

New or interesting records of lichenicolous fungi from Poland IV

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Abstract: KUKWA, M. & CZARNOTA, P. 2006. New or interesting records of lichenicolous fungi from Poland IV. – *Herzogia* 19: 111–123.

Records of 61 species of lichenicolous fungi are presented, four of which, *Feltgeniomyces luxemburgensis*, *Stigmidium clauzadei*, *Taeniolella pertusariicola* and *T. trapeliopseos*, are new to Central Europe and nine, *Merismatium heterophractum*, *Polycoccum minutulum*, *Pronectria leptaleae*, *P. pertusariicola*, *Roselliniopsis tartaricola*, *Skyttea gregaria*, *Stigmidium squamariae*, *Trichonectria hirta* and *Unguiculariopsis thallophila*, are new to Poland. *Cladonia caespiticia* is a new host for *Arthrorhaphis aeruginosa*, *Lecania cyrtella* for *Licea parasitica*, *Lecidella scabra* for *Feltgeniomyces luxemburgensis* and *Verrucaria muralis* for *Stigmidium clauzadei*.

Zusammenfassung: KUKWA, M. & CZARNOTA, P. 2006. Neue oder interessante Funde lichenicoler Pilze aus Polen IV. – *Herzogia* 19: 111–123.

Funde von 61 lichenicolen Pilzen werden vorgestellt. Vier Arten sind neu für Mitteleuropa: *Feltgeniomyces luxemburgensis*, *Stigmidium clauzadei*, *Taeniolella pertusariicola* und *T. trapeliopseos*, und neun sind neu für Polen: *Merismatium heterophractum*, *Polycoccum minutulum*, *Pronectria leptaleae*, *P. pertusariicola*, *Roselliniopsis tartaricola*, *Skyttea gregaria*, *Stigmidium squamariae*, *Trichonectria hirta* und *Unguiculariopsis thallophila*. *Cladonia caespiticia* ist ein neuer Wirt für *Arthrorhaphis aeruginosa*, *Lecania cyrtella* für *Licea parasitica*, *Lecidella scabra* für *Feltgeniomyces luxemburgensis* und *Verrucaria muralis* für *Stigmidium clauzadei*.

Key words: Ascomycetes, Basidiomycetes, mitosporic fungi, Myxomycetes, biodiversity.

Introduction

This study, the fourth in a series presenting distributional data on lichenicolous fungi in Poland (see KUKWA et al. 2002, KUKWA 2004, 2005), provides details of new localities for 61 taxa, four of them new to Central Europe and nine new to Poland. Four new host lichen species are reported for the first time for four lichenicolous taxa. The taxonomy of *Endococcus* aff. *propinquus* and *E. rugulosus* s.l. and the anamorph-teleomorph connection of *Vouauxiomyces santessonii* and *Abrothallus cetrariae* are briefly discussed.

Material and methods

Specimens were determined by the authors with the aid of the following literature: DIEDERICH (1990, 1996), ETAYO & DIEDERICH (1996), HAFELLNER (1994), HAWKSWORTH (1981, 1983), HAWKSWORTH & COLE (2002), HAWKSWORTH & MIĄDLIKOWSKA (1997), HAWKSWORTH & SANTESSON (1990), HOFFMANN & HAFELLNER (2000), KEISSLER (1930), KOCOURKOVÁ (2000), KOCOURKOVÁ & BERGER (1999), KUKWA & DIEDERICH (2005), ROUX & TRIEBEL

(1994), SANTESSON & TØNSBERG (1994), SÉRUSIAUX et al. (1999, 2003), TIBELL (1999), TRIEBEL (1989) and ZHURBENKO & TRIEBEL (2003). Representative material has been deposited in the lichen herbaria GPN, UGDA, SLTC, KTC, KRAM, KRAP, with duplicates donated to BILAS, C, PRM, TU and the herbarium of M. R. D. Seaward.

Many localities occur in the Gorce Mts and the Gorce National Park, for which the abbreviations G.M. and G.N.P. are used respectively. All examined localities are provided with geographical coordinates based on the ATPOL grid square system as in KUKWA et al. (2002) and KUKWA (2004, 2005) (Fig. 1).

The species

Abrothallus caerulescens I.Kotte

Only recently reported from Sudety Mts in SW Poland (FAŁTYNOWICZ 2003).

Host – *Xanthoparmelia conspersa* (thallus).

SPECIMEN EXAMINED. [Ge–22] – G.M., S slope of Twarogi Mt., alt. 520 m., 49°31'N/20°22'E, on sandstone, 05.08.1999, P. Czarnota 4040 (GPN).

Arthonia excentrica Th.Fr.

Recorded from only one locality in Poland (KOWALEWSKA & KUKWA 2003).

Host – *Lecanora rouxii* (thallus).

SPECIMEN EXAMINED. [Gd–59] – Western Tatra Mts, Kościeliska Valley, alt. 1000 m, 49°15'20"N/19°52'05", on limestone, 23.07.2002, M. Kukwa 1649a (UGDA-L-10206).

Arthonia aff. *molendoi* (Frauenf.) R.Sant.

Recently reported from Poland by KUKWA (2004). The characteristics of the specimens agree with those hosted by *Xanthoria parietina* (KUKWA 2004). All specimens referred to as *A.* aff. *molendoi* require further investigation.

Host – *Caloplaca decipiens* (thallus).

SPECIMENS EXAMINED. [Bf–77] – N side of Biebrza river, the Zarzeczce fortress, 53°29'24"N/22°38'34"E, on concrete, 01.05.2005, M. Kukwa 3958 & 3960 (UGDA-L-11515 & 11517).

Arthrorhaphis aeruginosa R.Sant. & Tønsberg

Only recently reported from Poland by CZARNOTA & KUKWA (2004), KUKWA (2004) and CZYZEWSKA et al. (2005). *Cladonia caespiticia* is a new host for this fungus.

Hosts – *Cladonia caespiticia*, *C. coniocraea*, *C. coccifera*, *C. digitata*, *C. sp.* (squamules).

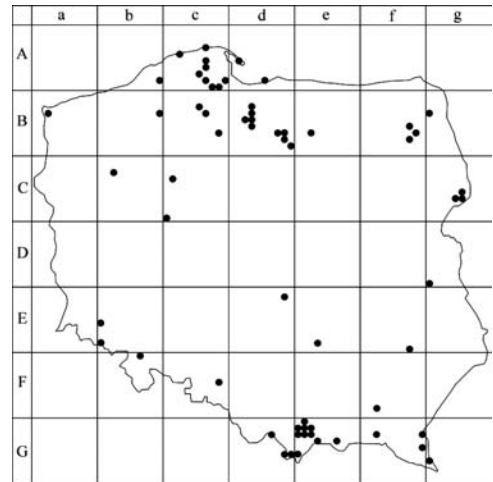
SPECIMENS EXAMINED. [Bc–25] – Wdzydze lake, N part of Glonek island, 53°58'28"/17°54'18", on *C. sp.* growing on wood, 10.05.2005, M. Kukwa 4069 (UGDA). [Cb–22] – Drawieński National Park, forest section No. 308g, 53°04'30"N/15°56'49", on *C. cf. digitata* growing on birch, 18.05.2004, P. Czarnota 4283 (GPN). [Fc–48] – c. 1 km W of Goszyce village, 50°16'33"/18°22'59"E, on *C. digitata* growing on pine roots, 18.04.2005, P. Czarnota 4443 (GPN). [Ff–82] – Dynowskie Foothills, pass below Krowia Góra Mt., 49°50'17"N/21°40'14"E, alt. 420 m, on *C. caespiticia* growing on soil, 17.04.2005, P. Czarnota 4546 (GPN). [Ge–10] – Beskid Wyspowy Mts, 'Luboń Wielki' nature reserve, 49°39.04'N/19°59.70'E, alt. 930 m, on *C. digitata* growing on decaying trunk, 05.06.2003, P. Czarnota 3258 (GPN). [Ge–11] – G.M., G.N.P., Podskaly glade, 49°35'N/20°11'E, alt. 1000 m, on *C. sp.* growing on soil, 07.05.2003, P. Czarnota 3324 (GPN). [Ge–50] – Tatra Mts, Tatra National Park, Żleb pod Krzyżnym gully, 49°13.48'N/20°02.86'E, alt. 1820 m, on *C. coccifera* growing on soil, 09.08.2003, P. Czarnota 3299 (GPN).

