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# NOTES TO POLYPORES FROM EASTERN BOHEMIA (CZECH REPUBLIC)

## Poznámky k chorošům z východních Čech (Česká republika)

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**Abstract**: This article presents some new or rare records of polypores from Eastern Bohemia. Six species: *Antrodiella onychoides, Ceriporia purpurea, Ceriporia reticulata, Oligoporus rennyi, Pseudoinonotus dryadeus, Rhodonia placenta* are shortly described and something important is discussed.

**Key words**: *Aphyllophorales, Polyporales*, forest ecosystems, rare fungi, biodiversity.

## INTRODUCTION

Several field trips in Eastern Bohemia revealed some unknown polypores from this region. Biodiversity of lignicolous fungi is little known in the Czech Republic, which is well demonstrated with repeatedly found new species (e.g. Dvořák et al. 2014, Kout et al. 2014).

Polypores are mainly saprotrophic fungi fruiting mainly on wood with more or less poroid hymenophore (Ryvarden & Gilbertson 1993). Resupinate species belong to the little known group, inconspicuous and often it is necessary to use the microscope for exact determination.

The aim of this paper is to add small part of knowledge about distribution of polypores in the Czech Republic.

## MATERIAL AND METHODS

Presented polypores were collected from 2011 to 2014. Examination was made by standard microscopic techniques in Melzer's reagent under Olympus BX41 with an oil immersion lens at a magnification of 1000×. Some specimens have been deposited in Mycological Herbarium of the Department of Biology, University of West Bohemia, Plzeň, Czech Republic (abbreviated KBI here). Geographical coordinates were taken by Garmin Vista HCx.

## RESULTS

### *Antrodiella onychoides* (Egeland) Niemelä

Pileate to effused-reflexed fruitbodies, whitish; pilei thin, slightly undulate. Generative hyphae without clamps; spores slightly allantoid, smooth, inamyloid, about 3 × 1,5 µm. White rot.

**Locality:** Hradec Králové Region, Rychnov nad Kněžnou District, Mochov–riparian forest, close to Opočno (about 4 km to the west), about 260 m n.m., dead hardwood, 17.IX.2011 leg. et det. J. Kout (herb. KBI).

This *Antrodiella* was previously overlooked, to the genus *Antrodiella* was classified at 1982 (Niemelä 1982), for central Europe was reported in 1983 (Große-Brauckmann & Jahn 1983) and in the Czechoslovakia in 1989 but more early specimens were revised from herbarium (Vampola 1991). *A. onychoides* has not been known in Eastern Bohemia till that time (Vampola 1991) and in neighboring Poland has not been recorded yet (Piątek 2001). Specimen was collected on the branch hardwood with bark from humid locality. This same ecological pattern was observed in Western Bohemia (Kout & Vlasák 2013).

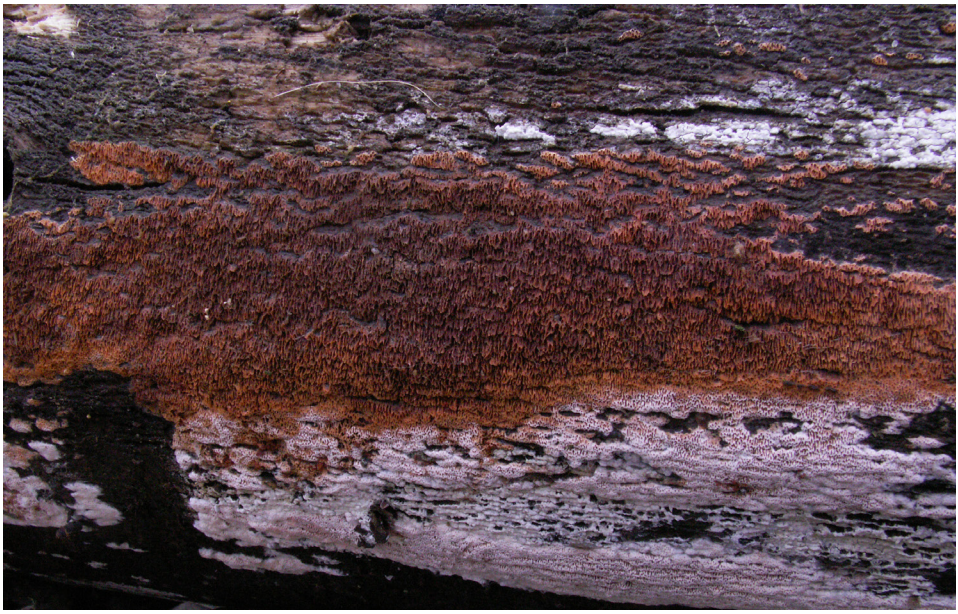

***Fig. 1.*** *Ceriporia purpurea, near Městec Králové. Photo J. Kout 2009.*

***Ceriporia purpurea* (Fr.) Donk** (Figs. 1–3)

Resupinate annual fruitbodies, pores white or creamish in young (by touch darkening, reddening in fresh condition) up to red and reddish violet in old and drying specimens; sterile whitish margin present by active fruiting or young fruitbodies; 2–4 pores/mm. Monomitic hyphal system, hyphae without clamps; spores allantoid, smooth, inamyloid, 6,5–8 × 2–2,5 µm. White rot.

