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Contribution to the knowledge of the very rare species *Cytidiella albomellea* (*Corticiaceae* s.l.)

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Kotlaba F. (2011): Contribution to the knowledge of the very rare species *Cytidiella albomellea* (*Corticiaceae* s.l.). – Czech Mycol. 63(1): 33–38.

Based on recent, very rich collections of *Cytidiella albomellea* (Bondartsev) Parmasto (= *C. melzeri* Pouzar) from South Bohemia (Czech Republic) the author lists all presently known localities and collections of this species in Bohemia and Slovakia. *C. albomellea* is only known from the Northern hemisphere, namely Europe, Asia and North America. Hosts are conifers (predominantly pines) as well as frondose trees and shrubs (mostly oaks). A taxonomic note on the genus *Cytidiella* is included.

Key words: *Cytidiella albomellea*, Czech Republic, Slovakia, ecology, general distribution, taxonomy.

Kotlaba F. (2011): Příspěvek k poznání velmi vzácného druhu kůžičky bledohnědé *Cytidiella albomellea* (kornatcovité). – Czech Mycol. 63(1): 33–38.

Autor na základě nedávných velmi bohatých sběrů kůžičky bledohnědé z jižních Čech vypočítává všechny v současnosti známé lokality a sběry tohoto druhu v Čechách a na Slovensku. Kůžička bledohnědá je známa pouze na severní polokouli, a to z Evropy, Asie a Severní Ameriky; hostitelskými dřevinami jsou jehličnany (především borovice), stejně jako listnaté stromy a keře (hlavně duby). Závěrem je připojena taxonomická poznámka o rodu *Cytidiella*.

INTRODUCTION

Sometimes we are lucky to find a very rare fungal species which we might not have been able to observe for several decades. This happened to me in autumn 2010 in a forest called "Šmelcovna" S of Vlastiboř near Soběslav (S Bohemia, Czech Republic), where I collected abundantly developed specimens of *Cytidiella albomellea* (Bondartsev) Parmasto (= *C. melzeri* Pouzar). This species is classified by Pouzar (2006) in the Red list of fungi (macromycetes) of the Czech Republic as probably extinct (?EX), because it had not been found for nearly half a century (for the first records, see Pouzar 1954). Šmelcovna is a sandy pine forest with bilberry (*Vaccinium myrtillus*) and terrestrial lichens (*Cladonia* sp. div., etc.), dominated by *Pinus sylvestris* with scattered planted North American *Pinus banksiana*. I found plenty of beautiful carpophores of *Cytidiella albomellea* on cut old branches of the latter pine species. Šmelcovna is situated very close to the "Soběslavská blata" peat-bogs, the richest locality in Bohemia for the species under discussion.

RESULTS AND DISCUSSION

Localities of *Cytidiella albomellea* in the Czech Republic and Slovakia

Localities, based on voucher specimens deposited in the herbarium of the Mycological Department, National Museum, Prague (PRM), are arranged by collecting date (the first five were published by Pouzar 1954). All data on the labels are written in Latin and are here translated into English; localities are mostly specified. As all specimens were collected on dead branches (rarely on thin trunks), this fact is omitted here. My name is shortened as F.K.

The correct name for arboraceous pine growing in European peat-bogs, known as *Pinus uliginosa*, *P. uncinata*, *P. rotundata* etc., seems to be *P. uncinata* ssp. *uliginosa* (Neumann) Businský. Nevertheless, the names of host plants are written here as given on herbarium labels.

Turovec NE of Planá nad Lužnicí (SE of Tábor), S Bohemia, *Quercus* sp. (most probably *Q. robur*, note of F.K.), 29. VIII. 1949 leg. M. Svrček, det. Z. Pouzar (PRM 195340 – paratypus).

Jiříkovo údolí ("Červené blato" peat-bog) SE of Šalmanovice, N of Nové Hrady, S Bohemia, *Pinus uncinata* (= *P. uliginosa*), 18. VII. 1952 leg. et det. Z. Pouzar (PRM 165343 – paratypus).

