

Mycological notes from the Tatra National Park. II

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The paper presents a list of 141 species of parasitic fungi collected in the Tatra National Park in 1982-1992. Some fungi are new to the Polish mycoflora, or have been collected on new host plants or rare known from single localities only.

Key words: Parasitic fungi, distribution, Tatra.

INTRODUCTION

In the years 1982-1992 studies on the mycoflora and vertical distribution of microscopic phytopathogenic fungi were further conducted in the Tatra Mountains. The present paper provides a list of 141 species of fungi, including those which are new to the mycoflora of Poland or have been collected on new host plants, and those which are rare to the mycoflora of the Tatra National Park. Most of those species were not included in the previous work (Sa la ta, Ro ma s z e w s ka - Sa la ta, Mu len ko, 1984).

A total of seventeen species were collected for the first time in Poland. These are: *Asteromella corcontica*, *Cladosporium soldaneliae*, *Leptosphaeria tofieldiae*, *Ovularia bartsiae*, *Peronospora arabidis-alpinae*, *Phacelium volkartianum*, *Phyllosticta caballeroi*, *P. cirsii*, *P. phyteumatis*, *P. pleurospermi*, *Seimatosporium rosarum*, *Sep-toria carvi*, *S. gentianicola*, *S. plantaginis-majoris*, *S. prostrata*, *Sporonema bartsiae* and *Stagonospora brachypodiicola*. Altogether thirty species of fungi were collected on host plants new to the flora of Poland.

The list published in the paper includes 47 species of fungi which are known to occur in Poland but have not been reported so far from the Tatra National Park. Furthermore, twenty-eight species were collected on new host plants. The remaining

phytopathogenic fungi have been reported from few or single localities. The collected materials is housed in the Herbarium of the Department of Botany UMCS in Lublin (LBLM).

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LIST OF SPECIES

The Latin names of fungi were updated according to the recent monographs and floristic works. The names of host plants were adopted according to "Flora Europaea". Denotations used throughout the paper were as follows:

n – near, m – above sea level, TNP – Tatra National Park, s – south, Dol. – valley, fungus or host plant new to the *Polish flora, (x) TNP flora, I-XII – months.

PERONOSPORALES

Bremia lactucae Regel. – on *Hieracium aurantiacum* L. (x): Niżnia Świstówka, grassland, 1500 m; IX. In Poland, the species was collected on this host plant only in the Botanical Gardens in Lublin (R o m a s z e w s k a - S a l a t a, 1973) and Kraków (K o c h m a n, M a j e w s k i, 1970).

**Peronospora arabidis-alpinae* Gäum. – on *Arabis alpina* L.: Path above Regle (Zameczki), damp alpine grassland, 1200 m; VII.

P. conferta (Ung.) Ung. – on *Cerastium fontanum* Baumg. subsp. *triviale* (Link.) Jalas: Przełęcz między Kopami, roadside, 1510 m; Dol. Jaworzynka, grassland, 1080 m; VI.

P. dentriae Rabenh. – on *Cardamine amara* L. (x): Włosienica, streamside, 1320 m; VI. – on *Cardamine flexuosa* With. (x): Jaszczurówka, beech forest, 920 m; VI.

(x)*P. fulva* H. Syd. – on *Lathyrus pratensis* L.: Stare Kościeliska, meadow, 960 m; VI.

P. galii Fuck. – on **Galium anisophyllum* Vill.: Mały Giewont, rock crevasse, 1650 m; VIII. – on *Galium schultesii* Vest.: Dol. Białego, herbaceous plants, 970 m; VI.

P. knautiae Fuck. ex Schroet. – on *Scabiosa lucida* Vill.: Hala Mała Łąka (below the Przełęcz Kondracka), alpine grassland 1500, 1600 m; IX. The species was collected on this host plant only in Suchy Żleb below Wrótka (S a l a t a et al., 1984).

P. lunariae Gäum. – on *Lunaria rediviva* L.: Dol. Kościeliska, beech-spruce forest, 980 m; Wąwóz Kraków, scrub, 1000 m; VI-VIII (Fig. 1D).

P. myosotidis de Bary – on *Myosotis scorpioides* L. (x): Hala Gąsienicowa, herbaceous plants, 1530 m; VI.

P. ranunculi Gäum. – on **Ranunculus oreophilus* Bieb.: Nosal, alpine grassland, 1150 m; VI.

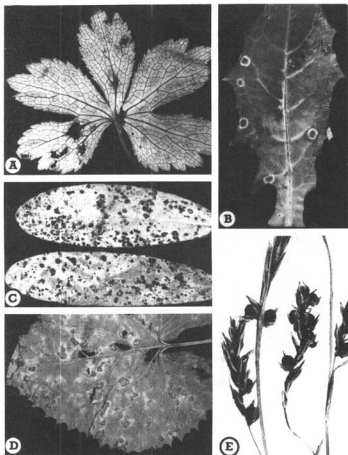


Fig. 1. A - *Puccinia astrantiae* Kalchbr. on *Astrantia major* L., B - *P. maculosa* (Str.) Röhl. on *Cicerbita alpina* (L.) Wallr., C - *Uromyces anthyllidis* Schroet. on *Anthyllis vulneraria* L., D - *Peronospora lunariae* Gäum. on *Lunaria rediviva* L., E - *Anthracoidea caricis* (Pers.) Bref. on *Carex fuliginosa* Schuhr

Plasmopara pusilla (de Bary) Schroet. – on *Geranium pratense* L. (x): Polana Olczyska, meadow, 1050 m; VI.

