

## Some mycogenous fungi from Poland

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In the present paper the results of earlier studies on mycogenous fungi which were gathered occasionally are summarized. Fifteen species, previously Pyrenomyces s.l., have been found growing on other fungi. *Immotia hypoxylon* and *Lophiostoma polyporicola* are new species to the Polish mycoflora. *Sphaeronaemella Kulczyńska* described by K. Ruppert (1912) is considered to be *Eleuteromyces subulatus*. Relatively high number of fungi inhabiting stromata of *Diatrypella favacea* is probably connected with its early colonization of the Polish area.

Key words: Mycogenous fungi.

### INTRODUCTION

Fungi are capable growing on different types of substrates such as living and dead basidiomata, ascocarps and conidiomata of other fungi. There are many papers in the Polish mycological literature which reported the occurrence of mycogenous fungi. Zabłocka (1931), Skirgielło (1965) and Krawczykyszyn (1969) reported the localities of *Xerocomus parasiticus* from Poland. Apart from them parasitic Tremellales (Wojewoda, 1975, 1977, 1978; Puzar, 1986) and some Dematiaceae (Borowska, 1986) were noted. Pruszynska-Gondek (1974, 1976) reported the occurrence of *Fusarium graminearum* and *Trichothecium roseum* on *Uromyces fabae*. Chelowska and Kawana (1986, 1988) found *Fusarium heterosporum* and *F. avenaceum* on sclerotia of *Claviceps purpurea*. Some information on the occurrence of mycoparasitic species is provided by Grzywacz (1974). Fungicolous Pyrenomyces are reported occasionally in many papers, e.g. Schroeter (1908), Eichler (1904, 1907), Ruppert (1912), Pięcka (1957), Bitner (1953), Ławrynowicz (1970), Truszkowska, Chlebicki (1983); Chlebicki (1988, 1989, 1992) and Skirgielło, Mułenkowa, Sadowska (1992). However there are some papers in which these microfungi

have been elaborated with special attention (Seeler, 1943; Ricksson, 1966; Pirozynski, 1973; Rogerson, Samuel, 1985, 1989; Samuel, 1988; Udagawa, Horie, 1971).

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## LIST OF SPECIES

### ASCOMYCOTINA

#### *Chaetosphaeria myriocarpa* (Fr.: Fr.) Booth

Facultative fungicolous saprophyte. Białowieża National Park, section 256, H-06, Querco-Piceetum, on dead stromata of *Pyrenomyces*, 15 May 1990, leg. A Chlebicki, KRAM-Chleb. 41 319; Boroowska (1986) noted that its anamorph – *Chloridium clavaeforme* (Pr.) Gams et Hol.-Jech. – was sometimes been isolated from old stromata of *Diatrypales*. Heller (1991) and Luschka (1993) found it on dead ascocarps of *Melogramma spiniferum* in Bayerischer Wald National Park in Germany.

#### *Eutypa lejoplaca* (Fr.: Fr.) Cooke

Facultative fungicolous saprophyte. Białowieża National Park, section 256, C-07, Tilio-Carpinetum, at the top and inside old ascocarps of *Splachnionema pupula*, 9 Oct. 1990, leg. A. Chlebicki, KRAM-Chleb. 41 512. This diatrypoid ascomycetes is reported to occur on decorticated branches of *Acer platanoides* and *Carpinus betulus* (Chlebicki, in press).

*Hypomyces papyraceus* (Ell. et Holw.) Seaver (Bas.: *Hypocrea papyraceus* Ellis et Holw. – Syn.: *Hypomyces arachnoideus* Schroeter, *Hypomyces stipitata* (Fuckel) Rogerson).

Obligatory fungicolous parasite. This fungus gathered by T. Helwig in environs of Zielona Góra, 16 Oct. 1989, on stromata of *Ustulina deusta*. Schröter (1908) described it as a new species. In 1968 G. Arnولد revised this material and considered it as *Arachnocrea papyracae* (Ell. et Holw.) E. Müller, WSRL!

*Immotthia hypoxylon* (Ellis et Everh.) Barr., Mycotaxon 29: 504, 1987. (Bas.: *Amphisphaeria hypoxylon* Ellis et Everh. J. Mycol. 2: 41, 1886).