Valley of "Haťský stream" S of Hatě SW of Řevnice near Praha, foot of Hřebeny hills, Central Bohemia, *Quercus* sp. (most probably *Q. petraea*, note of F.K.), 24. V. 1953 leg. M. Svrček, det. Z. Pouzar (PRM 195339 – paratypus).

Črmeľ at the N outskirts of Košice (locus classicus), E Slovakia, *Pinus nigra*, 23. X. 1953 leg. F.K., det. Z. Pouzar (PRM 195337 – holotypus).

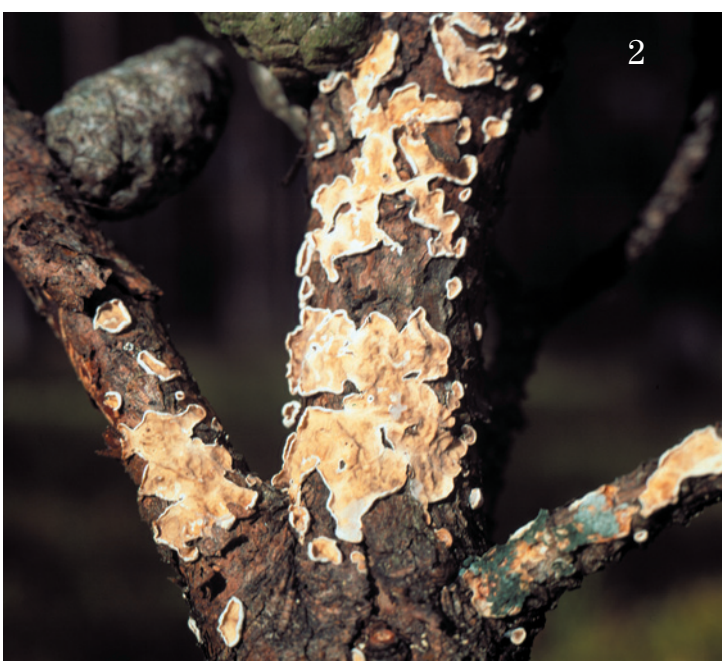
"Soběslavská blata" peat-bogs SW of Soběslav near Tábor, S Bohemia, NW margin called "Na Hranicích", *Pinus uncinata*, 17. XII. 1953 leg. F.K., det. Z. Pouzar (PRM 195338 – paratypus); ibid. (not yet published collection) 22. XII. 1954 leg. et det. F.K. (PRM 798324).

Valley of "Halounský stream" SE of Halouny SW of Řevnice near Praha, foot of Hřebeny hills, Central Bohemia, *Quercus* sp. (most probably *Q. petraea*, note of F.K.), 29. VIII. 1954 leg. F. Kuneš et K. Poner, det. Z. Pouzar (PRM 195342).

"Soběslavská blata" peat-bogs SW of Soběslav near Tábor, S Bohemia, NE margin, *Pinus uliginosa*, 26. 3. 1955 leg., det. et not. F.K.

Suchdol nad Lužnicí SSE of Třeboň, S Bohemia, *P. sylvestris*, 6. VIII. 1955 leg. et det. F.K. (PRM 628148).

"Soběslavská blata" peat-bogs SW of Soběslav near Tábor, S Bohemia, probably part called "Bahenní sosna", *P. sylvestris*, 9. V. 1957 leg. et det. F.K. (PRM 195341); ibid., *P. uliginosa*, 10. VIII. 1963 leg. et det. F.K. (PRM 583574).



Figs. 1-2. *Cytidiella albomellea* on cut branch of *Pinus banksiana*, Šmelcovna S of Vlastiboř near Soběslav, S Bohemia, Czech Republic. **1** – general view. **2** – detail. Photo 20 Oct. 2010 by F. Kotlaba.

Wood called "Kovářka" near Vrábsko E of Čimelice N of Písek, S Bohemia, *Quercus* sp. (most probably *Q. robur*, note of F.K.), 23. VII. 1964 leg. et det. M. Svrček as *Stereum gausapatum*?, rev. (det.) Z. Pouzar (PRM 623727).

