

New records of polypores from Iran, with a checklist of polypores for Gilan Province

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As a result of a survey of poroid basidiomycetes in Gilan Province, *Antrodiella fragrans*, *Ceriporia aurantiocarnescens*, *Oligoporus tephroleucus*, *Polyporus udus*, and *Tyromyces kmetii* are newly reported from Iran, and the following seven species are reported as new to this province: *Corioloopsis gallica*, *Fomitiporia punctata*, *Hapalopilus nidulans*, *Inonotus cuticularis*, *Oligoporus hibernicus*, *Phylloporia ribis*, and *Polyporus tuberaster*. An updated checklist of polypores for Gilan Province is provided. Altogether, 66 polypores are known from Gilan up to now.

Key words: fungi, hyrcanian forests, poroid basidiomycetes.

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Jako výsledek systematického výzkumu chorošotvarých hub v provincii Gilan jsou publikovány nové druhy pro Írán: *Antrodiella fragrans*, *Ceriporia aurantiocarnescens*, *Oligoporus tephroleucus*, *Polyporus udus* a *Tyromyces kmetii*. Mimoto byly další druhy nalezeny jako nové pro tuto provincii: *Corioloopsis gallica*, *Fomitiporia punctata*, *Hapalopilus nidulans*, *Inonotus cuticularis*, *Oligoporus hibernicus*, *Phylloporia ribis* a *Polyporus tuberaster*. Práci doplňuje aktuální checklist chorošů provincie Gilan, ze které je dosud známo celkem 66 druhů.

INTRODUCTION

Gilan (also spelled Guilan) is a province in the north of Iran. The province lies between 36°34'–38°27' N and 48°53'–50°34' E. It is one of the three provinces in Iran located along the southern coasts of the Caspian Sea and the northern slopes of the Alborz Mountains, constituting a green belt of old-growth,

hyrcanian forests containing some relict tertiary tree elements, such as *Acer velutinum*, *Gleditsia caspica*, *Quercus castaneifolia*, and *Parrotia persica* (Browicz 1989). Gilan has generally a humid temperate climate. The average annual rainfall in Gilan is 1359 mm, and the average annual temperature is 15.8 °C.

Records of polypores (poroid basidiomycetes) in Gilan have been mainly reported by Saber (1987), Hallenberg (1981), and later by Ghobad-Nejhad & Hallenberg (2012), who provided a checklist of non-gilled/non-gasteroid hymenomycetes (roughly aphylophoroids) of Iran on a provincial basis. In this list, 54 polypore species were recorded from Gilan Province having the third highest species diversity in Iran after Golestan and Mazandaran Provinces.

The aim of this study was to identify polypore specimens recently collected in Gilan Province, to publish new provincial and national records, and to increase the knowledge on polypore diversity in the surveyed region.

MATERIAL AND METHODS

The material for this study was mainly collected by the first author during spring and autumn 2015 in different parts of Gilan Province. The main collection sites and their characteristics are listed in Tab. 1.

Altogether, 184 specimens were collected and examined for this study. The collected specimens are kept at the mycology collections of the herbaria of Gilan University (GUM) and duplicates at the Iranian Research Organization for Science and Technology (ICH). Herbaria acronyms follow Index Herbariorum (Thiers on-line).

Identifications were performed using keys provided by Ryvarden & Melo (2014), Núñez & Ryvarden (1995, 2001), and Dai (2010). Microscopy routines are as described by Ghobad-Nejhad & Dai (2010). Species names and nomenclature generally follow MycoBank (www.mycobank.org) and Index Fungorum (www.indexfungorum.org).

RESULTS AND DISCUSSION

As a result of this study, five species are newly reported from Iran (**), while seven species are recorded for the first time from Gilan Province (*). Moreover, an insufficiently identified species of *Phylloporia* Murrill is noted. The species are listed alphabetically below. In Specimens examined, the format of collectors' names and herbarium codes corresponds to the labels in the GUM and ICH herbaria. A full list of polypores hitherto known for Gilan is also provided in Tab. 2.