Obligatory fungicolous saprophyte. Puszta Augustowska Forest, Dworczyk near Strzelcowizna, at on the bank of the Czarna Hańcza River, Circaco-Alnetum, on stromata of *Hypoxylon multifforme* and surrounding blackened wood, 28 July 1990, leg. A. Chlebicki, KRAM-Chleb. 41 762. Ascomata gregarious (Fig. 1), superficial, 210-230(250) µm diam. Ascii octospores ascospores bright brown, one septate, slightly constricted 13-15 x 4.5-5.5 µm. It has been recorded from North America (Barr, 1987) and Sweden (Ricksson, 1992).

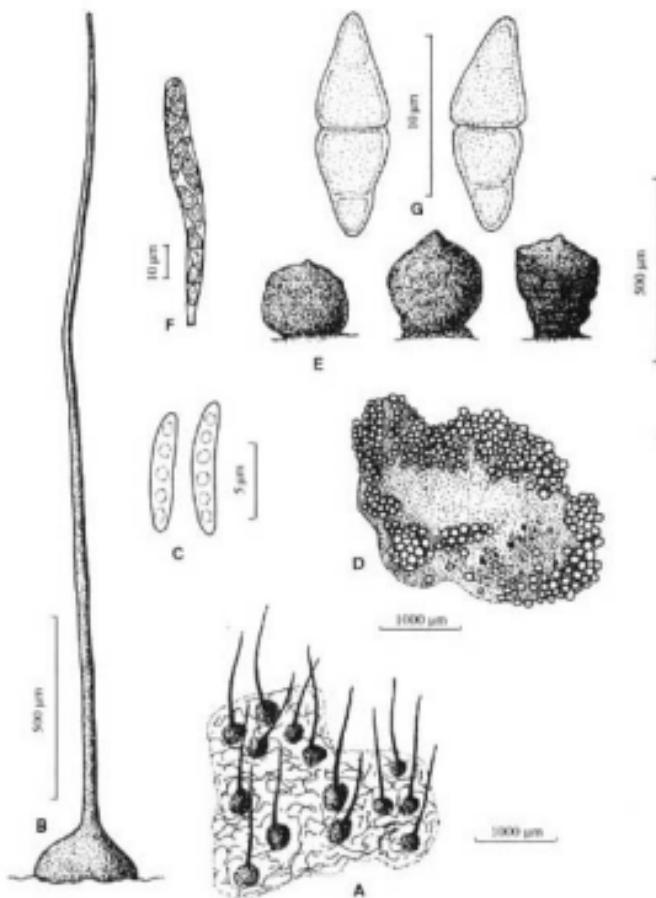


Fig. 1. *Ophiostoma polyporicola* Const. et Rym.

A - top view of gregarious perithecia embedded in old basidiocarp of *Oligosporus stipticus*, B - perithecium with long beak, C - ascospores, POZM, leg. A. Bujakiewicz; *Immotia hypoxylon* (Ellis et Everh.) Barr, D - top view of gregarious ascocarps covered surface of stroma of *Hypoxylon multifforme*, E - various shapes of ascocarps (side view), F - ascus, G - two-celled ascospores, KRAM-Chleb. 41 762.

#### *Melanomma pulvis-pyrius* (Pers.: Fr.) Fuckel

Facultative fungicolous saprophyte. Bialowieża National Park, section 256, D-07 *Carici elongatae-Alnetum*, on old stromata of *Diatrypella favacea* on *Betula pubescens*, 19 Nov. 1987, leg. A. Chlebicki; Puszcza Augustowska Forest, "Perkuć" Reserve, on wood and old stromata of *Diatrypella favacea* on *Betula pendula*, 16 Aug. 1991, leg. A. Chlebicki, KRAM-Chleb. 41 999. It is a very common lignicolous ascomycete previously found on decorticated branches and logs of different trees.

*Nectria episphaeria* (Tode: Fr.) Fr.

