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SHORT COMMUNICATION

Phaeocalicium populneum, a saprotrophic fungus rediscovered in Poland

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Abstract

The saprotrophic fungus *Phaeocalicium populneum* was noted from Poland only from one confirmed locality at the end of the 19th century, from the vicinity of Żagań (SW Poland). A new locality of this species is presented, which was found in 2017 on the bark of *Populus nigra*, within the Puszcza Darżłubska Forest in northern Poland. The species is common in Europe, and we consider that *Ph. populneum* is not rare in the country, but due to its small size, it is probably overlooked during field studies.

Keywords

Central Europe; Mycocaliciaceae; *Populus nigra*; species distribution

Dedicated to Professor Lucyna Śliwa

Genus *Phaeocalicium* A.F.W. Schmidt belongs to the Mycocaliciaceae. Currently, 23 species of saprotrophic and parasitic fungi are distinguished in this genus (Kirk, 2024), the occurrence of which is mainly limited to the northern hemisphere (Giavarini & Purvis, 2009). Single localities of *Phaeocalicium* species, belonging only to *Ph. compressulum* (Nyl. ex Szatala) A.F.W. Schmidt, have also been reported in Australia and New Zealand (McCarthy, 2023). Species of the genus *Phaeocalicium* grow on the bark of various trees and shrubs in Europe and North America, where we know the most species and localities. *Phaeocalicium* taxa were most often given with *Alnus*, *Populus*, and *Salix* bark (Tibell, 1975, 1996).

Phaeocalicium populneum (Brond. ex Duby) A.F.W. Schmidt (= *Calicium populneum* Brond.) is found only in the northern hemisphere. The most significant number of localities of this species have been recorded in western, central, and northern Europe and Canada. It is also reported from the U.S.A., Ukraine and Russia (European part, Siberia and Far East) (e.g., Aguire-Hudson & Spooner, 2016; Eichler et al., 2010; GBIF Secretariat, 2023; Haughland et al., 2018; Kondratyuk et al., 1996; Kuznetsova et al., 2012; McCune et al., 2020; McMullin & Lendemmer, 2013; Spribille et al., 2020; Stepanchikova et al., 2013; Suza, 1933; Tibell, 1975, 1979, 1986,

1996). It is also known from a few localities in northern Italy and Sardinia (Martellos et al., 2023).

The first information about the occurrence of *Phaeocalicium populneum* is found in the publication of Koerber (1865), after which it is cited by Stein (1879) and Migula (1931). The locality provided by Koerber (1865) was in the palace garden in Kobiela near Grodków (SW Poland), where this fungus grew on young specimens of *Sorbus aucuparia*. There is a reasonable suspicion that it belonged to a different species because, in the description, the author stated that the specimen found had 1-cell spores, much lower stems, narrower apothecia, which were dark brown to black. These features do not agree with the description of the *Phaeocalicium populneum* by Schmidt (1970) and Tibell (1996). The description in Koerber (1865) more closely corresponds to *Phaeocalicium compressulum* (Nyl. ex Vain) A.F.W. Schmidt, but this cannot be confirmed because herbarium specimens have not survived. The only reliable record of *Phaeocalicium populneum* in Poland was given by Hellwig (1897) from the vicinity of Żagań (SW Poland). This fungus grew on the fallen branches of *Populus italica* and the rotting shoots of *Vitis vinifera* by the road west of the city.

A new locality of *Phaeocalicium populneum* was found in the Puszcza Darżłubska Forest (northern Poland) in the forest belonging to the Wejherowo Forest District (54.7298056 N; 18.0589167 E; leg 15.VI.2017). The fungus was present on the bark of *Populus nigra*, which grew by the road between the villages of Kolkowo and Czymanowo, about 1 km SW from the southern shore of Jezioro Żarnowieckie Lake. The population was exceptionally wealthy. It had an area of several square decimeters, and thousands of fruiting bodies have been found. All diagnostic features of the collected specimens corresponded to the description of the species in the publications cited above. Herbarium materials can be found in WRSŁ-L-012888.

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