Arthrorhaphis grisea Th.Fr.

Rarely reported from Poland (only three modern records) (BIELCZYK 2003, FAŁTYNOWICZ 2003 and literature cited therein); some localities are probably incorrect due to the different host species (see FAŁTYNOWICZ 2003). Those records marked with an asterisk (*) from the Gorce Mts were previously mapped (CZARNOTA 2002), but details of localities were not provided.

Host – *Baeomyces rufus* (thallus).

Fig. 1: Localities of the species given in ATPOL grid square system.



SPECIMENS EXAMINED. [Ff-82] – Pogórze Dynowskie foothills, pass below Krowia Góra Mt., 49°50'17"N/21°40'14"E, alt. 420 m, on sandstone, 17.04.2005, P. Czarnota 4544 (GPN). [Gd-26] – Babia Góra massif, Gówniak Mt., 49°34'34"N/19°32'39"E, alt. 1608 m, on soil, 11.11.2005, P. Czarnota 4599 (GPN). [Ge-10] – G.M., Koninki village, 49°35'N/20°05'E, alt. 700 m, on soil, 6.06.2001, P. Czarnota 2452* (GPN). [Ge-11] – G.M., G.N.P., Białe Skały rocks, NE slope of Kudłoń Mt., 49°35'N/20°11'E, alt. 1100 m, on sandstones and moribund bryophytes, 07.05.2003, P. Czarnota 3312 (GPN). [Ge-12] – G.M., Magorzycza Mt., 49°35'N/20°15'E, on soil, 12.07.1999, P. Czarnota 1999 (GPN). [Ge-20] – G.M., Klikszowa village, 49°31.5'N/19°59.5'E, alt. 740 m, on soil, 10.08.1999, P. Czarnota 2050 (GPN). [Ge-21] – G.M., G.N.P., Borek pass, 49°33.5'N/20°08.5'E, alt. 1000 m, on soil, 02.06.2000, P. Czarnota 2317* (GPN). *ibid.*, Kamienica Valley, 49°33.5'N/20°12.5'E, alt. 820 m, on soil and moribund bryophytes, 01.07.1999, P. Czarnota 1979 & 2193* (GPN). *ibid.*, SW slope of Kudłoń Mt., 49°34'N/20°10'E, on soil, alt. 1140 m, 6.11.2001, P. Czarnota 2669* (GPN).

Athelia arachnoidea (Berk.) Jil.

A very common lichenicolous species in Poland in different habitats.

Hosts – *Amandinea punctata* (thallus and apothecia), *Lecanora conizaeoides* (thallus and apothecia), *Catillaria* sp. (thallus and apothecia), *Phaeophyscia orbicularis* (thallus), sterile sorediate lichen, probably *Biatora efflorescens* (thallus), *Xanthoria parietina* (thallus and apothecia).

SPECIMENS EXAMINED (if not otherwise stated growing on *Lecanora conizaeoides*). [Ad-51] – E of Hel town, 54°36'29"N/18°49'34"E, on pine, 12.02.2005, M. Kukwa 3773 (UGDA, specimen of *Lichenocodium lecanorae*). by the road to Hel town, 54°37'05.5"N/18°48'08.6"E, on pine, 13.02.2005, M. Kukwa 3794 (UGDA-L-11410). [Bd-23] – ca. 1 km S of Koniecwałd village, 53°56'30"N/19°01'E, on poplar, 18.03.2001, M. Kukwa 124 (UGDA). [Bd-33] – Sztum town, 53°55'N/19°01'E, on maple, 18.03.2001, M. Kukwa 130 (UGDA). [Bd-43] – Straszewo Wiszary village, 53°49'N/19°02'E, on *Amandinea punctata* growing on sycamore, 25.09.1997, M. Kukwa s.n. (UGDA-L-10167). [Bd-67] – W of Tynwałd village, Jązdówki village, 53°40'16"N/19°37'04"E, on pine, 11.2004, M. Kukwa 3665 (UGDA). [Bf-77] – E of Płochowo village, 53°30'22"N/22°41'28"E, on *Catillaria* sp. growing on willow, 30.04.2005, M. Kukwa 3936 (UGDA). SE of Osowiec village, 53°29'51"N/22°39'52"E, on *Phaeophyscia orbicularis* and *Xanthoria parietina* on poplar, 03.05.2005, M. Kukwa 3980 (UGDA). [Cg-65] – Białowieża village, 52°42'N/23°52'E, on lime tree, 26.03.2001, M. Kukwa 138 (UGDA). [Ge-21] – G.M., valley of Kamienica stream, alt. 1080 m, 49°32'N/20°07'E, on cf. *Biatora efflorescens* growing on maple, 13.10.2000, P. Czarnota 4576 (GPN).

Cercidospora epipolytropia (Mudd) Arnold

Reported from Poland by ALSTRUP & OLECH (1996) and KUKWA (2005).

Host – *Lecanora polytropia* (apothecia).

SPECIMEN EXAMINED. [Ge-21] – G.M., the top of Czoło Mt., 49°31'N/20°05'E, alt. 1260 m, on exposed sandstone boulders, 07.09.1995, P. Czarnota 2701 (GPN).

Clypeococcum cetrariae Hafellner

Only recently reported from Poland (KUKWA 2005).

Host – *Cetraria islandica* (thallus).

SPECIMENS EXAMINED. [Ad-51] – N of Hel town, 54°37'12.8"N/18°47'42.2"E, on soil, 13.02.2005, M. Kukwa 3798 (UGDA-L-11414). [Bf-77] – SE of Osowiec village, 53°29'51"N/22°39'52"E, on soil, 03.05.2005, M. Kukwa 3986 (UGDA).

Clypeococcum hypocenomycis D.Hawksw.

A common lichenicolous fungus in Poland (see FALTYNOWICZ 2003 and literature cited therein, KUKWA 2004), usually occurring in well-lit forests.

Host – *Hypocenomyce scalaris* (thallus).

