical,

Photo 1–2. *Gymnopus oreadoides*. Czech Republic, Bohemia, Dymokury, Pustý rybník, photo J. Kramoliš.

thin-walled, clamped, up to 6.5 µm wide hyphae with smooth or minutely incrusted walls; terminal cells adpressed to erect, cylindrical to clavate, sometimes irregular, thin-walled. Stipitipellis a cutis made up of parallel, slightly thick-walled, clamped, 2.0–5.0 µm wide, smooth or finely incrusted, hyaline hyphae. Caulocystidia abundant, 20–50×4.0–6.0 µm, adpressed to erect, cylindrical, sometimes slightly irregular, obtuse, clamped. No part of basidiocarps amyloid, dextrinoid or turning green in alkalis.

Biology. Saprotrophic on soil under *Quercus robur* in an oak-hornbeam forest with *Corylus avellana* growing on basic claystones on a slope above a pond. According to the Habitat Catalogue of the Czech Republic (Chytrý & al. 2001), this stand is classified as group L 6.4 Central European basiphilous thermophilous oak forest.

Material studied. Czech Republic, Bohemia, Dymokury near Nymburk, close to the northern part of the Pustý rybník pond NE of the village, alt. 230 m, co-ord. N 50°15' 21.37", E 15°13' 35.51", 13 Aug. 2006 leg. J. Kramoliš (BRNM 705174 and herb. J. Kramoliš).

Remarks. *Gymnopus oreadoides* is characterised as having pale, cream to light ochraceous or greyish orange basidiocarps with a smooth and glabrous pileus, a cylindrical fistulose stipe, rather small basidiospores, scattered, cylindrical to clavate, irregular to subcoralloid cheilocystidia, a slightly gelatinised pileipellis, and well-developed caulocystidia. It is a distinct species with some resemblance to both *Marasmius oreades* and *Gymnopus dryophilus*. From the former it is clearly distinguished by its non-hymeniform pileipellis, from the latter, among other things, by the pileipellis missing a *Dryophila*-structure (Antonín & Noordeloos 1997).

Judging by its macroscopic and microscopic characters (pileipellis usually a simple cutis, without *Dryophila*-structure, lamellae edge often with well-differentiated cheilocystidia, without a foetid smell), it belongs to *Gymnopus* sect. *Vestipedes* (Fr.) Antonín, Halling et Noordel. subsect. *Vestipedes* (Antonín & Noordeloos 1997). According to a recent publication based on molecular studies (Wilson & Desjardin 2005), this group is part of the euagarics clade /marasmiellus, which also contains, except for species of sect. *Vestipedes*, the type species of the genus *Marasmiellus*, *M. juniperinus* Murrill, and *Marasmiellus synodicus* (Kunze) Singer of sect. *Dealbati*.

It usually grows in humus and grass in open woodland on wet soil, but also in *Alnus* stands. Originally described from Italy, it represents a rather rare fungus recorded in Europe only in the Czech Republic, France, Italy (recently Sardinia, Contu 1992), Switzerland and Great Britain (Antonín & Noordeloos 1997, Moreau & Wuilbaut 2001).

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