Obligatory fungicolous saprophyte. Białowieża National Park: section 256, on old conidiomata and stromata, 75 samples; on *Coryneum brachyurum* (on issues of conidia), *Cytospora abietis*, *C. nivea*, *C. purinosa*, *Diatrype decorticata*, *D. stigma*, *D. subffixa*, *D. undulata*, *Diatrypella favacea*, *Hypoxyylon fuscum*, leg. A. Chlebicki, KRAM-Chleb. 40 975, 40 977, 40 997, 41 018, 41 021. Puszcza Augustowska Forest: Dworczyk near Strzelcowizna, on the bank of the Czarna Hańcza River in ecotone between *Tilio-Carpinetum* and *Circae-Alnetum*, on dead ascocarps of *Melanomma pulvis-pyrius*, 28 July 1990, leg. A. Chlebicki, KRAM-Chleb. 41 770; Kozi Rynek Reserve, *Carici elongatae-Alnetum*, on dead stromata of *Pseudovalsa lanciformis* on *Betula pubescens*, 4 August 1990, leg. A. Chlebicki, KRAM-Chleb. 41 785. Biebrza National Park: Czerwone Bagno Reserve, *Tilio-Carpinetum*, on dead stromata of *Hypoxyylon fuscum*, 18 August 1991, leg. A. Chlebicki, KRAM-Chleb. 42 052; on dead conidiomata of *Cytospora purinosa* on *Fraxinus excelsior*, 18 August 1991, leg. A. Chlebicki, KRAM-Chleb. 43 094 and conidiomata of *Coryneum brachyurum* on *Betula pendula*, leg. A. Chlebicki, KRAM-Chleb. 43 091; It is commonly found and recovered on old ascomata of different *Pyrenomyctetes* (Eichler, 1904; Schröter, 1908; Truskowska, Chlebicki, 1983; Chlebicki, 1989; Skirgieldo, Mullenko, Sadowska, 1992).

*Nectria episphaeria* was investigated in the permanent plot V-100 in Białowieża National Park. It is the most common mycophilus ascomycete in Białowieża. Its distribution correlates with the wet patches of *Tilio-Carpinetum* and rarely the ecotone areas (Fig. 2).

*Nectria magnusiana* Rehm ex Sacc.

Obligatory fungicolous saprophyte. Sobibór Landscape Park: Brudzieniec Reserve, by a lake side, on dead stromata of *Diatrypella favacea* on branches of *Betula* sp. disturbed by a beaver, 20 April 1986, leg. A. Chlebicki, KRAM-Chleb. 40 870. Białowieża National Park: section 256, D-07, *Carici elongatae-Alnetum*, on old stromata of *D. favacea*, 19 Nov. 1987, leg. A. Chlebicki, KRAM-Chleb. 41 163, ascii 76-86 x 7.6-9.6 µm, ascospores 11.5-14 µm x 5.7-6.5 µm; Knyszyn Landscape Park: Jesionowe Góry Reserve, *Circae-Alnetum*, on old stromata of *D. favacea* on branches of *Betula pubescens*, 5 March 1995, leg. A. Chlebicki. Schröter (1908) found it on *D. quercina* in Lower Silesia.

*Nitschkia parasitans* (Schw.) Nannf.

Mycoparasite (hyperparasite). This fungus has been found only in Białowieża National Park on living stromata of *Nectria cinnabarina* (Fig. 3), leg. A. Chlebicki, KRAM-Chleb. 40 990, 40 045 (Chlebicki, 1992).

*Ophiostoma polyporicola* Const. et Ryman, Mycotaxon, 34: 637, 1989

Obligatory fungicolous saprophyte. Perithecia black, partially embed or rarely superficial 380-420 µm diam. (Fig. 1), densely covering surface of substratum (Fig. 1), beaks central, straight 1000-2000 µm long, wider near base - 42-50 µm, slightly

tapering to the truncated apex, 10-11 µm diam, ascospores (5.7)6-8 x 1.5-1.8 µm, hyaline, slightly curved (Fig. 1).

Puszcza Notecka Forest: Słomowo, nadl. Kąty, Melico-Fagetum, on dead pileus of *Oligoporus stipticus*, 20 Oct. 1990, leg. A. Bujakiewicz, POZM.