SPECIMENS EXAMINED (if not otherwise stated the host species growing on pine). [Ad-51] – E of Hel town, 54°36'18"N/18°48'57"E, on pine, 12.02.2005, M. Kukwa 3759 (UGDA). E of Hel town, 54°36'30"N/18°49'27"E, old military buildings, 12.02.2005, M. Kukwa 3779 (UGDA-L-11395). [Ac-75] – W of Linia village, by N part of Białe Błoto peat bog, 54°28'48"N/17°53'09"E, on pine and wood, 04.11.2004, M. Kukwa 3632 & 3633 (UGDA). [Ac-86] – 'Staniszewskie Błoto' nature reserve, forest section No. 209, 54°22'N/18°00'E, on wood, 05.05.2005, M. Kukwa 4053 (UGDA-L-11484). [Ad-85] – vicinity of Kały Rybackie village, the edge of cormorant colony, 21.03.2005, K. Żółkoś (UGDA-L-10986). [Bb-49] – 'Cisy w Czarnem' nature reserve, 53°44'15"N/16°58'45"E, 13.11.2004, M. Kukwa 3687 (UGDA). [Bf-57] – between Kozłówka and Wojdy villages, 53°40'49"N/22°41'33"E, 02.05.2005, M. Kukwa 3970 (UGDA). c. 2.5 km SSW of Rajgród town, 53°41'40"N/22°41'04"E, 02.05.2005, M. Kukwa 3966 (UGDA). [Bf-68] – between Snopki village and Ruciane Nida town, 53°38'38.7"N/21°38'31.0"E, 17.09.2005, M. Kukwa 4608 (UGDA). [Bf-77] – between Osowiec village and railway station Osowiec, 53°28'51"N/22°38'58"E, 01.05.2005, M. Kukwa 3945 (UGDA-L-11501). [Cg-65] – Białowieża village, Palace Park, 52°42'N/23°51'E, 27.03.2001, M. Kukwa 156 (UGDA). [Ed-28] – Włodzimierzów village, by Luciąża river, 51°22'08"N/19°48'51"E, 19.05.2005, M. Kukwa 4106 (UGDA).

Cornutispora lichenicola D.Hawksw. & B.Sutton

A fifth locality of the species in Poland (KUKWA et al. 2002, KUKWA 2005).

Host – *Hypocenomyce scalaris* (thallus).

SPECIMEN EXAMINED. [Bc-25] – Wdzydze lake, N part of Glonek island, 53°58'28"N/17°54'18"E, on pine, 10.05.2005, M. Kukwa 4072 (UGDA).

Corticifraga fuckelii (Rehm) D.Hawksw. & R.Sant.

The most commonly collected peltigericolous fungus in Poland (e.g. KUKWA 2004, 2005).

Host – *Peltigera* sp. (thallus).

SPECIMEN EXAMINED. [Ac-75] – W of Linia village, by N part of Białe Błoto peat bog, 54°28'48"N/17°53'09"E, on soil, 04.11.2004, M. Kukwa 3657 (UGDA).

Dactylospora purpurascens Triebel

Previously reported from Poland by TRIEBEL (1989). Records here were previously reported as *Dactylospora saxatilis* (Schaer.) Hafellner (see CZARNOTA 2000).

Hosts – *Porpidia tuberculosa* (thallus), *P.* sp.

SPECIMENS EXAMINED. [Ge-11] – G.M., Lubomierz Rzeki settlement on Kamienica river, 49°35'N/20°14'E, alt. 700 m, on *P. tuberculosa* growing on sandstone, 12.07.1999, P. Czarnota 2121 (GPN). G.N.P., NW slope of Kudłoń Mt., 49°34'N/20°09'E, alt. 1030 m, on *P.* sp. growing on sandstone, 04.11.1999, P. Czarnota 4571 (GPN). [Ge-21] – G.N.P., N slope of Jaworzyna Kamienicka Mt., 49°31'N/20°08'E, alt. 1060 m, on *P.* sp. growing on sandstone, 19.07.1999, P. Czarnota 2198 (GPN).

Endococcus aff. *propinquus* (Körb.) D.Hawksw.

SÉRUSIAUX et al. (1999) recognised three taxa of *Endococcus* growing on *Porpidia* species, *E. brachysporus* (Zopf) Brand & Diederich characterized predominantly by small, 7–10 × (4.5–) 5–6 (–6.5) µm spores, *E. propinquus* with 10–12 × 6.5–7 µm spores and ± immersed perithecia, 160–260 µm in diameter, and an unnamed taxon with 10–12.5 × 5–6.3 µm and perithecia 170–240 µm in diameter, half or completely immersed in the host thallus. Both our specimens match the description of the unnamed *Endococcus* in terms of spore sizes; however, the size of the perithecia in one specimen (Czarnota 1977) were considerably smaller, up to 125 µm wide. In the second collection (Czarnota 2136), there were some doubts regarding the host species, as it was a sterile crustose thallus.

Hosts – *Porpidia crustulata*, sterile *Porpidia*-like thallus (always on thallus).

SPECIMENS EXAMINED. [Ge-11] – G.M., G.N.P., NW slope of Kudłoń Mt., 49°34'N/20°09'E, alt. 1030 m, on sterile *Porpidia*-like thallus growing on sandstone, 10.08.1999, P. Czarnota 2136 (GPN). [Ge-21] – G.M., G.N.P., below Średniak glade, 49°32'N/20°11'E, alt. 1020 m, on *Porpidia crustulata* growing on calcicolous sandstone, 5.07.1999, P. Czarnota 1977 (GPN).

Endococcus rugulosus Nyl. s.l.

This name has been used by TRIEBEL (1989) for specimens with brown, smooth-walled spores, $13\text{--}16 \times 6\text{--}7.5 \mu\text{m}$, growing on a wide range of lichens. Our specimen agrees well with this description. Nevertheless, according to SÉRUSIAUX et al. (1999), the type specimen occurred on *Verrucaria macrostoma* s.l. and the name should be used exclusively for material on *Verrucaria*. However, such material included specimens with considerably smaller and verruculose spores, which complicates the taxonomy of the species. Apparently it is a complex of species in need of revision.

Host – sterile lecideoid lichen (thallus).

SPECIMEN EXAMINED. [**Eb–50**] – Ostrzyca Proboszczowicka Mt. (former volcano) near Proboszczów, $51^{\circ}03'N/15^{\circ}46'E$, on basalt, 20.09.2003, M. Kukwa 2808a (UGDA-L-11332).

Epicladonia sandstedei (Zopf) D.Hawksw.

Previously reported from northern Poland (FAŁTYNOWICZ 2003 and literature cited therein, CZYZEWSKA et al. 2005). New for southern Poland.

Host – *Cladonia pyxidata* s.l. (squamules).

SPECIMEN EXAMINED. [**Gg–60**] – Bieszczady Mts, top of the Krzemień Mt., $49^{\circ}03'N/22^{\circ}45'E$, alt. 1330 m, over decaying terricolous bryophytes, 26.08.1957, K. Glanc (GPN/4574).

Feltgeniomyces luxemburgensis Diederich

To date, this species has only been reported from Luxembourg on *Lecidella conspurcatorosorediosa* (DIEDERICH & SÉRUSIAUX 2000). It is new to Central Europe and *L. scabra* appears to be a new host for the species.