P. umbelliferarum (Casp.) Schroet. ex Wartenw. – on *Aegopodium podagraria* L.: Dol. Chochołowska, meadow, 1100 m; VII. – on *Anthriscus sylvestris* (L.) Hoffm. (x): Polana Olczyska, meadow, 1050 m; VI.

PROTOMYCETALES, TAPHRINALES

Protomyces macrosporus Unger. – on *Aegopodium podagraria* L.: Jaszczurówka, beech forest, 940 m; VI. – on **Carum carvi* L.: Dol. Mała Łąka (Mała Polanka), meadow, 1210 m; VI.

Taphrina betulina Rostr. – on *Betula pubescens* Ehrh. subsp. *carpathica* (Willd.) Ascherson et Graebner: Morskie Oko, upper forest zone, 1450 m; VI-VII.

ERYSIPHALES

Blumeria graminis (DC.) Speer – on *Elymus caninus* (L.) L. (x): Dol. ku Dziurze, spruce-fir forest, 870 m; Dol. Białego, roadside in beech forest, 890 m, 950 m; Kuźnice, herbaceous plants by a stream, 1050 m; Hala Mała Łąka, meadow, 1200 m; VIII.

Erysiphe asperifoliorum Grev. – on *Myosotis sylvatica* Hoffm.: Adamica, damp depression in upper forest zone, 1200 m; VIII.

E. cichoracearum DC. var. *cichoracearum* – on *Carduus defloratus* L. subsp. *glaucus* Nyman: Dol. Białego, grasslands on roadside, 960 m; Dol. Jaworzynka, roadside, 1220 m; VIII-IX. – on *Centaurea jacea* L. (x): Polana Olczyska, meadow, 1040 m; Dol. Strążyska, roadside, 1020 m; IX. – on *Cirsium erisithales* (Jacq.) Scop.: Dol. Białego, roadside, 980 m; IX. – on *Hieracium murorum* L. (x): Dol. Mała Łąka, meadow, 1060 m; VIII. – on *Homogyne alpina* (L.) Cass. (x): Dol. Kondratowa, grassland, 1550 m; Sucha Czuba, grassland, 1600 m, 1680 m; Mała Polanka Ornaczańska, grassland, 1100 m; Dol. Chochołowska, grassland, 1100 m; Przełęcz w Grzybowcu, upper forest zone, 1311 m; VII-VIII. – on *Prenanthes purpurea* L.: Hala Olczyska, spruce forest, 1080 m; Dol. Mała Łąka, beech forest, 960 m; Dol. Białego beech-spruce forest, 940 m; IX. – on *Senecio nemorensis* L.: Dol. Bystrej, spruce forest, 1100 m, Dol. Olczyska, beech forest, 920 m; Dol. Mała Łąka, beech forest, 1000 m; Path above Regle (Zameczki), herbaceous plants, 1206 m; Wąwóz Kraków, herbaceous plants, 1020 m; Czerwona Przełęcz, spruce forest, 1303 m; Kopa Królowa Mała, herbaceous plants in dwarf-pine belt, 1525 m; Przełęcz w Grzybowcu, fallplace, 1402 m; VIII-IX. – on *Solidago virgaurea* L. (x): Hala Mała Łąka (Wyżnie), spruce forest, 1280 m; Nosal, spruce forest, 1140 m; VI, IX.

(x)*E. depressa* (Wall.) Schlecht. – on *Arctium tomentosum* Miller: Dol. Olczyska, scrub by streamside, 930 m; IX.

E. galeopsidis DC. – on *Lamiastrum galeobdolon* (L.) Ehrend. et Polatschek: Dol. Białego, spruce forest, 1120 m; Dol. za Bramką, beech forest, 997 m; Path above Regle, spruce forest, 1208 m; Dol. Kondratowa, upper forest zone, 1320 m; VIII-IX.