It was noted as saprophyte on basidiomata of *Fomitopsis pinicola* and *Oligoporus stipticus* in Sweden and Finland (Constantinescu, Ryman, 1989). Recently Luschka (1993) has reported some collections from Bayerischer National Park on *F. pinicola*, *O. stipticus* and *Antrodia serialis*. Ascospores in the type collection are distinctly smaller 3.3-5.5 x 1.1-1.3 µm and lunate with rounded ends. We have not found differences in other characters. Since the variability of ascospore length of *O. poly-porica* is poorly known we temporarily consider it to be the specimen with long ascospores.

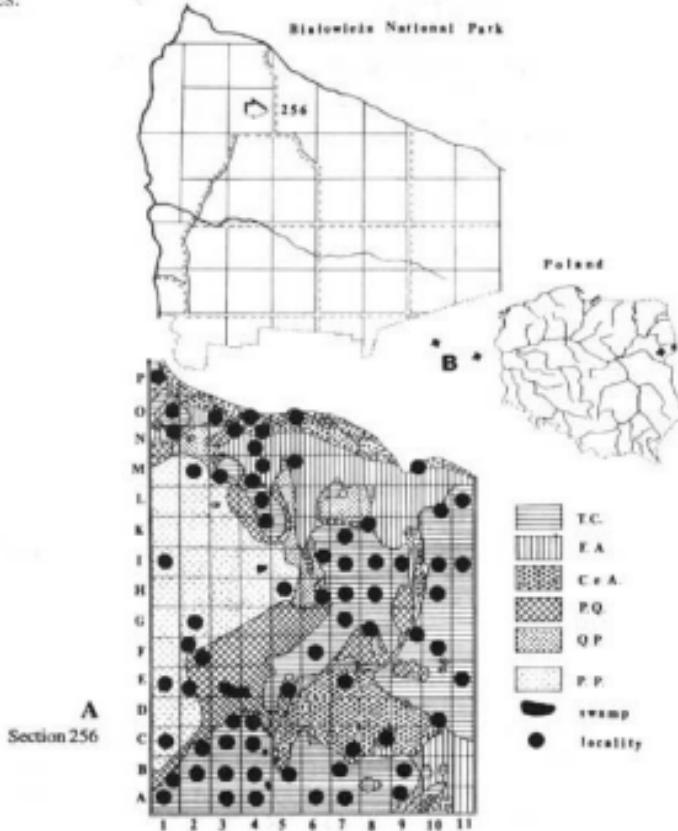


Fig. 2. Distribution of *Nectria episphaeria* in the permanent plot in Bialowieza National Park  
 A - section 256 (the permanent plot), B - location of section within the Park (Poland); T.C. - Tilio-Carpinetum, F.A. - Fraxino-Alnetum, C.e.A. - Carici elongatae-Alnetum, P.Q. - Pino-Quercetum, Q.P. - Querco-piceetum, P.P. - Peucedano-Pinetum.

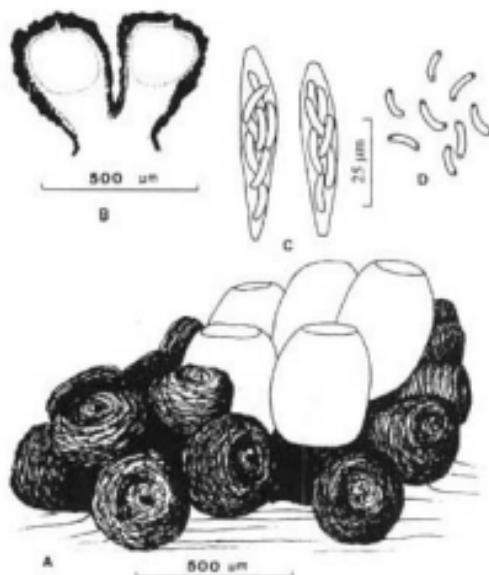


Fig. 3. *Nitschkia parasitans* Nannf.

A - perithecia on stroma of *Nectria cinnabarinina*, B - vertical section of petrihecia, C - ascii, D - ascospores. KRAM-Chleb. 40 990.

#### *Peckiella luteovirens* (Fr.: Fr.) Maire

Mycosparasite. Białowieża National Park, section 256, A-03, *Tilio-Carpinetum*, on pileus of *Lactarius* sp., 13 Aug. 1987, leg. A. Skirgiello. It is a mycoparasite of higher Basidiomycetes, found mainly on *Russula* and *Lactarius*.

