

PHAEOPHYSIA ENDOPHOENICEA (LECANOROMYCETES) – LICHEN SPECIES NEW TO BELARUS**Andrei TSURYKAU^{1,2*}, Aliaksandra ROPAT¹**¹F. Skorina Gomel State University, Department of Biology, Sovetskaja Str. 104, Gomel BY-246019, Belarus²Samara National Research University, Institute of Natural Sciences, Department of Ecology, Botany and Nature Protection, Moskovskoye shosse 34, Samara RU-443086, Russia

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Abstract

Tsurykau A., Ropat A., 2018: *Phaeophyscia endophoenicea* (Lecanoromycetes) – lichen species new to Belarus – Botanica, 24(1): 98–100.

Phaeophyscia endophoenicea (Harm.) Moberg was reported for the first time in Belarus. It was recorded growing on bark of *Carpinus betulus* in old-growth broadleaved forest in Gomel region, the southeastern part of Belarus.

Keywords: Ascomycota, biodiversity, distribution, foliose lichens, Gomel, Physciaceae.

The genus *Phaeophyscia* has been described and segregated from *Physcia* by MOBERG (1977) to accommodate species with greyish brown to brown thallus, ellipsoid pycnoconidia and lack of atranorin in upper cortex. To date, the genus comprises c. 40 species that are cosmopolitan or occur mostly in temperate regions of the Northern Hemisphere (EDWARDS & COPPINS, 2009).

So far, five *Phaeophyscia* species were known in Belarus, namely *P. ciliata* (Hoffm.) Moberg, *P. nigricans* (Flörke) Moberg, *P. orbicularis* (Neck.) Moberg, *P. pusilloides* (Zahlbr.) Essl. and *P. sciastra* (Ach.) Moberg (SAVICZ, 1911; KREYER, 1913; GOLUBKOV, 1987; YATSYNA & GOLUBKOV, 2009). However, the intensive field studies carried out in mixed and broadleaved woodlands in the south-eastern part of Belarus revealed material, which represented *Phaeophyscia endophoenicea* (Harm.) Moberg, a species new to Belarus. The material examined was deposited at GSU (Gomel State University). Lichen substances were investigated using thin-layer chromatography (TLC) in solvent system C following the methods described by ORANGE et al. (2001).

***Phaeophyscia endophoenicea* (Harm.) Moberg,** Symbolae Botanicae Upsalienses 22(1): 38 (1977).

Our samples have irregular thallus up to 1.5 cm in diameter, adnate lobes up to 2.0 mm wide, marginal, lip-shaped yellowish soralia, and contain skyrin in soredia and the lower medulla (Fig. 1).

The specimen was collected on the territory of the Čenki Forest (Fig. 2), which belongs to Korenevka Experimental Forestry of the Forest Institute, the National Academy of Sciences of Belarus. According to the data by the Forest Inventory Institution, the study



Fig. 1. Thallus of *Phaeophyscia endophoenicea* showing the presence of skyrin (orange pigment) in exposed soredia



Fig. 2. Location of the study area

area is mainly dominated by old-growth (140 y.o.) pedunculate oaks (*Quercus robur* L.). The other common trees are middle aged (50–70 y.o.) Norway maple (*Acer platanoides* L.), common hornbeam (*Carpinus betulus* L.) and Scots pine (*Pinus sylvestris* L.). Similar habitat requirements for *P. endophoenicea* have been previously mentioned by KUBIAK (2010).

According to EDWARDS & COPPINS (2009), *P. endophoenicea* inhabits mature trees in parklands as well as along woodland edges and shelter belts. In Belarus, the species was found on bark of *Carpinus betulus* growing along the forest edge near the road. In other European countries, *P. endophoenicea* is also confined to areas with well-preserved vegetation cover, constituting local refuges of biodiversity (MOTIEJŪNAITĖ, 2002), and is often considered as a threatened species (KUBIAK, 2010).

Specimen examined: Belarus, Gomel region, Gomel district, Čenki Forest, 0.7 km SW of Čenki village, 52°20'N, 30°57'E, on *Carpinus betulus*, A. Ropat, 26 August 2017.

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***PHAEOPHYSCIA ENDOPHOENICEA* (LECANOROMYCETES) – NAUJA KERPIŲ RŪŠIS BALTARUSIJOJE**

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Santrauka

Phaeophyscia endophoenicea (Harm.) Moberg rasta pirmą kartą Baltarusijoje. Kerpė aptikta ant *Carpinus betulus* žievės sename plačialapiame miške Gomelio regione, pietrytinėje šalies dalyje.