- E. galii* (Fuck.) ex Blumer – on *Galium mollugo* L. (x): Polana Pisana, roadside, 1110 m; VIII.
- E. heraclei* DC. – on *Chaerophyllum hirsutum* L.: Dol. Olczyska, by a roadside in beech-spruce forest, 940 m; Path above Regle, herbaceous plants, 1245 m; Path below Regle, herbaceous plants, 925 m; VIII-IX. – on *Heracleum sphondylium* L.: Dol. Olczyska, by roadside in spruce forest, 1020 m; IX.
- E. hyperici* (Wallr.) ex Blumer – on *Hypericum maculatum* Crantz: Dol. Mała Łąka, beech forest, 940 m; Dol. Białego, roadside, 950 m; Dol. Olczyska, roadside, 950 m; Dol. Bystrej, roadside 1050 m; Nosalowa Przełęcz, herbaceous plants in spruce forest, 1101 m; Boczań, spruce forest clearing, 1150 m; Przełęcz w Grzybowcu, in fallplace, 1338 m; Sarnia Skała, grassy clearing, 1345 m; Dol. Jaworzynka, herbaceous plants in mountain meadow, 1020 m; Polana Strążyńska, herbaceous plants, 1037 m; Dol. za Bramką, grassy clearing, 920 m; Stare Kościeliska, grassy clearing, 970 m; Path below Regle (Suchy Żleb), herbaceous plants, 925 m; VIII-IX.
- (x)*E. knautiae* Duby – on *Scabiosa lucida* Vill.: Dol. Białego, alpine herbaceous plants, 940 m; IX. Only known from Pieniny (S a ł a t a, 1985).
- E. ranunculi* Grev. – on *Aconitum firmum* Reichenb.: Wąwóz Kraków, roadside, 1100 m; VIII. – on *Aconitum* sp.: Kalacka Turnia, grassland, 1180 m; VII. – on *Ranunculus lanuginosus* L.: Dol. Mała Łąka, beech forest, 950 m; Hala Mała Łąka (Stawki), herbaceous plants near a spring, 1220 m; IX. – on *R. repens* L.: Dol. Bystrej, 1100 m; IX.
- E. trifolii* Grev. – on *Trifolium pratense* L. (x): Dol. Mała Łąka, by roadside in beech forest, 1020 m; IX.
- E. valerianae* (Jacq.) Blumer – on *Valeriana officinalis* L. subsp. *sambucifolia* (Mikan fil.) Čelak: Dol. Olczyska, herbaceous plants by streamside, 1010 m; Dol. Mała Łąka, on roadside in the lower forest zone, 1100 m; Polana Pisana, meadow, 1040 m; VII-IX. – on *Valeriana tripteris* L.(x): Dol. Mała Łąka, damp alpine grassland, 960 m; VIII. The species was collected on this host plant only in Pieniny (S a ł a t a, 1985).
- (x)*Microsphaera vanbruntiana* Gerard var. *sambuci-racemosae* U. Braun. – on *Sambucus racemosa* L.: Polana Olczyska, roadside scrubs, 1050 m; Dol. Mała Łąka, beech forest, 970 m; IX.
- Sphaerotheca aphanis* (Wallr.) U. Braun. – on *Alchemilla* sp.: Przełęcz Liliowe, grassland, 1952 m; VIII.
- (x)*S. balsaminae* (Wallr.) Kari – on *Impatiens noli-tangere* L.: Nosalowa Przełęcz, spruce forest, 1080 m; IX.
- S. epilobii* (Wallr. ex Link) Sacc. – on *Epilobium montanum* L.: Hala Mała Łąka (Stawki), herbaceous plants near a spring, 1220 m; IX.
- S. fusca* (Fr.) Blumer – on *Adenostyles alliariae* (Gouan) A. Kerner: Boczań, scrub in spruce forest, 1200 m; VIII. – on *Aster bellidiatrum* (L.) Scop.: north-facing slope of Kasprowy Wierch, alpine grassland, 1720 m, 1820 m; VIII. – on *Senecio subalpinus* Koch: Dol. Kondratowa, meadow, 1460 m; Path below

Regle, roadside, 910 m; Dol. Mała Łąka, meadow, 1020 m; VIII. – on *Taraxacum* sect. *Alpestris* v. Soest.: Hala Gąsienicowa, roadside, 1500 m; Stara Polana, roadside, 1025 m; VIII. – on *Taraxacum* sect. *Vulgaria* Dahlst.: Dol. Jaworzynka, roadside, 1073 m; Hala Kalatówki, mountain meadow grassland, 1225 m; Suchy Wierch, on roadside in spruce forest, 1145 m; Dol. Strążyska by roadside in spruce forest, 1020 m; Dol. Białego, roadside, 910 m VIII. – on *Taraxacum* sp.: Polana Uplaz, roadside, 1300 m; VII.

S. helianthemi L. Junell – on *Helianthemum nummularium* (L.) Miller subsp. *obscurum* (Čelak.) J. Holub: Nosal, rock debris, 1180 m; VIII.

S. spireae Sawada – on *Filipendula ulmaria* (L.) Maxim.: Dol. Olczyska scrub by streamside, 950 m; Dol. Mała Łąka, meadow, 1025 m; VIII-IX.

SPHAERIALES, CLAVICIPITALES

Isothea rhytismoides (Babington ex Berk.) Fr. – on *Dryas octopetala* L.: Przełęcz między Kopami; alpine grassland, 1500 m; Skupniów Uplaz, alpine grassland, 1485 m; VIII (Fig. 2F).

Claviceps purpurea (Fr.) Tul. – on *Alopecurus pratensis* L. (x): Hala Mała Łąka, meadow, 1200 m; VIII.

PHACIDIALES, HELOTIALES, DOTHIDEALES

Rhytisma salicinum (Pers. ex Fr.) Fr. – on *Salix silesiaca* Willd.: Dol. Chochołowska, scrub, 1000 m; VII.

(x)*Leptotrochila ranunculi* (Fr.) Schüpp – on *Ranunculus repens* L.: Dol. Chochołowska, meadow, 1000 m; Nosalowa Przełęcz, roadside, 1101 m; VII-VIII.

(x)*Pseudopeziza calthae* (Phill) Mass. – on *Caltha laeta* Schott, Nyman et Kotschy: Dol. Mała Łąka, herbaceous plants by a streamside, 1040 m; VI.

P. trifolii (Biv.-Bern. ex Fr.) Fuck. – on *Trifolium pratense* L.: Polana Uplaz, meadow, 1300 m; Dol. Mała Łąka, meadow, 1100 m; VIII-IX.

**Leptosphaeria tofieldiae* E. Müll. – on *Tofieldia calyculata* (L.) Wahlenb.: Nosal, alpine grassland, 1190 m; VI.

UREDINALES

Coleosporium tussilaginis (Pers.) Berk. – on *Pinus mughus* Scop.: Dol. Rybiego Potoku, road verge, 1400 m; VI.

Melampsora capreae Thüm. – on *Salix caprea* L.: Hala Mała Łąka (Stawki), in scrub near spring, 1220 m; Dol. Bystrej, roadside, 1150 m; Dol. Olczyska roadside, 940 m; Polana Olczyska, in scrub near rising spring, 1050 m; Path below Regle, forest margin, 910 m; VIII-IX.