#### *Pseudotrichia mutabilis* (Pers.: Fr.) Wehm.

Obligatory fungicolous saprophyte. It was noted on old stramata of *Diatrypella favacea* (Fig. 4) in the S-slope of Babia Góra (West Carpathians Mts.), KRAM-Chleb. 40 729 (Chlebicki, 1989) and on very old stromata of *Biscogniauxia marginata* in Lithuania, KRAM-Chleb. 42 044 (Chlebicki et Bujakiewicz, 1994).

#### *Tubeufia cerea* (Berk. et Curtis) Hochnef

Obligatory fungicolous saprophyte. Białowieża National Park, section 256, *Tilio-Carpinetum*, on old stromata of *Diatrypella verrucaeformis*, 29 Oct. 1988, leg. A. Chlebicki, KRAM-Chleb. 41 142, A-09, on periderm and old stromata of *Pseudovalsa lanciformis* on *Betula* sp., 11 Oct. 1990, leg. A. Chlebicki, KRAM-Chleb. 41 498; Puszcza Romincka Forest, "Boczki" Reserve, *Tilio-Carpinetum*, on dead stromata of *Diatrype undulata* on *Betula pendula*, 9 August 1991, leg. A. Chlebicki, KRAM-Chleb. 43 019; Ascii: 71-80 x 9-10 µm, ascospores 36-48 x 3-3.8 µm. Schroeppel (1908) described it as *Calonectria belonospora* and found it on stromata of *Diatrype stigma*.

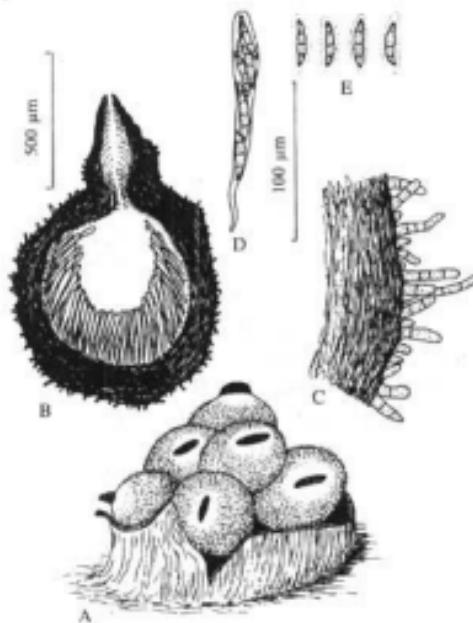


Fig. 4. *Pseudotrichia mutabilis* (Pers.: Fr.) Wehm.

A - ascocarps on old stromata of *Diatrypella favacea*, B - vertical section of ascocarp, C - tomentose surface of ascocarp, D - ascus, E - ascospores, KRAM-Chleb. 40 729

#### BASIDIOMYCOTINA

*Tremella globospora* Reid.

Mycoparasite. Babia Góra National Park, Sorbo-Aceretum carpaticum, on stroma of *Diatrype disciformis* on *Acer pseudoplatanus*, 4 May 1988, leg. A. Chlebicki, KRAM-Chleb. 40 936; Wójcikowa (1977) found it on dead twigs of *Acer* which were covered by old ascocarps of *Pyrenomyctetes*.

#### DEUTEROMYCOTINA

*Chalara inflatipes* (Pr.) Sacc.

Facultative fungicolous saprophyte. Białowieża National Park, section 256, E-03, Pino-Quercetum, on old console of *Polyporaceae*, 20 Nov. 1987, leg. A. Chlebicki, KRAM-Chleb. 41 155. Conidia hyaline, 5-celled 28-36 x 5-7 µm. Borowska (1986) found it on the bark of *Quercus* and *Alnus* in Poland. Species similar to *Chalara insignis* (Sacc. Rouss. et Bomm.) Hughes which has been noted on old console of *Poria* (Borowska, 1986).

*Eleutheromyces subulatus* (Fr.) Fuckel (Syn.: *Sphaeronaemella Kulczyńskaiana* Roupert, Spraw. Kom. Fizyogr. 46: 97, 1912).