Host – *Lecidella scabra* (thallus).

SPECIMEN EXAMINED. [**Ge–11**] – G.M., G.N.P., NW slope of Kudłoń Mt., $49^{\circ}34'N/20^{\circ}09'E$, alt. 1030 m, growing on sandstone, 04.11.1999, P. Czarnota 4577 (GPN).

Illosporopsis christiansenii (B.L.Brady & D.Hawksw.) D.Hawksw.

It is a highly unspecific lichenicolous fungus growing on a wide range of epiphytic lichens in Poland (KUKWA et al. 2002, KUKWA 2004, 2005).

Hosts – *Parmelia sulcata*, *Phaeophyscia orbicularis*, *Physcia adscendens*, *P. stellaris*, *P. tenella*, *Physconia* sp., *Xanthoria parietina* (in all cases on thallus).

SPECIMEN EXAMINED. [**Bd–42**] – 1 km NW of Nowa Wieś village, $53^{\circ}53'N/18^{\circ}59'E$, on *Physcia stellaris* growing on *Populus tremula*, 02.11.2004, M. Kukwa 3612 (UGDA, specimen of *Syzygospora physciacearum*). [**Bd–43**] – N bank of Postolińska Struga river, c. 0.5 km NNW of Nowa Wieś village, $53^{\circ}53'N/18^{\circ}59'E$, on unidentified crustose lichen, *Parmelia sulcata*, *Phaeophyscia orbicularis*, *Physcia adscendens*, *P. tenella*, *Physconia* sp. and *Xanthoria parietina* growing on branches of willow, 02.11.2004, M. Kukwa 3606 (UGDA). [**Bf–77**] – between Osowiec village and railway station, $53^{\circ}28'26"N/22^{\circ}39'16"E$, on *Physcia stellaris* growing on branches of *Populus tremula*, 01.05.2005, M. Kukwa 3946 (UGDA-L-11502).

Intralichen christiansenii (D.Hawksw.) D.Hawksw. & M.S.Cole

The species is probably a very common fungus in Poland, but overlooked (see FAŁTYNOWICZ 2003).

Host – *Sarcogyne regularis* (apothecia).

SPECIMEN EXAMINED. [**Ad–51**] – E of Hel town, $54^{\circ}36'30"N/18^{\circ}49'27"E$, old military buildings, on concrete, 12.02.2005, M. Kukwa 3778 (UGDA-L-11394, specimen of *Sarcogyne regularis*).

Karsteniomyces peltigerae (P.Karst.) D.Hawksw.

Rarely reported lichenicolous fungus in Poland (FAŁTYNOWICZ 2003 and literature cited therein, KUKWA 2004).

Host – *Peltigera canina* (thallus).

SPECIMEN EXAMINED. [**Bg–30**] – Puszcza Augustowska forest, forest section No. 301, S of Gorczyca village, $53^{\circ}53'N/23^{\circ}14'E$, on soil, 11.09.1986, S. Cieśliński s.n. (KRAM-L-31894).

Libertiella curvispora D.Hawksw. & Miądlikowska

A very rarely reported species in Poland (FAŁTYNOWICZ 2003 and literature cited therein).

Host – *Peltigera ponojensis* (thallus).

SPECIMEN EXAMINED. [Ee–83] – Góry Świętokrzyskie Mts, S slope of Góra Zelejowa Mt., 50°48'N/20°27'E, on soil, 10.07.1976, S. Cieśliński s.n. (KTC).

Licea parasitica (Zukal) Martin

Lecania cyrtella is a new host for this commonly lichenicolous myxomycete. In the collection, fruit bodies of *Licea parasitica* were also found growing directly onto the bark.

Host – *Lecania cyrtella* (thallus and apothecia).

SPECIMEN EXAMINED. [Bd–43] – N part of Nowa Wieś village, 53°53'N/19°00'E, on willow, 02.11.2004, M. Kukwa 3597 (UGDA-L-11305).

Lichenocodium erodens M.S.Christ. & D.Hawksw.

Hosts – *Hypocenomyce scalaris* (thallus), *Hypogymnia physodes* (thallus), *Lecanora conizaeoides* (thallus and apothecia).

SPECIMENS EXAMINED (if not otherwise stated growing on *Hypogymnia physodes*). [Ac–36] – ‘Długosz królewski w Wierzychucinie’ nature reserve, forest section No. 247/1, 54°47'53"N/18°02'07"E, on pine, 05.08.2005, M. Kukwa 4519 (UGDA). [Ad–51] – by the road to Hel town, 54°37'05.5"N/18°48'08.6"E, on *Lecanora conizaeoides* growing on pine, 13.02.2005, M. Kukwa 3796 (UGDA-L-11412). [Bc–25] – Wdzydze lake, N part of Glonek island, 53°58'28"N/17°54'18"E, on *Hypocenomyce scalaris* growing on pine, 10.05.2005, M. Kukwa 4072 (UGDA, specimen of *Cornutispora lichenicola*). *ibid.*, on bark of fallen oak, 10.05.2005, M. Kukwa 4086 (UGDA). [Bd–67] – W of Tynwałd village, by Jeziorak lake, 53°40'16"N/19°37'04"E, on *L. conizaeoides* growing on pine, 11.2004, M. Kukwa 3665 (UGDA). [Bd–78] – c. 1.25 km NW of Wygoda village, 53°31'N/19°55'E, on willow, 02.06.2001, M. Kukwa 792 (UGDA-L-9929). [Bd–89] – Wygoda village, 53°31'20"N/19°55'E, on maple, 30.06.2001, M. Kukwa 758 (UGDA-L-9926). [Bf–77] – SE of Osowiec village, 53°29'51"N/22°39'52"E, on pine, 03.05.2005, M. Kukwa 3985 (UGDA). [Cg–65] – Białowieża village, Palace Park, 52°42'N/23°51'E, on *L. conizaeoides* growing on black alder, 26.03.2001, M. Kukwa 153 (UGDA). [Ge–21] – G.M., valley of Kamienica stream below Hala Długa meadow, 49°31'N/20°06'E, alt. 1220 m, on spruce, 19.07.1995, P. Czarnota 1867 (GPN).

Lichenocodium lecanorae (Jaap) D.Hawksw.

A common lichenicolous fungus, but still not reported from many Polish localities.

Hosts – *Lecanora carpinea*, *L. conizaeoides*, *L. cf. sarcopidoides* (only apothecia).