**Locality:** Hradec Králové Region, Rychnov nad Kněžnou District, Mochov–riparian forest close to Opočno (about 4 km to the west), about 260 m n.m., dead hardwood (*Quercus* or *Fraxinus*), 18.III.2011, ibid, 17.IX. (two specimens) and 4.XI. (all leg. et det. J. Kout, all in herb. KBI).

This species was considered as a rare in the Czech Republic (Kotlaba 1984) but actually it seems more abundant. This *Ceriporia* probably has not been reported in Eastern Bohemia yet. Due to that fact, there are not probably any recent published localities from Central and Northern Bohemia, then here it fills this gap in distribution knowledge: Central Bohemian Region, Nymburk District, nearby Městec Králové, small pond (at Dlouhopolský stream) in the agroecosystem field at southward from town (near forest Holička), fallen trunk of *Populus* without bark, 7.III.2009; near Křinec, Chotuc natural monument, hardwood (*Fraxinus*?), 3.IV.2010. Northern Bohemia, Ústí nad Labem Region, Most District, České středohoří Protected Landscape Area, Milá nature reserve, dead branch of hardwood, 13.III.2011 (all leg. et det. J. Kout., all in herb. KBI).

In summary, *C. purpurea* inhabits mainly hardwood (not only in forest) from lowlands up to submontane level, prefers humid biotops but may be present in dry localities too (Chotuc).

Some other species with bright colours of fruibodies have been described in genus *Ceriporia* from Europe (Pieri & Rivoire 1997), but without microscopic examination we do not have exact determination.

***Fig. 2.*** *Ceriporia purpurea, Mochov–riparian forest. Photo J. Kout 2011.*

### *Ceriporia reticulata* (Hoffm.) Domański (Fig. 4)

Resupinate annual fruitbodies, soft, white in fresh condition, by desiccation become white sordid, creamish up to slightly orange, subiculum thin. Monomitic hyphal system, hyphae without clamps, hyaline; spores widely allantoid, smooth, inamyloid. White rot.

**Localities:** Hradec Králové Region, Rychnov nad Kněžnou District, Opočno, castle game park, 50°15'19.6"N, 16°6'45.7"E, 325 m n.m., hardwood, 22.IV.2011; Mochov–riparian forest close to Opočno (about 4 km to the west), about 260 m n.m., branch of hardwood on the ground, 17.IX.2011, ibid, hardwood, 4.XI.2011 (all leg. et det. J. Kout., all in herb. KBI).

The large spores (about 8 × 3 µm) in this species are good determination feature. One of specimen (Mochov 17.IX.2011) has anamorph stadium around fruitbody and then it may be considered as *Ceriporia metamorphosa* (Fuckel) Ryvarden & Gilb. but proportions of spores disproved it. Microscopic examination is necessary because there are other white *Ceriporia* species (Pieri & Rivoire 1997) but not so well known.

It seems that this is the first record of *C. reticulata* in Eastern Bohemia. Nevertheless, *C. reticulata* is widespread species, overlooked due to inconspicuous appearance.

### *Oligoporus rennyi* (Berk. & Broome) Donk

Syn. *Postia rennyi* (Berk. & Broome) Rajchenb.

Resupinate polypore white colour, very soft and fragile after desiccation. Hyphae with clamps. Present well developed anamorphic stage around basidiocarp, consists of thick-walled chlamydospores, around 6 µm in diam. Brown rot.

**Locality:** Pardubice Region, Pardubice District, by Horní Jelení (50°3'17.3"N 16°6'49.4"E), fallen trunk of conifer with *Fomitopsis pinicola* (Sw.) P. Karst., 10.IX.2014 leg. et det. J. Kout (herb. KBI).