Obligatory fungicolous saprophyte. Roupert (1912) described a new pycnidial fungus, *Sphaeronaemella Kulczyńskaiana*. The genus *Sphaeronaemella* was formed by Karsten (1884) and mistakenly placed in *Fungi imperfecti*. However the type species originally collected by Karsten is considered to be an ascomycete genus in the *Amphisphaerales* (Cannan, Hawksworth, 1982). Karsten's classification of *Sphaeronaemella* was the cause of the misguided diagnosis of Roupert. The Roupert's diagnosis and figures suggests *Eleutheromyces subulatus*. The material consists of few ambercoloured pycnidial conidiomata with long neck. Conidia hyaline 4.8-5.4 x 1.5-1.9 µm with unbranched appendages 3-10 µm long (Fig. 5).

Tatry Mts., Lejowa Valley, on dead basidiomata of *Sarcodon imbricatus* (as *Hydnum imbricatum*) and *Agaricus* sp., Sept. 1910, 1911, leg. K. Roupert, KRAM-001542! It was collected in Poland by Eichler (1904) on dead pileus of *Hypholoma fasciculare* in Międzyrzec Podlaski (E-Poland). Schröter (1908) reported it on *Pholiota mutabilis*, *Armillaria mellea*, *Pholiota squarrosa* and *Hypholoma fasciculare* in Lower Silesia.

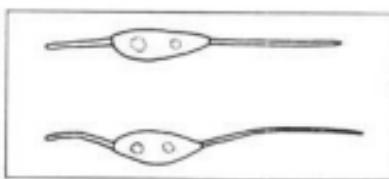


Fig. 5. *Eleutheromyces subulatus*: conidia

#### *Petrakia irregularis* van der Aa.

Facultative fungicolous saprophyte. Roztocze National Park (SE-Poland), Kosobudy, *Dentorio glandulosae-Fagetum*, on old stromata of a member of *Dioptales*, 3 July 1984, leg. A. Chlebicki, KRAM-Chleb. 40 324 d (Fig. 6) (Chlebicki, 1988). It was collected for the first time by van der Aa (1968) which isolated it from dead branches of *Acer pseudoplatanus*.

*Sepedonium chrysospermum* (Bull.:Fr.) Link (Teleomorph.: *Apiocrea chrysosperma* (Tul.) H. Sydow et Sydow).

Mainly mycoparasite. Białowieża National Park: 11 Aug. 1982, leg. A. Skirgielko, WA; section 256, on *Xerocomus chrysenteron*, 14 Aug. 1988, leg. A. Skirgielko, WA; section 256, on *Paxillus involutus*, 27 Oct. 1988, leg. A. Skirgielko, WA; "parasitans in *Agrico* sp.", Aug. 1922, leg. W. Siemaszko, WA; Bieszczady Mts: Jawornik Mt, 8 Aug. 1958, leg. A. Skirgielko, WA; Magurzec Mt, 23 Aug. 1965, leg. A. Skirgielko, WA; Puszcza Augustowska Forest: Kozi Rynek Reserve, 18 Aug. 1964, leg. A. Skirgielko, WA; Starożyn Reserve, on *Xerocomus chrysenteron*, 22 Aug. 1964, leg. A. Skirgielko, WA; Puszcza Piska Forest: Ruciane, 7 Sept. 1954, leg. A. Skirgielko, WA; Wierzba, 21 Aug. 1957.

Exsic: Mazowsze: Warszawa, 18 June 1976, leg. J. Gloza, WA; Małopolska: Tarnów, Sept. 1949, leg. W. et J. Zabłocki, WA; Zagórzany, Sept. 1907, leg.

K. Rouppert, KRAM 8601; Tuszyna, July 1908, leg. K. Rouppert, KRAM 8603; Roztoka Valley, 13 Aug. 1909, leg. K. Rouppert, KRAM 8604; Rymanów Zdrój, leg. K. Stecki, KRAM 8602, 8642 (on *Boletus* sp.); Silesia: Zielona Góra, 19 Sept. 1885, leg. Th. Hellwig, WRSL; on *X. chrysenteron*, Wrocław Botanical Garden, June 1880, leg. J. Schroeter, WRSL; Oborniki, leg. J. Schroeter, WRSL, Osobowice near Wrocław, leg. J. Schroeter, 2 Oct. WRSL.