M. epitea Thüm. – on *Salix silesiaca* Willd.: Dol. Strążyska, herbaceous plants by streamside, 980 m; Dol. Jaworzynka, in mountain meadow, 1050 m; Kuźnice, forest margin 1074 m; Dol. Kondratowa, in scrub, 1360 m; Sucha Czuba, 1600 m; VII-VIII.

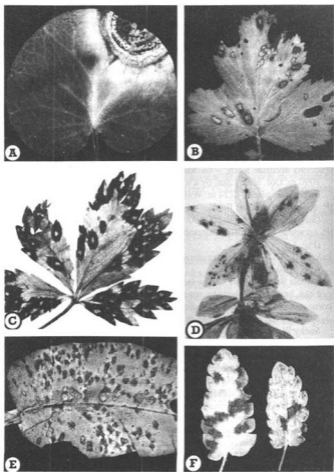


Fig. 2. A - *Cladosporium soldaneliae* Jaap on *Soldanella carpatica* Vierh., B - *Septoria gei* Rob. ex Desm. on *Geum urbanum* L., C - *Ramularia arvensis* Sacc. on *Potentilla aurea* L., D - *Septoria gentianicola* Baudys et Pich. on *Gentiana verna* L., E - *Bostrichonema polygoni* (Ung.) Schroet. on *Polygonum bistorta* L., F - *Isothea rhytismoides* (Babington ex Berk.) Fr. on *Dryas octopetala* L.

- M. lini* (Ehrenb.) Desm. – on *Linum perenne* L. spp. *extraxillare* (Kit.) Nyman: Hala Mała Łąka (Wyzńie), grassland, 1360 m; Świstówka Niżnia, grassland, 1550 m; VIII-IX.
- M. populnea* Thüm. – on *Mercurialis perennis* L. (x): Wąwóz Kraków, in scrub, 1250 m; VI.
- (x)*Melampsorella symphyti* Bub. – on *Symphytum tuberosum* L.: Dol. Mała Łąka, beech forest, 980 m; Dol. Strążyska, beech-spruce forest, 940 m; Dol. Kościeliska, beech-spruce forest, 980 m; VI-VII.
- (x)*Melampsorium betulinum* Kleb. – on *Betula pendula* Roth: Dol. Bystrej, roadside, 1120 m; IX.
- Pragmidium potentillae* (Pers.) Karst. – on *Potentilla aurea* L.: Polana Olczyska, meadow, 1060 m; Piekło, grassland in dwarf-pine belt, 1405 m; Przełęcz między Kopami, grassland, 1500 m; VII-IX.
- (x)*Puccinia acetosae* Körn. – on *Rumex acetosa* L.: Polana Olczyska, meadow, 1090 m; Dol. Mała Łąka, by a roadside in beech forest, 1000 m; Dol. Bystrej, herbaceous plants, 1124 m; Wąwóz Kraków, roadside, 1100 m; VIII-IX.
- (x)*P. aegopodii* (Schum.) Röhl. – on *Aegopodium podagraria* L.: Dol. Kościeliska (Sowa), herbaceous plants, 1000 m; Jaszczurówka, beech forest, 940 m; VI.
- (x)*P. astrantiae* Kalchbr. – on *Astrantia major* L.: Nosal, spruce forest, 1190 m; VI (Fig. 1A).
- P. calcitrapae* DC. – on *Cirsium oleraceum* (L.) Scop. (x): Dol. Mała Łąka, streamside, 1020 m; IX.
- P. calthicola* Schroet. – on *Caltha laeta* Schott, Nyman et Kotschy (x): Dol. Mała Łąka, herbaceous plants by streamside, 1040 m; VI.
- P. coronata* Corda – on **Sesleria sadlerana* Janka subsp. *Tatrae* (Degen) Deyl: Sarnia Skąła, alpine grassland, 1345 m; Dol. Jaworzynka, alpine grassland, 1062 m; Suchy Żleb below Giewont, alpine grassland, 1300 m; VIII-IX.
- P. graminis* Pers. – on *Elymus caninus* (L.) L.: Dol. Jaworzynka, herbaceous plants in mountain meadow, 1047 m; VIII.
- P. hieracii* Mart. – on *Hieracium alpinum* L.: Kasprowy Wierch, alpine grassland, 1985 m; VIII. – on *Hieracium villosum* Jacq.: Gęsia Szyja, alpine grassland, 1480 m; VI. – on *Leontodon incanus* (L.) Schrank (x): Nosal, grassland, 1120 m; 1180 m; VI.
- (x)*P. impatientis* Schubad – on *Impatiens noli-tangere* L.: Dol. Strążyska, roadside, 930 m; Dol. Mała Łąka, spruce forest, 1050 m; IX.
- P. maculosa* (Str.) Röhl. – on *Cicerbita alpina* (L.) Wallr.: Sarnia Skąła, dwarf-pine belt, 1377 m; VI (Fig. 1B).
- P. mei-mamillata* Semad. – on *Polygonum bistorta* L.: Hala Mała Łąka (Wielka Polana), meadow, 1140 m; Hala Kalatówki, herbaceous plants in mountain meadow, 1225 m; VIII-IX.
- P. pimpinellae* (Str.) Röhl. – on *Pimpinella major* (L.) Hudson (x): Sarnia Skąła, roadside, 1370 m; Hala Mała Łąka, spruce forest, 1210 m; Dol. Jaworzynka, herbaceous plants, 1065 m, 1230 m; Dol. Białego, alpine grassland, 950 m;