SPECIMENS EXAMINED (if not otherwise stated the species growing on *Lecanora conizaeoides*). [Ac–36] – ‘Długosz królewski w Wierzychucinie’ nature reserve, forest section No. 245, 54°47'53"N/18°02'07"E, on *Lecanora carpinea* growing on poplar, 05.08.2005, M. Kukwa 4538a (UGDA). *ibid.*, forest section No. 244, on birch, 05.08.2005, M. Kukwa 4544 (UGDA). [Ac–42] – Kluki village, 54°40'N/17°20'E, on *L. conizaeoides* and *L. cf. sarcopidoides* growing on wood, 04.08.1990, J. Miądlukowska s.n. (UGDA-L-10344). [Ac–75] – W of Linia village, by N part of Białe Błoto peat bog, 54°28'48"N/17°53'09"E, on wood, 04.11.2004, M. Kukwa 3636 (UGDA). [Ad–51] – by the road to Hel town, 54°37'05.5"N/18°48'08.6"E, on pine, 13.02.2005, M. Kukwa 3797 (UGDA-L-11413). E of Hel town, 54°36'18"N/18°48'57"E, on pine, 12.02.2005, M. Kukwa 3746 (UGDA). *ibid.*, 54°36'29"N/18°49'34"E, on pine, 12.02.2005, M. Kukwa 3773 (UGDA). [Bc–25] – Wdzydze lake, NW part of Glonek island, 53°58'28"N/17°54'18"E, on pine, 10.05.2005, M. Kukwa 4094 (UGDA). [Bc–36] – ‘Kamienne Kregi’ nature reserve, c. 2 km W Odry village, 53°54'14"N/17°58'51"E, on pine twigs, 27.09.2001, P. Czarnota 2631 (GPN). [Bd–67] – W of Tynwałd village, by Jeziorak lake, 53°40'16"N/19°37'04"E, on pine, 11.2004, M. Kukwa 3666 (UGDA). [Bd–89] – 1 km SE of Marwałd village, 53°29'N/19°59'E, on oak, 01.07.2001, M. Kukwa 767 (UGDA-L-9921, dupl. herb. Seaward). [Bf–57] – between Kozłówka and Wojdy villages, 53°40'49"N/22°41'33"E, on pine, 02.05.2005, M. Kukwa 3972 (UGDA). [Bf–77] – SE of Osowiec village, 53°29'51"N/22°39'52"E, on pine, 03.05.2005, M. Kukwa 3984 (UGDA). [Dg–90] – Lasy Parczewskie Wood, ‘Torfowisko przy Jeziorze Czarnym’ nature reserve, forest section No. 70, 51°31'05"N/23°02'15"E, on pine, 27.10.2004, P. Czarnota 4273 (GPN). [Gf–22] – Beskid Niski Mts, between Dukla town and Barwinek village, 49°29'26"N/21°42'12"E, alt. 400 m, on wood, 05.08.2004, P. Czarnota 4067 & 4064 (specimen of *Strangospora moriformis*) (GPN).

Lichenocodium pyxidatae (Oudem.) Petr. & Syd.

Rather uncommon species in Poland, but probably overlooked.

Host – *Cladonia fimbriata* (podetia).

SPECIMEN EXAMINED. [Ed–18] – vicinity of Włodzimierzów village, 51°22'21"N/19°48'45"E, on soil, 19.05.2005, M. Kukwa 4109a (UGDA).

Lichenocodium xanthoriae M.S.Christ.

Considered by KUKWA (2005) to be rather uncommon in Poland, but probably overlooked.

Hosts – *Xanthoria parietina*, *X. polycarpa* (apothecia only).

SPECIMENS EXAMINED. [**Ac-36**] – ‘Długosz królewski w Wierzchucinie’ nature reserve, forest section No. 244, 54°47'53"N/18°02'07"E, on *Xanthoria parietina* growing on poplar, 05.08.2005, M. Kukwa 4552a (UGDA). [**Bd-23**] – Koniecwałd village, 53°56'30"N/19°01'E, on *X. parietina* and *X. polycarpa* growing on *Populus nigra*, 18.03.2001, M. Kukwa 122 (UGDA). [**Bd-89**] – c. 2.5 km SE of Marwałd village, 53°29'N/19°59'E, on *X. parietina* growing on maple, 01.07.2001, M. Kukwa 768 (UGDA-L-9920). [**Bf-57**] – Kuligi village, 53°39'08"N/22°43'54"E, on *X. polycarpa* growing on branches of *Syringa vulgaris*, 02.05.2005, M. Kukwa 3974 (UGDA). [**Bf-77**] – 2 km SW of Osowiec village, 53°29'27"N/22°38'12"E, on *X. polycarpa* growing on branches of *Populus nigra*, 01.05.2005, M. Kukwa 3950 (UGDA-L-11507). SE of Osowiec village, 53°29'51"N/22°39'52"E, on *X. parietina* growing on *Populus nigra*, 03.05.2005, M. Kukwa 3979 (UGDA).

Lichenodiplis lecanorae (Vouaux) Dyko & D.Hawksw.

Records from Gorce Mts are the first from southern Poland.

Hosts – *Caloplaca* sp. (apothecia and thallus), *Lecanora saligna* (apothecia).

SPECIMENS EXAMINED. [**Bd-43**] – 2 km S of Nowa Wieś village, 53°11'30"N/19°00'20"E, on *Lecanora saligna* growing on wood, 04.1995, M. Kukwa s.n. (UGDA-L-10478). [Ge-10] – G.M., Poręba Górna Chlipały settlement, 49°35'N/20°02'E, alt. 630 m, on *L. saligna* growing on pear tree, 26.06.1999, P. Czarnota 2068 (GPN). Poręba Górna Buchole settlement, 49°35'N/20°03'E, alt. 570 m, on *Caloplaca* sp. growing on sandstone, 26.06.1999, P. Czarnota 2224 (GPN). [Ge-21] – G.M., the top of Czoło Mt., 49°31'N/20°05'E, alt. 1260 m, on *C. sp.* growing on sandstone, 14.08.1999, P. Czarnota 2236 (GPN).

Lichenosticta alcicornaria (Linds.) D.Hawksw.

Not reported from Poland for c. 75 years (see FAŁTYNOWICZ 2003 and literature cited therein).

Host – *Cladonia pyxidata* s.lat. (squamules).

SPECIMEN EXAMINED. [Ge-36] – Beskid Sądecki Mts, ‘Żebracze’ nature reserve, 49°23'N/20°52'E, alt. 870 m, on decaying tree stump, 05.07.2001, P. Czarnota 2595 (GPN).

Lichenostigma elongata Nav.-Ros. & Hafellner

Second record from Poland; previously reported by NAVARRO-ROSINÉS & HAFELLNER (1996).

Host – *Lobothallia radiosa* (thallus).

SPECIMEN EXAMINED. [Ge-21] – G.M., S slope of Cynrowa Góra Mt., 49°28'N/20°11'E, alt. 650 m, on sandstone, 06.08.1968, K. Glanc (GPN/4578).

Marchandiomyces aurantiacus (Lasch) Diederich & Etayo

A fourth locality in Poland (KUKWA 2004 and literature cited therein, CZYŻEWSKA et al. 2005).

Host – *Physcia tenella* (thallus).

SPECIMEN EXAMINED. [**Ab-89**] – between Wrząca and Kuleszów villages, 54°21'N/16°52'E, on maple, 21.11.1994, I. Izydorek s.n. (SLTC, dupl. in UGDA-L-9966).

Merismatium heterophractum (Nyl.) Vouaux

New to Poland.

Host – *Bilimbia sabuletorum* (thallus).

SPECIMEN EXAMINED. [**Gd-58**] – Tatra Mts, Dolina Chochołowska valley, Jamy glade, 49°15'21"N/19°49'15"E, alt. 1085 m, on terricolous bryophytes, 16.07.2004, L. Śliwa s.n. (KRAM).

Microcalicium disseminatum (Ach.) Vain.

Only pycnidia of the fungus have been found in the specimen noted below.