Tab. 1. Collection localities in Gilan Province. Particular sites are localised to the nearest city and village.

Locality	Coordinates	Elevation (m a.s.l.)	Habitat
Shaft, Kharfekhol	37°06'43" N 49°23'27" E	88–157	<i>Alnus glutinosa</i> , <i>Populus</i> sp.
Shaft, Khoramkesh	36°59'55" N 49°14'41" E	650–840	<i>Fagus orientalis</i> , <i>Acer</i> sp., <i>Diospyros</i> sp., <i>Quercus</i> sp.
Shaft, Chenarroodkhan	37°02'54" N 49°25'22" E	213	<i>Zelkova carpinifolia</i> , <i>Fagus orientalis</i> , <i>Mespilus germanica</i> , <i>Crataegus</i> sp.
Shaft, Noormas	37°07'22" N 49°29'27" E	70	<i>Quercus castaneifolia</i> , <i>Parrotia persica</i> , <i>Crataegus</i> sp.
Talesh, Gissom forest park	37°40'26" N 49°00'35" E	–3.5	<i>Alnus</i> sp., <i>Populus</i> sp., <i>Pterocarya fraxinifolia</i>
Fuman, Qale-Rudkhan 1	37°04'22" N 49°14'28" E	240–450	<i>Gleditsia caspica</i> , <i>Fagus orientalis</i>
Fuman, Qale-Rudkhan 2, historical site	37°03'50" N 49°14'20" E	180–200	<i>Alnus glutinosa</i> , <i>Gleditsia caspica</i> , <i>Pterocarya fraxinifolia</i>
Masal, Sheykhneshtin	37°28'27" N 49°07'36" E	50	<i>Quercus castaneifolia</i> , <i>Parrotia persica</i> , <i>Populus</i> sp.
Siahkal, Khararood	37°05'59" N 49°47'46" E	82	<i>Quercus castaneifolia</i> , <i>Parrotia persica</i> , <i>Populus</i> sp., <i>Acer</i> sp.
Siahkal, Radarposhteh	37°07'22" N 49°50'11" E	95	<i>Quercus castaneifolia</i> , <i>Parrotia persica</i> , <i>Populus</i> sp., <i>Acer</i> sp.
Siahkal, ca. 40 km north of Deilaman	37°01'39" N 49°53'02" E	385	<i>Pterocarya fraxinifolia</i> , <i>Carpinus betulus</i>
Rasht, Salkisar	37°09'58" N 49°33'34" E	80–100	<i>Quercus castaneifolia</i> , <i>Parrotia persica</i> , <i>Alnus glutinosa</i>
Rasht, Saravan forest park 1	37°08'32" N 49°39'56" E	80	<i>Quercus castaneifolia</i> , <i>Parrotia persica</i>
Rasht, Saravan forest park 2	37°07'57" N 49°39'46" E	56	<i>Quercus castaneifolia</i> , <i>Parrotia persica</i>
Rasht, Gilan University	37°11'42" N 49°38'22" E	49	–
Rasht, urban area	37°18'14" N 49°35'53" E	0	–

** *Antrodiella fragrans* (A. David & Torti c) A. David & Torti c

Fig. 1b

Specimen examined: Shaft, Noormas, on dead hardwood, 8 Oct 2015, Amoopour MA129.

The species is characterised by its small and pale brown basidiomes with coumarin scent, and grows on hardwoods. This is a rare species in Europe and eastern Asia (Ryvarden & Melo 2014, N n ez & Ryvarden 2001), and has also been reported from the Russian Caucasus (Ghobad-Nejhad et al. 2009).

** *Ceriporia aurantiocarnescens* (Henn.) M. Pieri & B. Rivoire Fig. 1c

Specimens examined: Fuman, Qale-Rudkhan 2, on white-rotten, decorticated coarse woody debris, 2 May 2008, Ghobad-Nejhad 862. – Siahkal, ca. 40 km north of Deilaman, on a fallen branch, 30 Apr 2008, Hallenberg NH16004.