- Boczań, grassy clearing in spruce forest, 1230 m; Path above Regle (Zameczki), alpine grassland, 1206 m; Nosal, alpine grassland, 1094 m; Dol. ku Dziurze, herbaceous plants, 890 m; Dol. Chochołowska (Polana Huciska), roadside, 980 m; Wąwóz Kraków (Kamienne Tomanowe), grassland, 1900 m; VI-IX.
- P. poarum* Niels. – on *Petasites hybridus* (L.) P. Gaertner, B. Meyer et Scherb. (x): Dol. Kościeliska, herbaceous plants, 1060 m; Dol. Białego, herbaceous plants, 1050 m; Kuźnice, herbaceous plants, 1000 m; Nosal, in upper forest zone, 1100 m; Dol. Sucha Woda, herbaceous plants, 1140 m; VI-VIII.
- P. poae-nemoralis* Outh – on *Anthoxanthum odoratum* L.: Piekło, grassland in dwarf-pine belt, 1425 m; VIII.
- P. polygoni-vivipari* Karst. – on *Polygonum viviparum* L.: Przełęcz Bacuch, alpine grassland, 1480 m; VIII.
- P. pulverulenta* Grev. – on **Epilobium alpestre* (Jacq.) Krock: Stare Kościeliska, herbaceous plants by streamside, 945 m; VIII. On this host plant the species is known to occur in Slovak Tatra (Starmachowa, 1963). – on *E. montanum* L.: Dol. Kondratowa, herbaceous plants in screes, 1320 m; Dol. Chochołowska, meadow, 1000 m; VII-VIII.
- P. pygmaea* Eriks. – on *Calamagrostis arundinacea* (L.) Roth (x): Dol. Mała Łąka, beech forest, 950 m; IX.
- P. veronicae* Schroet. – on *Veronica montana* L.: Dol. Strążyska (Polana Młyniska), beech forest, 910 m; VIII.
- Pucciniastrum vaccinii* (Wint.) Jørst. – on *Vaccinium myrtillus* L.: Dol. Białego, beech-spruce forest, 970 m; Dol. Olczyska, spruce forest, 1030 m; Staw Smreczyński, upper forest zone, 1226 m; VIII-IX.
- (x) *Triphragmium ulmariae* (DC.) Link – on *Filipendula ulmaria* (L.) Maxim.: Dol. Mała Łąka, streamside, 1020 m; meadow, 1030 m; VIII-IX.
- Uromyces anthyllidis* Schroet. – on *Anthyllis vulneraria* L.: Nosal, alpine grassland, 1120 m; Hala Mała Łąka, grassland, 1300 m; VI-VII (Fig. 1C).
- U. behenis* (DC.) Ung. – on *Silene vulgaris* (Moench) Garcke: Dol. Jaworzynka, by streamside, 1200 m; IX.
- U. geranii* (DC.) Fr. – on *Geranium pratense* L. (x): Polana Olczyska, meadow, 1050 m, 1030 m; VI, IX.
- U. valerianae* (DC.) Fuck. – on *Valeriana tripteris* L. (x): Dol. za Bramką, herbaceous plants by streamside, 976 m, Dol. Olczyska, herbaceous plants by a streamside, 900 m; Dol. ku Dziurze, herbaceous plants by streamside, 1085 m; Nosal, spruce forest, 1040 m; Dol. Białego, beech-fir forest, 1030 m; Dol. Strążyska (Polana Młyniska), beech-fir forest, 910 m; VIII.
- U. veratri* (DC.) Schroet. – on *Adenostyles alliariae* (Gouan) Krener: Morskie Oko, herbaceous plants, by head streams of a river, 1450 m; VII.

USTILAGINALES

- Anthracoidea caricis* (Pers.) Bref. – on **Carex fuliginosa* Schkuhr: Piekło, alpine grassland, 1450 m; Sucha Dolina, alpine grassland in the dwarf-pine belt, 1580 m; VIII (Fig. 1E).

Urocystis ranunculi (Lib.) Moesz – on *Ranunculus repens* L.: Przelęcz w Grzybowcu, near a tourist track, 1311 m; Dol. Kościeliska, roadside, 1050 m; Kuźnice, roadside, 1060 m, herbaceous plants by streamside 1081 m; Dol. Kondratowa, meadow, 1440 m; Nosal, herbaceous plants by streamside, 1092 m; Ięła, clearing in spruce forest, 1065 m; Boczań, clearing in spruce forest, 1200 m; Dol. Białego, roadsides, 920 m, 1004 m, 1150 m; Dol. Strążyńska, roadsides, 900 m, 1000 m, Dol. Olczyńska, roadside, 950 m; Dol. ku Dziurze, herbaceous plants by a stream, 910 m; Dol. Spadowiec herbaceous plants by a stream, 950 m; Hala Gąsienicowa roadside, 1500 m; Stare Kościeliska, roadside, 945 m; VII-VIII.

MONILIALES

Bostrichonema polygoni (Ung.) Schroet. – on *Polygonum bistorta* L. (x): Dol. Mała Łąka, roadside, 980 m; dry stream bed, 1140 m; Hala Mała Łąka (Stawki), near a spring, 1220 m; IX (Fig. 2 E, Fig. 3 a).

(x) *Botrytis cinerea* Pers. ex Nocca et Balbis – on **Geum montanum* L.: Sucha Czuba, grassland, 1640 m; VIII. – on **Ligusticum mutellina* (L.) Crantz: Dol. Kondratowa, grassland, 1550 m; VIII. – on **Salix silesiaca* Willd.: Sucha Czuba, in scrub. 1600 m; VIII.

(x) *Cercospora mercurialis* Pass. – on *Mercurialis perennis* L.: Dol. Mała Łąka, beech forest, 950 m; IX.