It is a common species throughout Poland. Hennings (1892) found it in Świecie. Schröter (1908) reported it from Zielona Góra voivodeship, Lower and Upper Silesia (31 localities) on *Boletus* spp., *Xerocomus chrysenteron*, *Hydnus* sp., *Paxillus involutus* and *Octaviania asterospora*. However only seven sheets with this fungus were deposited in herbarium WRSL. Teodorowicz (1933) listed Niechowo near Gniezno. Bitner (1953) listed many localities from Poland: Puszcza Piska Forest: Głodowo, Niedźwiedzi Kąt, Bagnowo Małe, Grajewo: Klimaszewnica; Tatry National Park (Mała Łąka Valley, Jaszczyrkówka); Zakopane: Parcele; environs of Kłodzko in Lower Silesia and Zagórzany (leg. B. Namysłowski). The fungus has been noted by Bitner (l.c.) on *Boletus* spp., *Lactarius* spp. and *Paxillus involutus*. Apart from them Bitner (l.c.) described a new form *Hypomyces chrysospermus* forma *edulis* Bitner which occurs on *Boletus edulis* only. Truskowska et Kalinská (1979) isolated this fungus from the soil in Pawłowice near Wrocław.

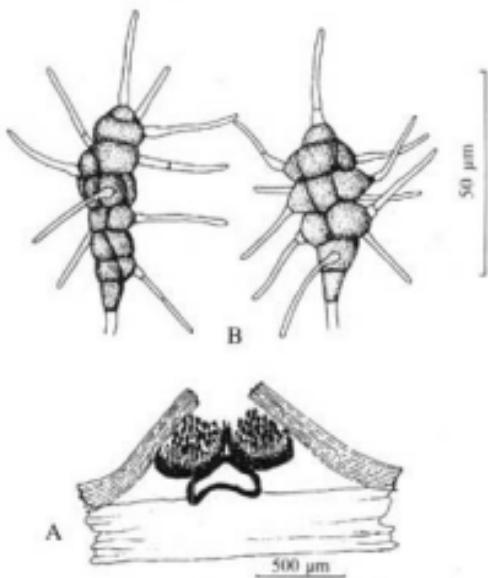


Fig. 6. *Petranka irregularis* van der Aa

A - vertical section of coremia developed on dead perithecia of *Diaporthe* sp.. B -multiseptate conidia with hyaline appendages, KRAM-Chleb. 40324 d



Fig. 7. Distribution of *Sepedonium chrysospermum* in Poland  
Open symbols designed new localities

## DISCUSSION

Mycogenous fungi were noted on dead conidiomata, ascornata, basidiomata and issues of conidia. All the collected species have been assigned to three ecological groups: facultative fungicolous saprophytes, obligatory fungicolous saprophytes and mycoparasites (Tab. 1). Fungicolous saprophytes usually occur on many species of different fungi, but some species are connected with strictly delimited range of species or genus as *Nectria magnusiana*; among them are occasionally found saprophytes known such as lignicolous fungi: *Chaetosphaeria myriocarpa*, *Melanomma pulvis-pyrius*, *Eutypa lejoplaca*. Ascocarps of fungicolous *Pyrenomyctes* previously grew on the external part of frutification structures. The occurrence of *Eutypa lejoplaca* inside the old ascocarps of *Splachnnonema pupula* is exceptional and noteworthy. The above mentioned microfungi belong to the group of facultative fungicolous saprophytes. Mycoparasites are represented by *Sepedonium chrysospermum*, *Peckialla luteovirens*, *Nitschkia parasitans* and *Tremella globospora*. Bittner (1953) divided mycoparasitic fungi into two groups: obligatory parasitic species and facultative parasitic species. He indicated *Sepedonium chrysospermum* as obligatory parasitic species.