The species has thin, salmon orange, resupinate basidiomes with shallow pores (5–7 per mm) and turns dark purple upon contact with KOH. Basidiospores are moderately thick-walled and cyanophilous. It is a rare species in Europe [France (Pieri & Rivoire 1997), Italy (Bernicchia et al. 2007)] and China (Dai 2011), and has also been reported from Georgia (Ghobad-Nejhad et al. 2009).

* *Corioloopsis gallica* (Fr.) Ryvarden

≡ *Trametes gallica* (Fr.) Fr.

Specimens examined: Shaft, Kharfehkol, on dead hardwood, 11 Jun 2015, Amoopour MA13; ibid., dead wood of *Populus* sp., Amoopour MA21 & 45. – Siahkal, Radarposhteh, on dead hardwood, 25 Sep 2015, Amoopour MA69; ibid., dead wood of *Populus* sp., 3 Dec 2015, Amoopour MA234. – Masal, Sheykhneshtin, on dead wood of *Quercus* sp., 24 Dec 2015, Amoopour MA251.

* *Fomitiporia punctata* (P. Karst.) Murrill

≡ *Phellinus punctatus* (P. Karst.) Pilát

Specimen examined: Rasht, urban area, on dead wood of planted *Robinia pseudoacacia*, 19 Nov 2015, Amoopour MA197.

* *Hapalopilus nidulans* (Fr.) P. Karst.

Specimens examined: Rasht, Salkisar, on dead wood of *Quercus* sp., 1 Oct 2015, Amoopour MA103. – Shaft, Noormas, on dead hardwood, 8 Oct 2015, Amoopour MA140.

* *Inonotus cuticularis* (Bull.) P. Karst.

Specimen examined: Rasht, Saravan forest park 2, on living tree of *Quercus* sp., 2 Oct 2015, Amoopour MA114.

* *Oligoporus hibernicus* (Berk. & Broome) Gilb. & Ryvarden Fig. 1h

Specimen examined: Masal, Sheykhneshtin, on dead wood of *Quercus* sp., 24 Dec 2015, Amoopour MA252.

** *Oligoporus tephroleucus* (Fr.) Gilb. & Ryvarden Fig. 1i

≡ *Tyromyces tephroleucus* (Fr.) Donk

Specimen examined: Siahkal, Radarposhteh, on dead hardwood, 25 Sep 2015, Amoopour MA60 & 61.

This is a rather common species in Europe and has already been reported from several countries in the Caucasus Region (Ghobad-Nejhad et al. 2009). For a distinction between *Oligoporus hibernicus* and *O. tephroleucus*, we follow Ryvarden & Melo (2014).

* *Phylloporia ribis* (Schumach.) Ryvarden

≡ *Phellinus ribis* (Schumach.) Quél.

Specimen examined: Rasht, Saravan forest park 2, on dead hardwood, 2 Oct 2015, Amoopour MA109.



Fig. 1. Basidiomes of selected species collected in this study: **a** – *Abortiporus fractipes*, **b** – *Antrodiella fragrans*, **c** – *Ceriporia aurantiocarnescens*, **d** – *Fuscoporia torulosa*, **e** – *Gloeophyllum trabeum*, **f** – *Gloeoporus dichrous*, **g** – *Meripilus giganteus*, **h** – *Oligoporus hibernicus*, **i** – *Oligoporus tephroleucus*, **j** – *Phylloporia* sp., **k** – *Polyporus udus*, **l** – *Tyromyces kmetii*. Photos by Mohammad Amoopour and Masoomeh Ghabad-Nejhad.

***Phylloporia* sp.**

Fig. 1j

Specimen examined: Shaft, Noormas, on the ground and attached to dead hardwood, 8 Oct 2015, Amoopour MA134.

