

Hymenochaete carpatica from Częstochowa Upland (S Poland)

LOTHAR KRIEGLSTEINER¹ and MARIA ŁAWRYNOWICZ²

¹Institut für Botanik, Universität Regensburg Postfach, 101042, D-93040 Regensburg
Present address: Beethovenstr. 1, D-73568 Durlangen, lkrieglsteiner@t-online.de

²Department of Algology and Mycology, University of Łódź
Banacha 12/16, PL-90-237 Łódź, miklaw@biol.uni.lodz.pl

Krieglsteiner L., Ławrynowicz M.: *Hymenochaete carpatica* from Częstochowa Upland (S Poland). Acta Mycol. 38 (1/2): 27-30, 2003.

Hymenochaete carpatica has been found in 1994 in Częstochowa Upland, "Parkowe" nature reserve, in Wiercica river valley situated on calcareous area, 290-310 m above sea level, on fissured bark of *Acer pseudoplatanus*. This contribution corresponds to the paper by Chlebicki (2003) who has recently discovered several localities of *H. carpatica* in Sudetes and Carpathians. Both papers present a set of sites of *H. carpatica* reported hitherto from Poland, and contribute to the knowledge on its distribution in Europe.

Key words: *Hymenochaete carpatica*, ecology, distribution

INTRODUCTION

Hymenochaete carpatica (Pilát 1930) was originally described from Low Carpathians in Slovakia. For the next 58 years it had been completely overlooked in Europe (Baici and Léger 1988). It has a very special ecology because it grows only on the bark of *Acer pseudoplatanus* L., mainly on the inner side of the pieces still attached to living trees. Only in mountain areas where there are very moist air conditions it is able to grow also on the outer side of the bark and is more likely to be found. G. J. Krieglsteiner (1994) presented morphology, chorology, ecology and taxonomy of *H. carpatica*. He considers *H. carpatica* as well-defined and -delimited fungus, fairly common, at least regionally. *H. carpatica* is macroscopically similar to the other brown-colored resupinate species *H. corrugata* (Fr.) Lév., but differs microscopically in having longer setae, larger basidia and larger spores. According to the above author *H. carpatica* is widespread in Central Europe and locally common in mountain regions of Southern Germany, Eastern France (Vosges), Switzerland (Baici and Léger 1988) and particularly in Austria. He also discusses the question that although there are no data on *H. carpatica* in Eastern Europe, finding it there is highly probable.

In 1994, during the excursion to the Częstochowa Upland in the frame of mycological exchange programme between the universities of Regensburg and Łódź, a rich collection of *Asco*- and *Basidiomycota* as well as *Myxomycetes* has been made by the authors. Among the collected species *Hymenochaete carpatica* was also distinguished. The material is successively completed and prepared for publication.

The article by Chlebicki (2003) containing excellent data concerning taxonomy, mode of life and ecology of *H. carpatica* found in Sudetes and Carpathians stimulated the authors to give a short note about its occurrence in the Częstochowa Upland. More detailed elaboration of *H. carpatica* and some other species collected will be published separately.

AREA OF INVESTIGATIONS

The nature reserve "Parkowe" (Fig. 1) comprises elevations built of High Jurassic rocks emerging from under diluvial sands. It is a good example of phytosociological and forest conditions, characteristic of the whole region of the Częstochowa Jurassic system. Oak-hornbeam forest (*Tilio-Carpinetum*), confined as a rule to the lowest parts of the area, is characterized by great fertility and optimum humidity (Celiński and Wika 1975). *Acer pseudoplatanus* is fairly widespread in the area of the reserve.

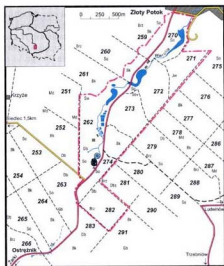





Fig 1. Locality - "Parkowe" nature reserve (Herceznik 2002).

-  Site of collected *Hymenochaete carpatica*
-  Springs of Wiercica river "Źródła Zygmunta"
-  Border of the nature reserve

The area has been the object of mycological investigations for many years (Ławrynowicz 1989, 1990). Altogether 356 species of macrofungi, among them *Hymenochaete rubiginosa* (Dicks.: Fr.) Lév., have been reported from the "Parkowe" nature reserve (Adamczyk 1996).

HYMENOGHAETE CARPATICA IN POLAND

H. carpatica has been reported recently from three regions in Poland: Sudetes and Carpatians (Chlebicki 2003), and Częstochowa Upland. The first collection in the Częstochowa Upland in the "Parkowe" nature reserve, forest section 262, has been made on July 15, 1994, in the site indicated on Figure 1, but further random observations reveal its common occurrence on *Acer pseudoplatanus* growing along the Wiercica river, especially around its spring called "Źródła Zygmunta". The elevation of the valley is 290-310 m a.s.l. The fungus grew exclusively on the inner surface of loosing bark fragments on old living trees of *A. pseudoplatanus* and was observed all over the year.

H. carpatica was previously regarded as a mountain species. According to some authors it can grow in a broad range of elevations (e.g. G. J. Krieglsteiner (1994): 250-1700 m a.s.l.; Tomšovský (2001): 290-1220 m a. s. l.).

