

## NOTES ON POLISH POLYPORES. 1. *OLIGOPORUS ALNI*, COMB. NOV.

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**Abstract:** *Oligoporus alni* (Niemelä & Vampola) Piątek, *comb. nov.* is discussed, the morphological characters of basidiomes from the Polish population are described and illustrated, and the occurrence of the fungus in Poland is evaluated briefly. A key to European *Oligoporus* Bref. with basidiomes tinted blue-grey is provided.

**Key words:** *Oligoporus*, *Postia*, polypores, taxonomy, Poland

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In Europe, tyromycetoid polypores with basidiomes tinted blue-grey were assigned mostly to *Oligoporus caesius* (Schrad.: Fr.) Gilb. & Ryvarden if they grew on conifers and had basidiospores  $4.5\text{--}6.0 \times 1.5\text{--}2.0 \mu\text{m}$ , or to *Oligoporus subcaesius* (David) Ryvarden & Gilb. if they grew on deciduous trees and had basidiospores  $4.0\text{--}5.0 \times 1.0\text{--}1.2 \mu\text{m}$  (Ryvarden & Gilbertson 1994). However, Niemelä (in Niemelä *et al.* 2001), following earlier observations and suggestions by Vampola (1994), explained that the polypore from some countries of Central and Northern Europe determined previously as '*Oligoporus subcaesius*' and having relatively small basidiomes is not identical with the true *Oligoporus subcaesius* described by David (1974) as a fairly large species occurring in the Mediterranean. A description given by Jülich (1984) also seems to refer to the species *sensu typi*.

Basidiomes of the discussed polypore from German population were depicted by Jahn (1979), who named it '*Tyromyces subcaesius* for. *minor*' but never validly published the name. Vampola (1994) found an older name for this taxon, *Polyporus alni* Velen. However, it cannot be used as the basionym because the name is later illegitimate homonym of *Polyporus alni* Sorokin, which is considered to be taxonomically synonymous with *Ganoderma lipsiense* (Batsch) G. F. Atk. (Niemelä *et al.* 2001). Under these circumstances, Tuomo

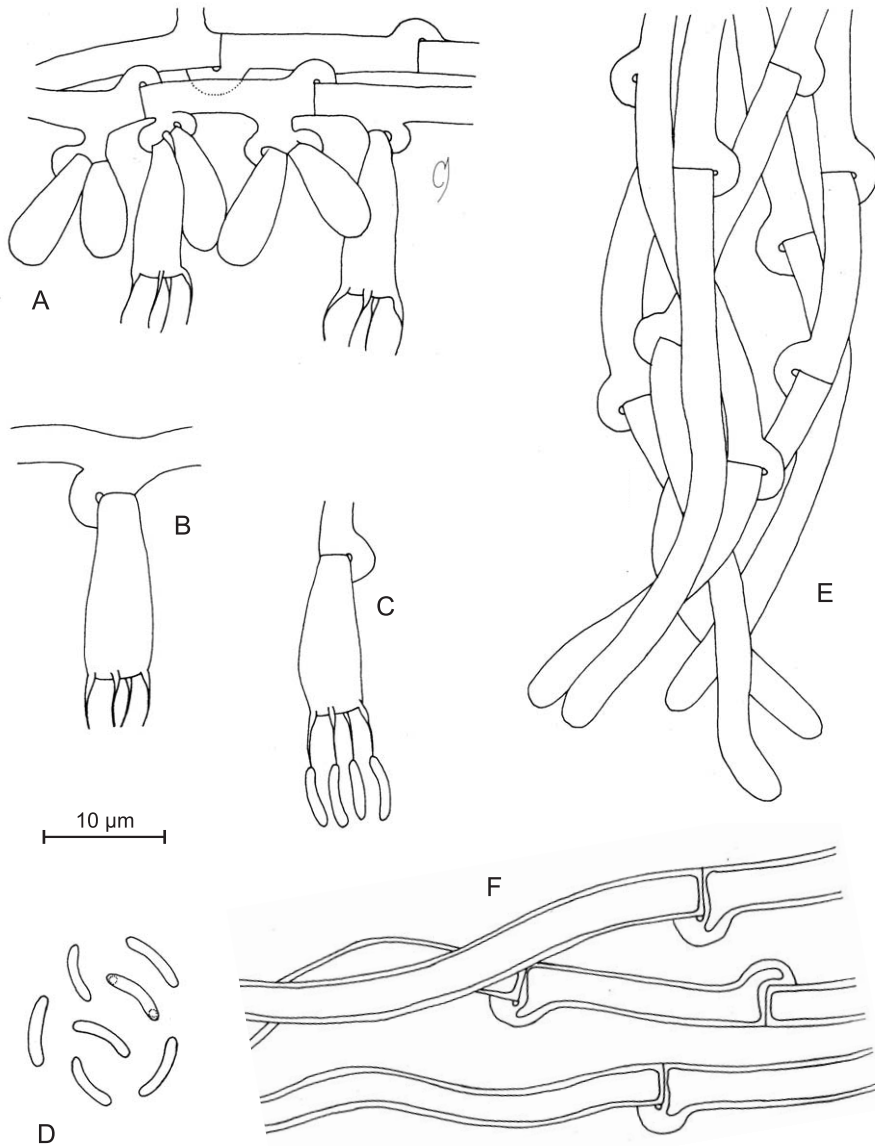
Niemelä and Petr Vampola (in Niemelä *et al.* 2001) formally described the species as new *Postia alni* Niemelä & Vampola using a Slovakian specimen as type.