Forest called "Šmelcovna" S of Vlastiboř near Soběslav, S Bohemia, *Pinus banksiana*, 1. X. 2010 (PRM 917689), 8. X. 2010 (PRM 917691), 20. X. 2010 (PRM 917692), 25. III. 2011 (PRM 918097), 13. V. 2011 (PRM), 15. VI. 2011 (PRM) leg. et det. F.K.

N o t e s

Three herbarium collections of *Cytidiella melzeri* were on loan in Germany (Munich, Tübingen) for a long time and returned to PRM at the end of 2010; therefore really all existing Czech and Slovak collections were available to me. I can now state that we have registered 10 localities of *Cytidiella albomellea* in Bohemia (Czech Republic) and one in Slovakia, mostly very rich collections which are deposited in the PRM herbarium.

Carpophores of *C. albomellea*, which are biennial (or lasting several years), were in Bohemia collected nearly in every month during more than 60 years, and richly produced spores.

Host plants

It is interesting that *Cytidiella albomellea* occurs on some frondose trees and shrubs (mainly on oaks) as well as on many conifers (mostly pines). Nevertheless it seems to be generally rather rare to very rare in most countries. According to information from the literature, we can now state that *C. albomella* is known from *Abies concolor*, *Alnus crispa*, *Corylus avellana*, *Pinus banksiana*, *P. nigra*, *P. palustris*, *P. ponderosa*, *P. resinosa*, *P. strobus*, *P. uncinata* ssp. *uliginosa*, *Quercus petraea*, and *Q. robur* (Boidin & Gilles 1990, Ginns & Lefebvre 1993, Nakasone 1996, Wojewoda 2006, etc.).

General distribution

According to the literature (Boidin & Gilles 1990, Bondartsev 1927, Eriksson & Ryvarden 1975, Ghobat-Nejhad et al. 2009, Ginns & Lefevbre 1993, Nakasone 1996, Ostrow & Dämmrich 2010, Pouzar 1954, Rodrigez-Armas et al. 1992, Stalpers 1988, Škubla 2003, Wojewoda 2006, Yurchenko 2002), *C. albomellea* chiefly occurs in Europe (Norway, Sweden, Germany, Czech Republic, Poland, Slovakia, Belarus, Ukraine, France, and Spain – only Tenerife Island on the Canary Islands) and also in North America (Canada – Yukon Territory, and USA – Arizona, New Mexico, Wisconsin, Maine, and Mississippi). From Asia *Cytidiella albomellea* has only been confirmed from the Russian Far East. Z. Pouzar and I had the chance to

study collections from this area made by E. Parmasto (for which we sincerely thank him): Natalino, Blagoveshchensk distr., Amur region, *Pinus sylvestris*, 30. VIII. 1975 leg. E. Parmasto, det. 10. II. 2011 F.K. et Z. Pouzar (herb. Inst. Zool. et Bot. Acad. Sci. Estoniae – TAA 58911, TAA 59534). The information that *C. albomellea* (*C. melzeri*) has also been collected in Iran (Ghobat-Nejhad et al. 2009, Nakasone 1996), is obviously erroneous as it refers to Hallenberg (1981), who did, however, not mention this species from Iran neither in 1981 nor in 1978 (he only noted *Auriculariopsis ampla*).

Taxonomic position

The species under discussion has been classified in various genera, mostly in *Auriculariopsis* Maire (Bernicchia & Gorjón 2010, Ginns & Lefevbre 1993, Kotlaba 1988, Ostrow & Dämmrich 2010, Stalpers 1988, Tellería in Tellería & Melo 1995, Wojewoda 2006), but also in *Cytidiella* Pouzar (Parmasto 1968; Pouzar 1954, 2006), and – based on molecular studies – in *Phlebia* Fr. (Nakasone 1996). Here I would like to state – contrary to what I published earlier (Kotlaba 1988) – that the most suitable genus for the discussed fungus is *Cytidiella* Pouzar. The carpophores of this species grow together (merged), whereas those of *Auriculariopsis* (*ampla*) never merge and remain single, i.e. separate. This is a very important character of generic value and in classic classification mostly generally recognised and applied (see e.g. *Auricularia* Bull. and *Hirneola* Fr., etc.).

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