We collected several specimens of Protoparmelia hypotremella van Herk, Spier & V. Wirth during lichenological investigations in the Las Bielański Nature Reserve in Warsaw 2009, and our detailed examination also turned up Sphinctrina anglica Nyl. in this material. S. anglica is an inconspicuous calcicolous fungus characterized by short-stalked black apothecia. The species is probably a highly specialized parasite restricted to lichens of the genera Protoparmelia (Aptroot et al. 1997). S. anglica was known previously in Poland from only two older reports (Stein 1879; Czyżewska 1981; see also Czyżewska & Kukwa 2009). P. hypotremella has been recorded frequently but probably is still overlooked or not distinguished in Poland because its sterile thalli are fine and inconspicuous. These two interesting taxa are presented here.

Sphinctrina anglica Nyl.

For the species description see Löfgren and Tibell (1979) and Tibell (1999).

Sphinctrina anglica was first found in Poland by Stein (1879) in Pruszków near Opole (SW Poland). The second locality of the species was recorded by Czyżewska (1981) from the Niecka Włoszczowska basin in the central part of the country (Fig. 1). In both cases it was considered a lichenized fungus. The lichenicolous behavior of the species in Poland was first mentioned by Kukwa (2000; see also comments under the species by Czyżewska & Kukwa 2009).

The biology of Sphinctrina anglica was long unrecognized. According to recent reports it is an obligatory parasitic fungus occupying thalli of Protoparmelia oleagina and P. hypotremella (e.g., Aptroot et al. 1997; Kukwa 2000). Its occurrence depends on the habitat preferences of its host. S. anglica is reported mostly from lichens growing on the bark of trees, and also on wood (Santesson et al. 2004; Svensson et al. 2005; Sribille et al. 2008).
Sphinctrina anglica is reported generally from Western and Central Europe and North America (Tibell 1994, 1999). It is also known from India (Saxena et al. 2007) and Africa (Giavarini & Purvis 2009). In Europe, besides Poland it has been reported from Austria (Hafellner & Türk 2004), the Czech Republic (Vězda & Liška 1999), Finland and Sweden (Santesson et al. 2004), Germany (Scholz 2000), Great Britain (Giavarini & Purvis 2009), the Netherlands (Aptroot et al. 1997), Romania (Ciurchea 2009), Spain (Llimona & Hladun 2001) and Ukraine (Kondratyuk et al. 1998).

For the species description see Aptroot et al. (1997) and Brodo and Aptroot (2005).

Protoparmelia hypotremella was known previously from ten localities in Poland (Fig. 1), distributed in the northern (Kubiak 2005; Kukwa 2005; Szymczyk & Zalewska 2008), central (Czyżewska 1981, 2003; Kukwa 2000; Kubiak 2009) and southern parts of the country (Kościelniak & Kiszka 2006; Sliwa 2006; Czarnota & Wojnarowicz 2008).

Protoparmelia hypotremella is a toxitolerant crustose lichen, reported mostly on the bark of mature wayside trees. In Western Europe it is spreading very rapidly in favorable habitats (Aptroot et al. 1997). Interestingly, at the newly discovered localities of P. hypotremella in the Las Bielański Nature Reserve it was recorded exclusively on twigs and branches of old oaks. It seems that P. hypotremella is a regular constituent of canopy lichen communities (especially in old-growth forest stands). That habitat was rarely studied in the past, and this is probably why the species has not been recorded often. Associated species found with P. hypotremella include Cladonia sp., Lecanora conizaeoides, Lepraria incana, Parmelia saxatilis, P. sulcata and Scoliciosporum sarothamnii. Most of them are rather acidophilous lichens (van Herk 1999, 2002). This suggests that P. hypotremella found favorable conditions in the reserve due to acidification of the environment and the disappearance of species more sensitive to air pollution.

Protoparmelia hypotremella is known from Western and Central Europe as well as North America (Aptroot et al. 1997; Brodo & Aptroot 2005). In Europe, besides Poland it has been reported from Austria (Hafellner & Türk 2001), Belgium (Diederich & Sérusiaux 2000), Germany (Scholz 2000), France (Aptroot et al. 2001), the Netherlands (Aptroot et al. 2004), Switzerland (Clerc 2004) and Sweden (Santesson et al. 2004). The species is also known from Canary Islands (Boom 2007).

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REFERENCES


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