***Fig. 3.*** *Ceriporia purpurea, Mochov – riparian forest. Photo J. Kout 2011.*

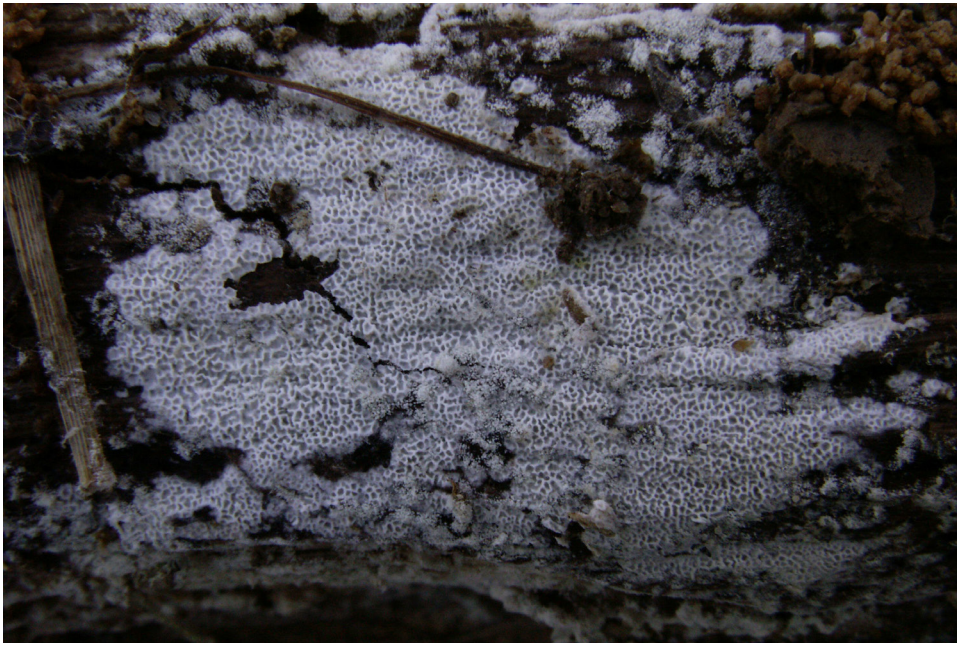

***Fig. 4.*** *Ceriporia reticulata, Opočno, castle game park. Photo J. Kout 2011.*

Easily identified species if anamorphic stage is present. It would be preferred to include this species in genus *Oligoporus* (Ortiz-Santana et al. 2013).

### *Pseudoinonotus dryadeus* (Pers.) T. Wagner & M. Fisch. (Fig. 5)

Syn. *Inonotus dryadeus* (Pers.) Murrill

Fruitbodies annual, pileate; pilei applanate, dimidiate, large (often over 20 cm in diam), upper surface ochre and guttulate in young, becoming blackish or sordid white, glabrous. White rot.

**Localities:** Hradec Králové Region, Rychnov nad Kněžnou District, Opočno, castle game park, 50°15'49.4"N, 16°6'40.1"E, 322 m n.m., base of living oak, 11.VII.2011 (21.X. photo of old fruit body); Mochov–riparian forest close to Opočno (about 4 km to the west), 265 m n.m., 25.VII.2011 (all not. J. Kout).

Rare species generally but it is considered as rare in lowlands forest too (Antonín 2007). Here would be expected the most abundant due to its connection to oak.

### *Rhodonia placenta* (Fr.) Niemelä, K. H. Larss. & Schigel

Syn. *Oligoporus placenta* (Fr.) Gilb. & Ryvarden, *Postia placenta* (Fr.) M. J. Larsen & Lombard

Fruitbodies annual, widely resupinate or with indicated pilei, characteristically pinkish but white may be too. Hyphal system monomitic with hyaline hyphae. Brown rot.

**Locality:** Hradec Králové Region, Náchod District, northeast from Hronov, at the red touristic mark (behind the cementery), stump of conifer (*Larix*?), 1.IX.2012 leg. et det. J. Kout, rev. V. Spirin; Pardubice Region, Ústí nad Orlicí District, Vlčkovice, foothill of Studený at

***Fig. 5.*** *Pseudoinonotus dryadeus (old fruitbody), Opočno, castle game park. Photo J. Kout 2011.*

the red touristic mark (in the forest), on the stump of conifer (*Picea?*), 4.IX.2012 leg. J. Kout, det. J. Vlasák (all herb. KBI).

Generally rare polypore with scattered known localities. Red list of macromycetes mentions it as endangered (Kotlaba et al. 2006).

Similar to resupinate specimens may be *Aurantiporus priscus* Niemelä, Miettinen & Manninen but spores are slightly different (Niemelä et al. 2012). White coloured *R. placenta* (e.g. from Vlčkovice) may be misidentified with several resupinate polypores and without careful microscopic work it is not possible correctly identified it.

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