Notes on lichenicolous fungi of the Świętokrzyskie Mountains, Central Poland

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Abstract: Łubek, A. 2009. Notes on lichenicolous fungi of the Świętokrzyskie Mountains, Central Poland. – Herzogia **22**: 327–329.

Records of eight species of lichenicolous fungi found in the Świętokrzyskie Mts are presented. *Endococcus rugulosus* s.str. and *Phaeosporobolus usneae* are new to Poland and five species are new to the Świętokrzyskie Mts. *Lecidella elaeochroma* is a new host for *Feltgeniomyces luxemburgensis*.

Zusammenfassung: Łubek, A. 2009. Mitteilungen über lichenicole Pilze des Świętokrzyskie-Gebirges, Zentral-Polen. – Herzogia **22**: 327–329.

Es werden Funde von acht lichenicolen Pilzen des Świętokrzyskie-Gebirges präsentiert. *Endococcus rugulosus* s.str. und *Phaeosporobolus usneae* sind Neufunde für Polen, fünf Arten sind neu für die Świętokrzyskie-Berge. *Lecidella elaeochroma* ist ein neuer Wirt für *Feltgeniomyces luxemburgensis*.

Key words: Ascomycota, mitosporic fungi, lichens, biodiversity, Świętokrzyski National Park.

Introduction

During the last lichenological study on the lichen biota in Świętokrzyskie Mountains eight species of lichenicolous fungi were found. Two of them, *Endococcus rugulosus* s.str. and *Phaeosporobolus usneae*, are reported from Poland for the first time. Five species have not been noticed so far from the Świętokrzyskie Mts. The localities of investigated material are located in Świętokrzyskie Mts, and are given in ATPOL grid square system (see Cieśliński & Fałtynowicz 1993; also Kukwa et al. 2002). Specimens have been deposited in the Herbarium of the Jan Kochanowski University in Kielce (KTC).

The species

Cercidospora epipolytropa (Mudd) Arnold

New to the Świętokrzyskie Mts; hitherto known in Poland from the northern part of the country (Kukwa & Kowalewska 2007), Sudety Mts (Kossowska 2008) and the Carpathians (Alstrup & Olech 1996, Kukwa 2005, Kukwa & Czarnota 2006, Flakus 2007, Kukwa & Jabłońska 2008).

Host – *Lecanora polytropa* (apothecia).

SPECIMEN EXAMINED. **[Ee–77] –** Świętokrzyski National Park, Św. Krzyż forest district, Łysa Góra Mt., on rocks, 07.1958, leg. B. Halicz & S. Kuziel, det. A. Łubek (KTC–8145).

Cercidospora macrospora (Uloth) Hafellner & Nav.-Ros

New to the Świętokrzyskie Mts. In Poland reported so far from Sudety Mts (Stein 1979) and from one locality from the northern part of country (Kukwa 2005).

Host – *Protoparmeliopsis muralis* (thallus and apothecia).

SPECIMENS EXAMINED. **[Ee–77] –** Słupia Nowa village, on calcareous rocks, 07.1957, leg. B. Halicz & S. Kuziel, det. M. Kukwa (KTC–8142); Świętokrzyski National Park, Św. Krzyż forest district, Święty Krzyż, on rocks, 07.1958, leg. B. Halicz & S. Kuziel, det. M. Kukwa (KTC–8143); Św. Krzyż forest district, Droga Królewska, on stone, 06.1959 leg. B. Halicz & S. Kuziel, det. M. Kukwa (KTC–8144).

Cornutispora lichenicola D.Hawksw. & B.Sutton

New to the Świętokrzyskie Mts. It is a rare species in Poland reported only from few localities from the northern part of the country (Kukwa 2005, Kukwa & Czarnota 2006, Kukwa & Kowalewska 2007).

Host – *Parmelia saxatilis* (thallus).

SPECIMEN EXAMINED. **[Ee–76] –** Świętokrzyski National Park, Św. Katarzyna forest district, forest section no. C1, Agata boulder field, on *Sorbus aucuparia*, 25.09.2000, leg. A. Donica, det. M. Kukwa (KTC–8138).

Endococcus rugulosus Nyl. s.str.

New to Poland. So far only *E. rugulosus* s.lat. was reported from Poland growing on non-verrucarioid lichens (e.g. Kukwa & Czarnota 2006). According to Sérusiaux et al. (1999) *E. rugulosus* s.str. is confined to *Verrucaria* spp. The studied specimen has half-immersed perithecia, up to 170 µm in diam. and brown, verruculose spores, 10–11 × 5.5–6 µm. It agrees with the characteristic of the species provided by Sérusiaux et al. (1999).

Host – *Verrucaria* sp. (thallus).

SPECIMEN EXAMINED: **[Ee–77] –** Świętokrzyski National Park, Chełmowa Góra forest district, Zapusty range, limestone outcrops, on limestone, 31.08.2001, leg. A. Donica (KTC–8146).

Feltgeniomyces luxemburgensis Diederich

New to the Świętokrzyskie Mts. In Poland the species has been reported so far only from one locality (Kukwa & Czarnota 2006). *Lecidella elaeochroma* is a new host for the fungus.

Host – *Lecidella elaeochroma* (thallus).

SPECIMEN EXAMINED. **[Ee 76] –** Świętokrzyski National Park, Św. Katarzyna forest district, forest section no. 138, boulder field, on *Acer pseudoplatanus*, 25.09.2000, leg. A. Donica, det. M. Kukwa (KTC–8140).

Muellerella lichenicola (Sommerf.: Fr.) D.Hawksw.

The species has been reported from Świętokrzyskie Mts by Łubek (2002).

Host – *Rinodina calcarea* (thallus).

SPECIMEN EXAMINED. **[Ee–77] –** Świętokrzyski National Park, Chełmowa Góra forest district, Zapusty range, outcrops limestone, on limestone, 31.08.2001, leg. & det. A. Łubek (KTC–8146, in specimen of *Endococcus rugulosus* s.str.).

Phaeosporobolus usneae D.Hawksw. & Hafellner

New to Poland.

Hosts – *Parmelia saxatilis, Platismatia glauca, Pseudevernia furfuracea, Usnea filipendula* (thalli).

SPECIMENS EXAMINED. **[Ee–76] –** Świętokrzyski National Park, Św. Katarzyna forest district, Łysica Mt., on *Abies alba*, 07.1959, leg. B. Halicz & S. Kuziel, det. A. Łubek (KTC–8136); Św. Katarzyna forest district, forest section no C1, Agata boulder field, on *Sorbus aucuparia*, 25.09.2000, leg. & det. A. Łubek (KTC–8138, in mixed infections with *Cornutispora lichenicola*), 8139); **[Ee–77] –** Świętokrzyski National Park, Chełmowa Góra forest district, Chełmowa Góra Mt., on *Larix decidua* subsp. *polonica*, 07.1956, leg. B. Halicz & S. Kuziel, det. A. Łubek (KTC–8137); Św. Krzyż forest district, by the path to Św. Krzyż, on *Abies alba*, 07.1956, leg. B. Halicz & S. Kuziel, det. A. Łubek (KTC–8135).

Zwackhiomyces lecanorae (Stein) Nik.Hoffm. & Hafellner

New to the Świętokrzyskie Mts. In Poland the species has been recorded so far only from Sudety Mts (Stein 1879, Kossowska 2006).

Host – *Lecanora dispersa* group (thallus and apothecia).

SPECIMEN EXAMINED. **[Ee–77] –** Słupia Nowa village, on stone, 07.1956, leg. B. Halicz & S. Kuziel, det. M. Kukwa (KTC–8141).

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