Chlebicki (2003) collected *H. carpatica* at an altitude of 460-1000 m a.s.l. but in his opinion the fungus can grow both in the lowlands and in the mountains. The site in the Częstochowa Upland of 290-310 m a. s. l. is an example of the occurrence of this fungus at the lower elevation. L. Krieglsteiner (1999: 382) collected it in Germany as low as 180 m a.s.l. Thus it can be expected in the whole range of natural occurrence of *Acer pseudoplatanus*. We hope this note will stimulate further searching.

The specimens collected in the Częstochowa Upland have been deposited in the Herbarium Universitatis Lodziensis (LOD), Poland, and in the "Fungarium Krieglsteiner" (PH Schwäbisch Gmünd), Germany.

Acknowledgements: The authors thank to Professor A. Bresinsky (Regensburg) for coordination of the mycological exchange programme on the German side. The publication was prepared with financial support of the University of Łódź. The authors are indebted to Professor A. Chlebicki who kindly accepted a suggestion to publish both papers in the same volume.

REFERENCES

- Adamczyk J. 1996. Les champignons supérieurs des hêtrais du nord du plateau de Częstochowa. *Lejeunia*, Nouvelle série 150: 1-83.
- Baici A., Léger J. C. 1988. *Hymenochaete carpatica* (Pilát 1930) collected in Switzerland. *Mycol. Helvetica* 3(1): 89-98.
- Celiński F., Wika S. 1978. Próba nowego spojrzenia na stosunki fitosocjologiczne rezerwatu „Parkowe” w Złotym Potoku koło Częstochowy – A new Look at Phytosociological Conditions in the „Parkowe” Reservation in Złoty Potok near Częstochowa. *Fragm. Flor. et Geobot.* 24 (2): 277-307.
- Chlebicki A. 2003. *Hymenochaete carpatica*, an inconspicuous fungus growing on chips of bark of *Acer pseudoplatanus*. *Acta Mycol.* 38 (1/2): 21-26.
- Hereźniak J. 2002. Rezerwaty przyrody Ziemi Częstochowskiej. LOP, Częstochowa, 300 pp.
- Krieglsteiner G. J. 1994. *Hymenochaete carpatica* Pilát 1930, die Bergahorn-Borstenscheibe, in Mitteleuropa. *Beitr. Kenntn. Pilze Mitteleur.* 9: 76-96.

- Krieglsteiner L. 1999. Pilze im Naturraum Mainfränkische Platten und ihre Einbindung in die Vegetation. Regensb. Mykol. Schr. 9. 1: 1-464.
- Ławrynowicz M. 1989. Chorology of the European hypogeous *Ascomycetes* I. *Elaphomycetales*. Acta Mycol. 25 (1): 3-41.
- Ławrynowicz M. 1990. Chorology of the European hypogeous *Ascomycetes* II. *Tuberales*. Acta Mycol. 26 (1): 7-75.
- Pilát A. 1930. Monographie der europäischen Steraceen. Hedwigia 70: 10-132.
- Tomšovský M. 2001. Remarks on the distribution of *Hymenochaete carpatica* in Central and Eastern Europe. Czech Mycol. 53 (2): 141-148.

Hymenochaete carpatica na Wyżynie Częstochowskiej

Streszczenie

Grzyb *Hymenochaete carpatica* został opisany przez Piláta (1930) ze Słowacji. Jest to gatunek rosnący po wewnętrznej stronie łuszczących się płatów kory jaworu *Acer pseudoplatanus*. Chociaż, jak wykazano, jest przynajmniej regionalnie pospolity, przez 58 lat pozostawał niezauważony przez mikologów.

Dopiero Baici i Léger (1988) zwrócili uwagę na ten gatunek analizując materiały zielnikowe oraz wykazując jego występowanie w wielu miejscach w Szwajcarii. G. J. Krieglsteiner (1994) opublikował obszerne studium taksonomiczno-chorologiczne tego gatunku.

W lipcu 1994 roku w ramach realizacji programu współpracy między uniwersytetami w Łodzi i Regensburgu autorzy niniejszej pracy prowadzili terenowe badania mikologiczne na Wyżynie Częstochowskiej. Wśród bogatego materiału, który jest przedmiotem oddzielnego opracowywania, pierwszy autor zwrócił uwagę na *Hymenochaete carpatica*, gatunek rozpoznany na korze jaworu w rezerwacie „Parkowe” koło źródeł rzeki Wiercicy, znanych jako „Źródła Zygmunta” koło miejscowości Złoty Potok. Obserwacje prowadzone w kolejnych latach dostarczyły informacji o występowaniu *Hymenochaete carpatica* na dalszych okazach jaworu rosnących w dolinie rzeki Wiercicy. Projektowane są szczegółowe badania nad rozmieszczeniem *H. carpatica* na Wyżynie Częstochowskiej. Do podania informacji o odkryciu na Wyżynie Częstochowskiej *H. carpatica* skłonił autorów artykuł Chlebickiego (w tym tomie), który nie tylko znalazł ten gatunek w Sudetach i Tatrach ale stwierdził jego pospolitość w niektórych regionach, a także szczegółowo opisał i zilustrował cechy morfologiczne owocników oraz sposób życia i rozwoju *H. carpatica* w warunkach konkurencji z innymi organizmami. Można oczekiwać, że podane w obu artykułach informacje zachęcą do poszukiwań tego gatunku również w innych regionach w zasięgu występowania *Acer pseudoplatanus*.