The validity of the generic name *Postia* Fr. is problematic and variously interpreted by polyporologists. Gilbertson and Ryvarden (1987), Ryvarden (1991) and Ryvarden and Gilbertson (1994) were of the opinion that *Postia* Fr. is a *nomen nudum* and that *Oligoporus* Bref. is the oldest validly published generic name for the species causing brown rot and having a monomitic hyphal system with clamped hyphae. In opposition, Renvall (1992) considered *Postia* to be validly published. I rather agree with the former authors (especially with the reasoning of Ryvarden & Gilbertson 1994: 398) and combine *Postia alni* into *Oligoporus*.

***Oligoporus alni*** (Niemelä & Vampola) Piątek, *comb. nov.* (Fig. 1)

Basionym: *Postia alni* Niemelä & Vampola, *Karstenia* **41**(1): 7. 2001.

Basidiomes annual, small, usually pileate, semicircular, up to 3(–5) cm long and 2(–4) cm wide, sometimes effused-reflexed or even resupinate, soft and watery when fresh, hard when dry; upper surface azonate, not pubescent or only slightly tomentose, white with blue-grey tint, the



**Fig. 1.** *Oligoporus alni* (Niemelä & Vampola) Piątek, *comb. nov.* A – hymenium, B, C – basidia, D – basidiospores, E – hyphae from dissepiment edge, F – thicker-walled contextual hyphae (drawing by Jolanta Cabała from KRAM F-39715).

same color occurring on tubes but more intensive; pore surface white or greyish, pores circular, 4–5 per mm. Hyphal system monomitic; hyphae with clamp connections, jelly-like in KOH, sparsely branched, thin-walled and sometimes thicker-

walled, especially in context and upper part of dissepiment edge, 2.5–4.0 µm. Cystidia or other similar sterile elements absent. Basidia clavate, with four sterigmata and basal clamp, 10.0–15.0 × 3.5–5.0 µm. Basidiospores allantoid, thin-walled,

greyish, usually with two oil-drops, weakly amyloid in masses,  $5.2\text{--}6.2 \times 1.0\text{--}1.7 \mu\text{m}$ .