Table 1  
Ecological groups of microfungi

Species	Host
<b>FACULTATIVE FUNGICOLOUS SAPROPHYTES</b>	
<i>Chalara inflatipes</i>	dead console of <i>Polyporaceae</i>
<i>Chaetosphaeria myriocarpa</i>	dead stromata of <i>Pyrenomycetes</i>
<i>Eutypa lejolifaca</i>	dead ascocarps of <i>Splachnchonema pupula</i>
<i>Melanomma pulvis-pytius</i>	dead stromata of <i>Diatrypella favacea</i>
<i>Petrakia irregularis</i>	dead stromata of <i>Diaporthales</i>
<b>OBLIGATORY FUNGICOLOUS SAPROPHYTES</b>	
<i>Cleistothecomyces subulatus</i>	dead basidiomata of <i>Sarcodon imbricatus</i>
<i>Immotthia hypoxylon</i>	dead stromata of <i>Hypoxylon multifforme</i>
<i>Nectria episphaeria</i>	dead conidiomata and stromata of <i>Coryneum brachytrum</i> , <i>Cytopsora abietis</i> , <i>C. nivea</i> , <i>C. purinosa</i> , <i>Diatrype stigma</i> , <i>D. decorticata</i> , <i>Diatrypella favacea</i> , <i>Eutypella quaternata</i> , <i>Hypoxylon fragiforme</i> , <i>H. fuscum</i> , <i>H. howeanum</i> , <i>H. multifforme</i> , <i>Melogramma spiniferum</i> , <i>Splachnchonema pupula</i> , <i>Valsa nivea</i> , <i>Winterella suffusa</i>
<i>Nectria magnusiana</i>	dead stromata of <i>Diatrypella favacea</i>
<i>Ophiostoma polyporicola</i>	dead pileus of <i>Oligoporus stipticus</i>
<i>Pseudotrichia mutabilis</i>	dead stromata of <i>Diatrypella favacea</i> , <i>Biscogniauxia marginata</i>
<i>Tubeufia cerea</i>	dead stromata of <i>Diatrypella verruciformis</i> , <i>Diatrype undulata</i> , <i>Pseudovalsa lanciformis</i>
<b>MYCOPARASITES</b>	
<i>Sepedonium chrysospermum</i>	on basidiomata of <i>Agaricus</i> sp., <i>Paxillus involutus</i> , <i>Xerocomus chrysenteron</i>
<i>Hypomyces papyraceus</i>	on stromata of <i>Ustulina deusta</i>
<i>Nitschka parasitans</i>	on perithecia of <i>Nectria cinnabarina</i>
<i>Peckialla luteovirens</i>	on pileus of <i>Lactarius</i> sp.
<i>Tremella globospora</i>	on stromata of <i>Diatrype disciformis</i>

Some of the collected fungi were found on old stromata of *Diatrypales*. Several fungi occur on members of *Diatrypales* e.g. *Tremella indecorata*, *Mycogloea macrospora* (Wojewoda, 1977; Luschka, 1993), *Chloridium clavaeforme*, *Chalara brevispora*, *Chaetopsis grisea* (Borowaska, 1986); *Capronia nigerrima* (Mathiassen, 1989; Eriksson, 1992), *Capronia parsitica*, *Nectria magnusiana*, *Tubeufia cerea* (Eriksson, 1992; Luschka, 1993). Relatively high number of mycogenous fungi inhabiting stromata of *Diatrypella favacea* s.s. is probably connected with its early colonisation of the Polish area. *D. favacea* is a very common species occurring on *Betula pubescens* and *Betula pendula*. The remaining taxa which belong to *Diatrypella favacea* such as *D. verruciformis* and *D. tocciaeana* (Chlebicki, 1986) are probably younger. This interpretation correlates with its host specification. *D. verruciformis* previously occurred on *Corylus avellana* and *Carpinus betulus*, *D. tocciaeana* on *Alnus glutinosa* and *A. incana*. The above mentioned host plants appeared later than *Betula* spp. (Ralska-Jasiewiczowa, 1991). Similarly, *Hypoxylon multifforme* which previously occurred on *Betula* spp. is a substratum colonized by a higher member of mycogenous fungi than the remaining species of *Hypoxylon*.

Finally it should be noted that mycogenous fungi are poorly investigated in Poland. Hence it is important to provide more detailed investigations both a floristic recognition and the nature of this organisms. From such knowledge new approaches may be developed.

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