Host – *Chaenotheca* sp. (thallus).

SPECIMEN EXAMINED. [**Cc-90**] – forest division Zielonka, 52°30'N/17°06'E, forest section No. 73, on oak, 17.06.1961, K. Glanc s.n. (GPN).

Monodictys epilepraria Kukwa & Diederich

The species has been only recently described (KUKWA & DIEDERICH 2005).

Hosts – *Lepraria elobata*, *L. incana*, *L. rigidula*, *L. sp.*

SPECIMENS EXAMINED [Ac–89] – ‘Źródlika w dolinie Ewy’ nature reserve, 54°25'N/18°32'E, on *Lepraria cf. incana* growing on black alder, 31.05.2003, M. Kukwa (UGDA-L-11028). [Bb–49] – ‘Cisy w Czarnem’ nature reserve, 53°44'15"N/16°58'45"E, on *L. cf. incana* growing on *Taxus baccata* and black alder, 13.11.2004, M. Kukwa 3677 & 3697 (UGDA). [Bc–25] – Wdzydze lake, E part of Glonek island, 53°58'28"N/17°54'18"E, on *L. incana* growing on oak, 10.05.2005, M. Kukwa 4090 (UGDA). [Bd–43] – N of Brachlewo village, 53°49'N/18°59'E, on epiphytic *L. sp.*, 1996, M. Kukwa s.n. (UGDA-L-9867). [Bd–53] – Liwa river valley, SE of Szadowo village, 53°46'18"N/19°03'18"E, on *L. incana* and *L. sp.* growing on oak, 12.04.2004, M. Kukwa 3067 & 3073 (UGDA-L-10278 & 10774). SW of Szadowo village, 53°46'23"N/19°03'00"E, on *L. incana* growing on hornbeam, 28.03.2005, M. Kukwa 3835 (UGDA-L-11550, dupl. BILAS, C, PRM, TU). [Bc–68] – c. 2.5 km W of Stara Rzeka village, 53°39'21"N/18°17'02"E, on *L. elobata* and *L. rigidula* growing on hornbeam, 14.06.2004, M. Kukwa 3335 (UGDA). [Cg–55] – Białowieża National Park, forest section No. 370, 52°43'N/23°52'E, on *L. incana* growing on oak, 27.03.2001, M. Kukwa 195b (UGDA-L-11026). forest section No. 315D, 52°44'59"N/23°49'29"E, on *L. sp.* growing on maple, 27.03.2001, M. Kukwa 265 (UGDA-L-11027).

Muellerella lichenicola (Sommerf.) D.Hawksw.

Only recently recorded in Poland from a few localities (ŁUBEK 2004, KUKWA 2005).

Host – *Caloplaca flavovirescens* (thallus and apothecia).

SPECIMENS EXAMINED. [Ge–22] – G.M., Ochotnica Dolna village, Lubańskie settlement, 49°30'N/20°21'E, alt. 560 m, on sandstone, 15.08.1967, K. Glanc s.n. (GPN/4580). Ochotnica Dolna village, near Barbarówka settlement, 49°31'N/20°22'E, alt. 500 m, on calcareous sandstone, 05.10.2000, P. Czarnota 4570 (GPN).

Muellerella pygmaea (Körb.) D.Hawksw. var. *pygmaea*

Reported from Poland several times, but most of records are from 19th century (FAŁTYNOWICZ 2003 and literature cited therein).

Host – *Lecidea fuscoatra* (thallus).

SPECIMEN EXAMINED. [Fb–06] – Góry Sowie Mts, Srebrna Góra village, 50°34.50'N/16°38.83'E, on exposed gneiss rock, 22.04.2004, P. Czarnota 4143 (GPN).

Muellerella ventosicola (Mudd) D.Hawksw.

Recently reported from one locality (KUKWA 2005, see discussion therein). The locality below is almost the same as the previous one, but the host species is different.

Host – *Rhizocarpon cf. geographicum* (thallus).

SPECIMEN EXAMINED. [Eb–80] – Karkonosze Mts, E slope of Śnieżka Mt., 50°44'20"N/15°45'00"E, on rock, 15.06.1992, s.coll. (UGDA-L-10471).

Phaeopyxis punctum (A.Massal.) Rambold, Triebel & Coppins

Hosts – *Cladonia digitata*, *C. macilenta* (squamules).

SPECIMENS EXAMINED. [Cg–64] – Białowieża Primeval Forest, forest section No. 572, 52°40'N/23°40'E, 11.08.2002, P. Czarnota 2994 (GPN). [Cg–65] – Białowieża Primeval Forest, forest section No. 494C, 52°35'N/23°39'E, on pine, 13.08.2002, P. Czarnota 3035 (GPN).

Polycoccum minutulum Kocourková & F.Berger

New to Poland.

Host – *Trapelia placodioides* (thallus).

SPECIMEN EXAMINED. [Ge–22] – G.M., S slope of Twarogi Mt. above Ochotnica Dolna village, 49°31'N/20°22'E, alt. 530 m, on sandstone, 5.11.1999, P. Czarnota 2174 (GPN).

Pronectria leptaleae (J.Steiner) Lowen

New to Poland.

Hosts – *Physcia caesia* (thallus), *P. stellaris* (thallus and apothecia).

SPECIMENS EXAMINED. [**Bf-77**] – between Osowiec village and railway station, 53°28'26"N/22°39'16"E, on *P. stellaris* growing on branches of poplar, 01.05.2005, M. Kukwa 3947 (UGDA-L-115030). 1.5 km SSW of Osowiec village, by the Zarzeczce fortress, 53°29'27"N/22°38'23"E, on *P. caesia* growing on concrete, 01.05.2005, M. Kukwa 3951 (UGDA-L-11508).

Pronectria pertusariicola Lowen

New to Poland.

Hosts – *Pertusaria* cf. *amara*, *P.* cf. *pertusa*, *P.* sp. (thallus).

SPECIMENS EXAMINED. [**Bb-49**] – ‘Cisy w Czarnem’ nature reserve, 53°44'15"N/16°58'45"E, on beech, 13.11.2004, M. Kukwa 3732, 3733 & 3735 (UGDA, dupl. of 3732 in BILAS, PRM).

Pyrenidium actinellum Nyl.

Rarely reported from Poland and so far only from *Peltigera* thalli (FALTYNOWICZ 2003 and literature cited therein).

Host – *Diploschistes scruposus* (thallus).

SPECIMEN EXAMINED. [**Ge-22**] – G.M., S slope of Twarogi Mt., 49°31'N/20°22'E, alt. 520 m, on sandstone outcrop, 05.08.1999, P. Czarnota 2035 (GPN).

Roselliniopsis tartaricola (Nyl.) Matzer

New to Poland.

Host – muscicolous sterile thallus (most probably *Pertusaria*).

SPECIMEN EXAMINED. [**Ge-22**] – G.M., S slope of Twarogi Mt., 49°31'N/20°22'E, alt. 540 m, on mosses, 05.11.1999, P. Czarnota 2205 (GPN).

Sclerococcum sphaerale (Ach.) Fr.

Very rarely reported from Poland (FALTYNOWICZ 2003 and literature cited therein).

Host – *Pertusaria* sp. (thallus).