(x) *Cercospora mangusiana* Allesch. – on **Geranium sylvaticum* L.: Dol. Mała Łąka, meadow, 1100 m; VIII. The species occurs on this host plant in Slovak Tatra (Tatry Bielskie) (S t a r m a c h o w a, 1963).

(x) *Cladosporium echinulatum* (Berk.) de Vries – on **Gypsophila repens* L.: Hala Mała Łąka, grassland, 1600 m; IX.

**C. soldaneliae* Jaap – on *Soldanella carpatica* Vierh.: Beskid, alpine grassland, 1750 m; VIII (Fig. 2 A). On this host plant the species was also collected in Slovak Tatra (S t a r m a c h o w a, 1963). – on *Soldanella montana* Willd.: Polana Waksmundzka, upper forest zone, 1400 m, VI.

(x) *Gyoerffyella oxalidis* Vanev – on *Oxalis acetosella* L.: Dol. Olczyńska, beech-spruce forest, 1020 m; IX. In Poland the species has been reported from Białowieża Forest and South Roztocze (M u ł e n k o, 1993).

Mastigosporium album Ries. – on *Alopecurus pratensis* L.: Hala Kalatówki, meadow, 1260 m; VIII.

M. muticum (Sacc.) Gunnerb. – on *Dactylis glomerata* L.: Dol. Mała Łąka (Wielka Polana), meadow, 1150 m; Polana Olczyńska, meadow, 1050 m; Dol. Olczyńska, roadside, 900 m; Nosal, clearing in spruce forest, 1194 m; Kuźnice, herbaceous plants, 1051 m; VIII-IX.

M. rubricosum (Dearn. et Barth.) Nannf. – on *Calamagrostis varia* (Schrad.) Host: Beskid, grassland in dwarf-pine belt, 1725 m; VIII.

(x) *Mycocentrospora veratri* (Peck.) U. Braun – on *Veratrum lobelianum* Bernh.: Dol. Kościeliska (Smytnia Polana), meadow, 1100 m; Nosalowa Przelęcz, spruce forest, 1080 m; VII, IX (Fig. 3 e). The nearest locality has been reported from the High Tatra in Slovakia (O n d ř e j, 1974).

**Ovularia bartsiae* (Johans.) Rostr. – on *Bartsia alpina* L.: Dol. Białego, alpine grassland, 980 m; Kopa Królowa Mała, alpine grassland in dwarf-pine belt, 1525 m; Beskid, alpine grassland in dwarf-pine belt, 1725 m, VIII.

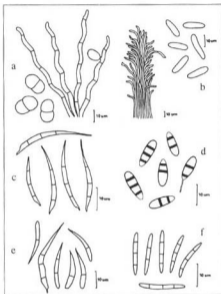


Fig. 3. a – *Bostrichonema polygoni* (Ung.) Schroet. on *Polygonum historta* L., b – *Phacelium volkartianum* (P. Magnus) U. Braun on *Potentilla aurea* L., c – *Heteropatella umbilicata* (Pers.) Jaap on *Hieracium alpinum* L., d – *Seimatosporium rosarum* (P. Henn.) Sutton on *Rosa pendulina* L., e – *Mycocentrospora veratri* (Peck.) U. Braun on *Veratrum lobelianum* Bernh., f – *Stagonospora brachypodiicola* (Braun.) Castellani et Germano on *Brachypodium sylvaticum* Beauv.

Phacelium albo-rosellum (Desm.) U. Braun – on *Cerastium fontanum* Baumg. subsp. *triviale* (Link.) Jalas: Hala Gąsienicowa, roadside, 1600 m; VI.

P. episphaerium (Desm.) U. Braun – on *Stellaria nemorum* L.: Dol. Mała Łąka, roadsides in spruce forest, 1020 m, 1090 m; Dol. Chochołowska, forest margin, 1080 m; Wąwóz Kraków, in scrub, 1000 m; Dol. Kondratowa, streamside, 1200 m; VI-IX.

**P. volkartianum* (P. Magnus) U. Braun – on *Potentilla aurea* L.: Beskid, dwarf-pine belt, 1670 m; Kasprowy Wierch, alpine grassland, 1965 m; VII-VIII (Fig. 3b).

(x)*Phaeoramularia punctiformis* (Schlechtendal) U. Braun – on *Epilobium montanum* L.: Dol. Białego, beech forest, 930 m; IX.