SPECIMENS EXAMINED. POLAND. POJEZIERZA POŁUDNIOWOBAŁTYCKIE LAKELANDS. Pojezierze Łagowskie lakeland: silva Łagów Lubuski dicta, distr. Świebodzin, ad stirpium putridum Fagi silvaticae, 4 Aug. 1980, leg. S. Domański (KRAM-Domański 20486), ad caudicem putrescentem Populi tremulae, 7 Aug. 1980, leg. S. Domański (KRAM-Domański 20487); POJEZIERZE WSCHODNIOPOMORSKIE LAKELAND. Pojezierze Starogardzkie lakeland: Orle nad Jezierzem Dużym Reserve, ca 21 km NW of Starogard Gdański, mixed forest, fallen branch of deciduous tree, 29 Sept. 1995, leg. H. Komorowska (KRAM F-36530, F-36857); BRAMA KRAKOWSKA GATE. Pomost Krakowski bridge: Kraków, Las Wolski forest, Paniańskie Skąty Reserve, *Tilio-Carpinetum*, fallen trunk of deciduous tree, 6 Sept. 1979, leg. W. Wojewoda (KRAM F-31374); Kraków, Las Wolski forest, near Paniańskie Skąty Reserve, *Tilio-Carpinetum*, fallen trunk of deciduous tree, 8 Oct. 1980, leg. W. Wojewoda (KRAM F-18435); Kraków, Las Wolski forest, NW slopes of Sowiniec hill, *Tilio-Carpinetum*, fallen trunk of deciduous tree, 29 Aug. 1987, leg. W. Wojewoda (KRAM F-30032); Kraków, Las Wolski forest, Łupany Dół, *Tilio-Carpinetum*, fallen trunk of *Carpinus betulus*, 6 Sept. 1979, leg. W. Wojewoda (KRAM F-31373); KOTLINA SANDOMIERSKA BASIN. Podgórze Bocheńskie piedmont: Lipówka Reserve, ca 30 km E of Kraków, *Tilio-Carpinetum*, fallen trunk of deciduous tree, 20 Oct. 1989, leg. W. Wojewoda (KRAM F-30731), 11 Oct. 1994, leg. W. Wojewoda (KRAM F-35691, F-35695), 19 Aug. 1996, leg. W. Wojewoda (KRAM F-37088), 4 Nov. 1996, leg. W. Wojewoda (KRAM F-37267); between Chobot and Ispina, ca 30 km E of Kraków, *Tilio-Carpinetum*, fallen branch of *Carpinus betulus*, 29 Sept. 1994, leg. W. Wojewoda (KRAM F-35645), 14 Nov. 1994, leg. W. Wojewoda (KRAM F-36171); Płaskowyż Tarnowski plateau: Tarnów, Krzyż, alder forest, fallen branch of *Sambucus nigra*, 20 Sept. 1999, leg. M. Piątek (KRAM F-39540); Nizina Nadwiślańska lowland: Tarnów, Las Mościcki forest (at Czarna Droga street), alder forest, fallen branch of *Prunus padus*, 29 Oct. 1999, leg. M. Piątek (KRAM F-39715).

In Poland, as elsewhere in Central and Northern Europe, *Oligoporus alni* has been misidentified as *Oligoporus subcaesius* and under this name or its taxonomic synonym *Postia subcaesia* (David) Jülich has been reported from some localities (e.g., Bujakiewicz & Lisiewska 1983;

Friedrich 1994; Bujakiewicz 1997; Flisińska 1997; Wojewoda *et al.* 1999; Bujakiewicz & Kujawa 2000; Komorowska 2000). This paper adds more sites but the species is still rarely collected in Poland. Apparently it is not so rare but merely undercollected. *Oligoporus alni* is usually found on deciduous trees in herb-rich forests, in Poland for instance in *Carici elongatae-Alnetum*, *Ficario-Ulmetum*, *Fraxino-Alnetum*, *Ribeso nigri-Alnetum* and *Violo odoratae-Ulmetum*, and also in mesic forests such as *Fago-Quercetum* and *Tilio-Carpinetum* but there occurring rather in moist places.

*Oligoporus alni* has been reported so far from Germany (Jahn 1979), the Czech Republic, Finland, Slovakia (Niemelä *et al.* 2001; Niemelä 2001) and Russian Karelia (Lositskaya 1997; Niemelä 2001; Niemelä *et al.* 2001), and is reported here for the first time from Poland. The real distribution of this fungus is uncertain, and knowledge of it requires, besides field studies, revision of herbarium specimens identified as *Oligoporus subcaesius* and older collections of *Oligoporus caesius*. The problem of specific characters separate between *Oligoporus alni*, *O. caesius* and *O. subcaesius*, especially in the case of intermediate specimens, needs further research on the molecular level. The following key is proposed based on morphological characters.

#### KEY TO EUROPEAN *OLIGOPORUS* WITH BASIDIOMES TINTED BLUE-GREY

1. Pilei usually more than 5 cm long and 2–3 cm thick with indistinct blue-grey tint .....  
..... *Oligoporus subcaesius*
- 1\* Pilei usually not exceeding 5 cm long and 1 cm thick with more or less blue-grey tint ..... 2
  2. Blue-grey tint of basidiomes not intensive, basidiospores  $5.2\text{--}6.2 \times 1.0\text{--}1.7 \mu\text{m}$ , usually on deciduous trees ..... *Oligoporus alni*
  - 2\* Blue-grey tint of basidiomes intensive, basidiospores  $4.5\text{--}6.0 \times 1.5\text{--}2.0 \mu\text{m}$ , usually on coniferous trees ..... *Oligoporus caesius*

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