SPECIMEN EXAMINED. [**Gd-58**] – Tatra Mts, Dolina Chochołowska valley, Chochołowska glade, alt. 1105 m, 49°14'16"N/19°47'47"E, on granite, 16.07.2004, L. Śliwa 3092 (KRAM).

Skyttea gregaria Sherwood, D.Hawksw. & Coppins

New to Poland.

Host – *Mycoblastus fucatus* (thallus).

SPECIMEN EXAMINED. [**Ge-11**] – G.M., valley of Kamienica stream, 49°35'N/20°14'E, alt. 700 m, on fir, 28.08.1961, K. Glanc s.n. (GPN/4564).

Sphinctrina turbinata (Pers. ex Fr.) de Not.

Appears to be fairly rare in Poland (FALTYNOWICZ 2003).

Host – *Pertusaria pertusa* (thallus).

SPECIMENS EXAMINED. [**Ge-10**] – G.M., G.N.P., by Szalasisko glade, alt. 49°34'N/20°06'E, alt. 750 m, on beech, 07.09.1959, K. Glanc s.n. (GPN/2700). [**Ge-11**] – G.M., G.N.P., N slope of Gorc Porębski Mt., valley of Gorcowy Potok stream, 49°34'N/20°12'E, alt. 1100 m, on beech, 04.10.1996, P. Czarnota 1292 (GPN).

Stigmidium clauzadei Cl.Roux & Nav.-Ros.

New to Central Europe. *Verrucaria muralis* appears to be a new host.

Host – *Verrucaria muralis* (thallus).

SPECIMEN EXAMINED. [**Ge-20**] – G.M., G.N.P., valley of Olszowy stream, 49°33'N/20°05'E, alt. 820 m, on sandstone 21.06.1996, P. Czarnota 1330 (GPN, dupl. UGDA-L-11435).

Stigmidium mycobilimbiae Cl.Roux, Triebel & Etayo

This species has already been reported from this locality (KUKWA 2005), but in the new collection the host is *Mycobilimiba hypnorum*, and the spores were slightly wider (3.5–5 µm), than those reported by ROUX & TRIEBEL (1994).

Host – *Mycobilimiba hypnorum* (thallus).

SPECIMEN EXAMINED. [**Gd-59**] – Tatra Mts, Tatra National Park, S slope of Wysoki Grzbiet Mt. above Kraków Gorge, alt. 1570 m, 49°13'52"N/19°53'17"E, plant debris, 23.07.2002, Czarnota 2937 (GPN).

Stigmidium squamariae (de Lesd.) Cl.Roux & Triebel

New to Poland.

Host – *Lecanora* cf. *polytropa* (thallus and apothecia).

SPECIMEN EXAMINED. [**Ge-20**] – G.M., Klikuszowa village, 49°31'N/19°58'E, on sandstone, 10.08.1999, P. Czarnota 2277 (GPN).

Syzygospora physciacearum Diederich

Rather common on *Physcia* species in Poland, but only found in humid areas by rivers or lakes (KUKWA et al. 2002, KUKWA 2004, 2005).

Hosts – *Physcia tenella*, *P. stellaris* (thallus).

SPECIMEN EXAMINED. [**Ad-85**] – between Piaski village and Krynica Morska town, forest section No. 15, 54°24'51"N/19°33'41"E, on *Physcia tenella* growing on willow, 28.03.2004, M. Kukwa 2967 (UGDA). [**Bd-42**] – 1 km NW of Nowa Wieś, Postolińska Struga river valley, 53°53'N/18°59'E, on *P. stellaris* growing on poplar, 02.11.2004, M. Kukwa 3612 (UGDA).

Taeniolella beschiana Diederich

Probably very common, but rarely collected due to its minute dimensions.

Host – *Cladonia* sp. (squamules).

SPECIMEN EXAMINED. [**Ef-97**] – Porytowe Wzgórze hill, c. 2.5 km S of Flisy village, 50°37'48"N/22°27'59"E, on decaying stump, 10.10.2003, P. Czarnota 3447 (GPN).

Taeniolella pertusariicola D.Hawksw. & H.Mayrhofer

New to Central Europe.

Host – *Pertusaria* sp. (thallus).

SPECIMEN EXAMINED. [**Bb-49**] – ‘Cisy w Czarnem’ nature reserve, 53°44'15"N/16°58'45"E, on beech, 13.11.2004, M. Kukwa 3691 (UGDA).

Taeniolella punctata M.S.Christ. & D.Hawksw.

The sixth Polish locality (JANDO & KUKWA 2003, KUKWA 2005, CZYŻEWSKA et al. 2005).

Host – *Graphis scripta* (thallus).

SPECIMEN EXAMINED. [**Ac-98**] – ‘Jar rzeki Raduni’ nature reserve, 54°18'N/18°18'E, on hornbeam, 27.05.1995, J. Miądlkowska s.n. (UGDA-L-11372).

Taeniolella trapeliopseos Diederich

New to Central Europe.

Host – *Trapeliopsis flexuosa* (thallus).

SPECIMEN EXAMINED. [**Be-62**] – Nowe Ramuki forest division, forest section No. 713, by Dłużek Lake, 53°38'N/20°28'E, on dead spruce branch, 02.05.2001, D. Kubiak s.n. (GPN/2632).

Telogalla olivieri (Vouaux) Nik.Hoffm. & Hafellner

Reported from Poland by NAVROTSKAYA et al. (1996) and KUKWA (2005).

Host – *Xanthoria parietina* (thallus).

SPECIMENS EXAMINED. [**Bc-25**] – Wdzydze lake, N part Glonek island, 53°58'28"N/17°54'18"E, on poplar, 10.05.2005, M. Kukwa 4099 (UGDA). [**Bd-42**] – 1 km NW of Nowa Wieś village, 53°53'N/18°59'E, on poplar, 02.11.2004, M. Kukwa 3614 (UGDA).

Tremella hypogymniae Diederich & M.S.Christ.

Host – *Hypogymnia physodes* (thallus).

SPECIMENS EXAMINED. [**Ac-75**] – W of Linia village, N part of ‘Białe Błoto’ peat bog, 54°28'48"N/17°53'09"E, on oak, 04.11.2004, M. Kukwa 3637 (UGDA). [**Ac-86**] – ‘Kurze Grzędy’ nature reserve, forest section No. 133a, 54°33'N/17°58'E, on oak, 05.05.2005, M. Kukwa 4005 (UGDA-L-11436). [**Ge-21**] – G.M., G.N.P., valley of

Lopuszanka stream, 49°30'N/20°08'E, alt. 860 m, on fir, 5.05.1995, P. Czarnota 880 (GPN). [**Gf-29**] – Góry Sanocko-Turczańskie Mts, pass between Ostrykowiec Mt. and Oratyk Mt., 49°27'N/22°41'E, on maple, 08.1992, R. Kościelniak s.n. (KRAP).

Tremella lichenicola Diederich

Gorce Mts records are the first from southern Poland.

Host – *Mycoblastus fucatus* (thallus).