- Ramularia aplospora* Speg. – on *Alchemilla* sp.: Przelęcz Liliowe, grassland, 1952 m; Dol. Jaworzynka, meadow 1100 m; Hala Kondratowa, 1320 m; Polana Olczyńska, meadow, 1050 m; VI-VIII.
- (x)*R. arvensis* Sacc. – on *Potentilla aurea* L.: Hala Kondratowa, meadow, 1320 m, VII (Fig. 2C). On this host plant the species was also noted in Slovak Tatra (S t a r m a c h o w a, 1963).
- (x)*R. cardamines* Syd. – on **Cardamine opizii* J. et C. Presl: Mała Polanka Ornaczańska, streamside, 1100 m; Włosienica, streamside, 1320 m; VI-VIII.
- (x)*R. chalcidonica* Allesch. – on **Silene dioica* (L.) Clairv.: Dol. Olczyńska, streamside, 920 m; Dol. Jaworzynka, meadow, 1100 m; VII, IX.
- R. circumfusca* Ell. et Ev. – on **Rumex arifolius* All.: Dol. Roztoki, spruce forest, 1220 m; VI.
- (x)*R. cirsii* Allesch. – on **Cirsium oleraceum* (L.) Scop.: Dol. Mała Łąka, streamside, 1020 m; IX.
- (x)*R. evanida* (Kühn.) Sacc. – on *Gentiana asclepiadea* L.: Dol. Olczyńska, beech forest, 940 m; IX.
- R. filaris* Fres. – on *Senecio subalpinus* Koch: Dol. Białego, beech-spruce forest, 950 m; Dol. Mała Łąka, beech forest, 1010 m; Hala Mała Łąka (Wyżnie), roadside, 1260 m; Dol. Tomanowa, meadow, 1180 m; Nosalowa Przelęcz, herbaceous plants, 1101 m; Dol. ku Dziurze, herbaceous plants by a stream, 875 m, 925 m; Dol. Jaworzynka, grasslands in spruce forest, 1060 m; Dol. Strążyska, herbaceous plants, 1030 m; Dol. Chochołowska, roadside, 1000 m; Jaszczurówka, beech forest, 940 m; Włosienica, spruce forest, 1320 m; Dol. Olczyńska, beech-spruce forest, 970 m; Dol. Bystrej, spruce-beech forest, 1000 m, Sucha Dolina, herbaceous plants, by a stream, 1680 m; VI-IX.
- R. gerani* (West.) Fuckel – on *Geranium phaeum* L.: Polana Olczyńska, meadow, 1050 m; Dol. Mała Łąka, by a roadside in spruce forest, 1050 m; Wielka Polana, meadow, 1150 m; Dol. Miętusia, roadside, 1060 m; Polana Strążyska, herbaceous plants in mountain meadow, 1035 m; Dol. Chochołowska, meadow, 1100 m; Dol. Kościeliska, roadside, 1050 m, 1080 m; Dol. Bystrej, roadside, 1100 m; VI-IX.
- R. hieracii* (Bäumler) Jaap – on *Hieracium alpinum* L.: Beskid, alpine grassland, 1690 m; Kasprowy Wierch, alpine grassland, 1985 m; Przelęcz Goryczkowa nad Zakosy, alpine grassland, 1820 m; Sucha Czuba, in dwarf-pine belt, 1650 m; VIII. – on *Hieracium* sp.: Dol. Olczyńska, on a roadside in beech forest, 910 m; Path above Regle, spruce forest, 1160 m; IX.
- (x)*R. lamii* Fuckel – on **Lamium maculatum* L.: Wąwóz Kraków, grassland, 1100 m; VIII.
- (x)*R. macularis* (Schroet.) Sacc. et P. Syd. – on *Chenopodium bonus-henricus* L.: Dol. Tomanowa, meadow, 1300 m; VI.
- (x)*R. plantaginis* Ell. et G. Martin – on *Plantago major* L.: Dol. Bystrej, roadside, 1100 m; IX.

- (x)*R. valerianae* (Speg.) Sacc. – on *Valeriana officinalis* subsp. *sambucifolia* (Mikan fil.) Čelak: Gęsia Szyja, in dwarf-pine belt, 1490 m; VI. – on *Valeriana tripteris* L.: Dol. Mała Łąka, beech forest, 960 m; IX.
- (x)*R. variabilis* Fuckel – on **Digitalis grandiflora* Miller: Dol. Mała Łąka, beech forest, 1010 m; IX.
- R. variegata* Ell. et Holw. – on *Petasites hybridus* (L.) P. Gaertner, B. Meyer et Scherb. (x): Dol. Sucha Woda, herbaceous plants, 1140 m; VI.

MELANCONIALES

- (x)*Diplosporonea delastrei* (Delacr.) Petrak – on **Silene vulgaris* (Moench) Garcke: Dol. Jaworzynka, grassland by a stream, 1200 m; IX.
- Marssonina violae* (Pass.) Magn. – on *Viola biflora* L.: Dol. ku Dziurze, spruce-fir forest, 880 m; VIII.
- **Seimatosporium rosarum* (P. Henn.) Sutton – on *Rosa pendulina* L.: Dol. Białego, beech forest, 950 m; IX (Fig. 3 d). Perhaps the specimen collected by Chlebicki from Babia Góra and described as *Seimatosporium* sp. should be classified as this species (Chlebicki, 1989).

SPHAEROPSIDALES

- Ampelomyces quisqualis* Cesati – on *Sphaerotheca fusca* (Fr.) Blumer (x) (on *Senecio subalpinus* Koch): Dol. Mała Łąka, meadow, 1020 m; VIII.
- (x)*Ascochyta boltshauseri* Sacc. – on **Vicia cracca* L.: Stare Kościeliska, meadow, 870 m; VI.
- **Asteromella corcontica* (Kab. et Bub.) Moesz ex Batista – on *Hieracium alpinum* L.: Przełęcz Goryczkowa nad Zakosy, alpine grassland, 1820 m, 1985 m; south facing slope of Sucha Czuba, in dwarf-pine belt, 1650 m; VIII.
- Heteropatella umbilicata* (Pers.) Jaap – on **Hieracium alpinum* L.: Beskid, alpine grassland, 1690 m; VIII (Fig. 3 c).
- (x)*Phoma exigua* Desm. var. *exigua* – on **Aster bellidiastrum* (L.) Scop.: Dol. Białego, alpine grassland, 920 m; IX.
- (x)*Phyllosticta alnea* Oud. – on *Alnus incana* (L.) Moench: Dol. Bystrej, roadside, 1090 m; IX.
- (x)*P. aucupariae* Thüm. – on *Sorbus aucuparia* L.: Dol. Mała Łąka, spruce forest, 1140 m; IX.
- **P. caballeroi* Gonz. Frag. – on *Tussilago farfara* L.: Dol. Mała Łąka, streamside, 970 m; IX.
- **P. cirsii* Desm. – on *Cirsium erisithales* (Jacq.) Scop.: Hala Mała Łąka, on a roadside in spruce forest, 1210 m; IX.
- **P. phyteumatis* Gonz. Frag. – on *Phyteuma spicatum* L.: Dol. Kościeliska (Zahradziska) forest margin, 1180 m; VIII.
- **P. pleurospermi* Died. – on *Pleurospermum austriacum* (L.) Hoffm.: Dol. Białego, grassland on roadside, 960 m; IX.
- **Septoria carvi* Syd. – on *Carum carvi* L.: Dol. Mała Łąka (Mała Polanka), meadow, 1210 m; VI.

- (x) *S. cerastii* Rob. ex Desm. – on *Cerastium fontanum* Baumg. subsp. *triviale* (Link.) Jalas: Dol. Jaworzynka, dry stream bed, 1080 m; IX.
- (x) *S. cirsii* Niessl – on **Cirsium erisithales* (Jacq.) Scop.: Dol. Mała Łąka, beech forest, 950 m; IX. Also known from Slovak Tatra (S t a r m a c h o w a, 1963).
- (x) *S. galeopsidis* West. – on **Galeopsis bifida* Boenn.: Polana Uplaz, meadow, 1320 m; VIII.
- S. gei* Rob. ex Desm. – on *Geum montanum* L. (x): Sucha Czuba, grassland, 1640 m; Kasprowy Wierch, grassland, 1900 m; VIII. On this host plant the fungus was also collected in Slovak Tatra (S t a r m a c h o w a, 1963). – on *Geum urbanum* L. (x): Dol. Mała Łąka, roadside in beech forest, 1010 m; Hala Mała Łąka, spruce forest, 1210 m; Dol. Olczyńska, roadside, 930 m; Dol. Bialego, in scrub by stream-margin, 950 m; IX (Fig. 2B).
- **S. gentianicola* Baudyš et Pich. – on *Gentiana verna* L.: Dol. Jaworzynka, alpine grassland, 1170 m; IX (Fig. 2D).
- (x) *S. heraclei* (Lib.) Desm. sensu Jørst. – on *Heracleum sphondylium* L.: Dol. Jaworzynka, meadow, 1180 m; IX.
- (x) *S. hyperici* Rob. ex Desm. – on **Hypericum maculatum* Crantz: Dol. Olczyńska on a roadside in beech-spruce forest, 960 m; Hala Mała Łąka (Wielka Polana), meadow, 1150 m; IX. Species also known from Slovak Tatra (S t a r m a c h o w a, 1963).
- (x) *S. lamiicola* Sacc. – on *Lamium maculatum* L.: Wąwóz Kraków, in scrub, 980 m; VI. – on *Lamium purpureum* L. Polana Mała Łąka, scrub, 1200 m; IX.
- (x) *S. pimpinellae* Laub. – on *Pimpinella major* (L.) Hudson: Dol. Chochołowska (Polana Huciska), roadside, 980 m; VII.
- **S. plantaginis-majoris* (Sacc.) Nannf. – on *Plantago major* L.: Dol. Mała Łąka, roadside, 1150 m; IX.
- **S. prostrata* Kab. et Bub. – on *Homogyne alpina* (L.) Cass.: Dol. Olczyńska, spruce forest, 1015 m; IX.
- (x) *S. ribis* (Lib.) Desm. – on *Ribes alpinum* L.: Kobylarz, in dwarf-pine belt, 1480 m; VII.
- S. rohlenae* Bub. – on *Scrophularia scopolii* Hoppe: Hala Mała Łąka (Stawki), meadow, 1220 m; IX.
- (x) *S. senecionis* West. – on *Senecio nemorensis* subsp. *Fuchsii* (Gmel.) Čelak: Wąwóz Kraków, in scrub, 1100 m; VII.
- (x) *S. tormentillae* Rob. ex Desm. – on **Potentilla aurea* L.: Czerwona Przełęcz, grassy clearing, 1303 m; Rusinowa Polana, grassland, 1200 m; VI-VIII. – on *Potentilla erecta* (L.) Räuſchel: Polana Olczyńska, meadow, 1050 m; IX.
- (x) *S. violae-palustris* Died. – on **Viola biflora* L.: Świstówka Niżnia, grassland, 1600 m; IX.
- Sphaerellopsis filum* (Biv. – Bern. ex Fr.) Sutton (= *Darlucula filum* (Biv.) Cast.) – on *Uromyces anthyllidis* (Grev.) Schroet. (x) (on *Anthyllis vulneraria* L.): Nosal, grassland, 1120 m; VI.

- * *Sporonema bartsiae* (Rost.) Jørst. – on *Bartsia alpina* L.: Suchy Żleb below Giewont, alpine grassland, 1350 m; Przelęcz Siodło, alpine grassland, 1850 m; Beskid, alpine grassland, 1725 m; VIII.
- * *Stagonospora brachypodiicola* (Brun.) Castellani et Germano – on *Brachypodium sylvaticum* Beauv.: Dol. Mała Łąka, beech forest, 960 m; IX. (Fig. 3 f).

RESULTS

The paper presents a list of 141 species of parasitic fungi collected in the Tatra National Park in 1982-1992. Some fungi are new to the Polish mycoflora (17 species); others have been collected on new host plants (28 species) or are known from single localities. The list includes 47 species of fungi which are known to occur in Poland but have not been reported so far from the Tatra National Park.

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