SPECIMENS EXAMINED. [**Ac-56**] – 1 km SE of Świetlino village, 54°35'N/17°56'E, on horn-beam, 07.04.2001, M. Kukwa 587 (UGDA-L-9925). [**Ac-97**] – SW part of Ostrzyckie Lake, 54°15'N/18°07'E, on beech, 30.05.2003, M. Kukwa 1816 (UGDA-L-10627). [**Bb-49**] – 'Cisy w Czarnem' nature reserve, 53°44'15"N/16°58'45"E, on beech, 13.11.2004, M. Kukwa 3711 (UGDA). [**Bd-53**] – SE of Szadowo village, 53°46'16"N/19°03'40"E, on black alder, 28.03.2005, M. Kukwa 3829 (UGDA). [**Ge-21**] – G.M., G.N.P., 'Turbacz' nature reserve, 49°33'N/20°06'E, alt. 1030 m, on beech, 12.06.1996, P. Czarnota 976 (GPN). *ibid.*, alt. 960 m, on fir, 11.06.1996, P. Czarnota 979 (GPN, dupl. UGDA-L-10550). below Średniak glade, 49°33'N/20°12'E, alt. 900 m, on beech, 09.06.1997, P. Czarnota 1633 (GPN). [**Ge-33**] – G.M., S slope of Lubań Mt., 49°27'N/20°21'E, alt. 750 m, on fir, 07.07.1967, K. Glanc s.n. (GPN/4565).

Tremella ramalinae Diederich

Previously reported from only three Polish localities (KOWALEWSKA & KUKWA 2003, KUKWA 2005).

Host – *Ramalina fraxinea* (thallus).

SPECIMENS EXAMINED. [**Ac-66**] – c. 1, 5 km W of Chmieleniec village, 54°35'25"N/17°56'35"E, on sycamore, 07.04.2001, M. Kukwa 569 (UGDA). [**Bf-57**] – Wojdy village, 53°43'10"N/22°41'29"E, roadside trees, on oak, 02.05.2005, M. Kukwa 3965 (UGDA-L-11522).

Trichonectria hirta (A.Bloxam) Petch

New to Poland.

Hosts – *Micarea prasina* s.lat., *Placynthiella dasaea* (thallus; both hosts in one collection).

SPECIMEN EXAMINED. [**Ge-01**] – Beskid Wyspowy Mts, E slope of Lubogoszcz Mt., 49°42'N/20°07'E, alt. 680 m, on wood, 23.09.2001, P. Czarnota 4037 (GPN).

Unguiculariopsis thallophila (P.Karst.) W.Y.Zhuang

New to Poland.

Host – *Lecanora chlarotera* (thallus).

SPECIMEN EXAMINED. [**Ac-36**] – 'Długosz królewski w Wierzchucinie' nature reserve, forest section No. 245, 54°47'53"N/18°02'07"E, on poplar, 05.08.2005, M. Kukwa 4538 (UGDA).

Vouauxiella lichenicola (Linds.) Petr. & Syd.

Hosts – *Lecanora argentata* (apothecia), *L. chlarotera* (apothecia), *L. pulicaris* (apothecia), *L. sp.* (thallus and apothecia).

SPECIMENS EXAMINED. [**Bb-49**] – 'Cisy w Czarnem' nature reserve, 53°44'15"N/16°58'45"E, on *Lecanora argentata* growing on beech, 13.11.2004, M. Kukwa 3710 (UGDA). [**Bc-25**] – Wdzydze lake, W part of Glonek island, 53°58'28"N/17°54'18"E, on *L. pulicaris* growing on oak, 10.05.2005, M. Kukwa 4085 (UGDA). [**Bd-78**] – Glaznoty village, 53°32'N/19°53'30"E, on *L. sp.* and *L. chlarotera* growing on maple, 06.07.2001, M. Kukwa 806 & 817 (UGDA-L-9918 & 9923, dupl. KRAM). [**Bf-57**] – Wojdy village, 53°43'10"N/22°41'29"E, on *L. chlarotera* growing on oak, 02.05.2005, M. Kukwa 3961 (UGDA-L-11518). [**Ge-10**] – G.M., Niedźwiedz village, 49°37'N/20°06'E, alt. 510 m, on *L. chlarotera* on grey alder, 16.09.1965, K. Glanc s.n. (GPN/4039). [**Ge-11**] – G.M., E slope of Kudłoń Mt., 49°34'N/20°12'E, alt. 870 m, on *L. argentata* growing on maple, 25.08.1967, K. Glanc s.n. (GPN/4575). [**Gf-49**] – Góry Sanocko-Turczańskie Mts, Ostre ridge, 49°18'N/22°37'E, on *L. sp.* growing on beech, 16.04.199?, R. Kościelniak s.n. (KRAP).

Vouauxiomyces santessonii D.Hawksw.

The species has been recently reported by CZYZEWSKA et al. (2005).

V. santessonii is supposed to be an anamorphic state of the gall-inducing *Abrothallus cetrariae*, but HAWKSWORTH (1981) also observed another *Vouauxiomyces*-like anamorph connected with galls formed by that species; a similar anamorph was also found in a specimen of *A. cetrariae* from Ukraine (KUKWA 2000), but no pycnidia of *V. santessonii* were found on the host thallus. This unnamed *Vouauxiomyces*

differs from *V. santessonii* in its smaller conidia. It seems to be connected only with galls caused by the teleomorph, whereas *V. santessonii* usually does not induce deformation of the host, or galls are formed in late stage of infection. Based on those observations, *V. santessonii* may not be an anamorphic state of *A. cetrariae*.

Host – *Platismatia glauca* (thallus).

SPECIMENS EXAMINED. [Ac–86] – ‘Kurze Grzędy’ nature reserve, forest section No. 133b, 54°33'N/17°58'E, on *Sorbus aucuparia*, 05.05.2005, M. Kukwa 4033 (UGDA-L-11464). *ibid.*, forest section No. 136, by Wielkie lake, on birch, 05.05.2005, M. Kukwa 4045 (UGDA-L-11476).

Xanthoriicola physciae (Kalchbr.) D.Hawksw.

Host – *Xanthoria parietina* (apothecia).

SPECIMENS EXAMINED. [Ac–36] – ‘Długosz królewski w Wierzychucinie’ nature reserve, forest section No. 244, 54°47'53"N/18°02'07"E, on poplar, 05.08.2005, M. Kukwa 4549 (UGDA). [Ad–82] – 1.5 km N of Świbno, 54°20'42"N/18°56'23"E, on *Populus alba*, 01.06.2005, M. Kukwa 4314 (UGDA). [Ad–85] – between Piaski village and Krynica Morska town, forest section No. 15, 54°24'51"N/19°33'41"E, on willow, 28.03.2004, M. Kukwa 2968 (UGDA). [Ba–32] – Wolin Island, Wicko village, 53°53'N/14°23'E, on horsechestnut, 17.06.1976, W. Fałtynowicz s.n. (UGDA-L-9941). [Bf–77] – E part of Płochowo village, 53°30'31"N/22°40'37"E, on poplar, 30.04.2005, M. Kukwa 3944 (UGDA-L-11500). Osowiec Twierdza village, 53°28'20"N/22°39'10"E, on concrete, 14.09.2005, M. Kukwa 4605 (UGDA). [Ce–31] – Gołuń village, by the road to Smogulec village, 53°02'N/17°19'E, on ash, 16.06.1996, K. Glanc s.n. (UGDA-L-9942).

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