Basidiome stipitate, rusty brown, brittle, context homogenous, ca. 8 mm thick in the middle, pores small, 7–9 per mm. Hyphal system dimitic, setae absent, hyphae unchanged in KOH. Basidiospores abundant, broadly ellipsoid to subglobose, thick-walled, brown, smooth, IKI–, $4.5\text{--}5 \times 3\text{--}3.5 \mu\text{m}$. Following the key by Zhou (2016), the closest match is *P. spathulata* / *P. verae-crucis*, both differing from our specimen macro- and microscopically. *Phylloporia spathulata* (Hook.) Ryvarden has smaller, thinner, light coloured, and pliable basidiomes with papery margin, duplex context, and has smaller spores, $3\text{--}4 \times 2\text{--}2.5 \mu\text{m}$. *Phylloporia verae-crucis* (Berk. ex Sacc.) Ryvarden has been treated as a synonym of *P. spathulata* until recently, differing from it mainly by its larger spores, $4\text{--}5 \times 2\text{--}3(3.5) \mu\text{m}$, and restricted distribution range in Mexico and Costa Rica (Ferreira-Lopes et al. 2016). We will have to wait for more sampling and DNA data to sufficiently identify this species.

* ***Polyporus tuberaster* (Jacq.) Fr.**

Specimen examined: Siahhak, Khararood, on unidentified wood, 25 Sep 2015, Amoopour MA55.

** ***Polyporus udus* Jungh.**

Fig. 1k

Specimen examined: Rasht, Saravan forest park 2, on dead hardwood, 2 Oct 2015, Amoopour MA75.

According to Núñez & Ryvarden (2001), *P. udus* is mainly distributed in tropical and warm temperate zones in eastern Asia. It has also been reported from Argentina by Robledo & Rajchenberg (2007) and from the Russian Caucasus by Ghobad-Nejhad et al. (2009).

** ***Tyromyces kmetii* (Bres.) Bondartsev & Singer**

Fig. 1l

Specimens examined: Shaft, Khoramkesh, on dead wood of *Mespilus germanica*, 12 Nov 2015, Amoopour MA179.

Finland. Inari, Tirro, Hinnivaara, on stub of *Betula pubescens* ssp. *tortuosa*, 4 Sep. 1981, Kotiranta 3048 (Kotiranta ref. collection, dupl. at H and ICH).

The species is characterised by apricot-coloured basidiomes becoming purple in KOH. According to Ryvarden & Melo (2014) and Núñez & Ryvarden (2001), this is a rare species in Europe, North America and East Asia. It is also known from Armenia, Georgia, and the Russian Caucasus (Ghobad-Nejhad et al. 2009, Ghobad-Nejhad 2011).

Tab. 2. List of polypore species of Gilan Province based on samplings made in this study as well as the checklist by Ghobad-Nejhad & Hallenberg (2012). Occurrence data is only provisional and would require more inventories to be more comprehensive; it is noted only for the species collected in this study.

Occurrence abbreviations: C – common in the study area; LC – locally common (common at some localities); R – rare (1–2 records).

Species	Order	Family	Sample numbers	Occurrence
<i>Abortiporus biennis</i> (Bull.) Singer	Polyporales	Meruliaceae	MA112, 122, 157, 158, 159, 160	C
<i>Abortiporus fractipes</i> (Berk. & M.A. Curtis) Gilb. & Ryvarden	Polyporales	Meruliaceae	MA133, 180	R
<i>Antrodiella fragrans</i> (A. David & Torti�c) A. David & Torti�c	Polyporales	Phanerochaetaceae	MA129	R
<i>Bjerkandera adusta</i> (Willd.) P. Karst.	Polyporales	Meruliaceae	MA99	R
<i>Bjerkandera fumosa</i> (Pers.) P. Karst.	Polyporales	Meruliaceae	MA216, 230, 247	LC
<i>Ceriporia aurantiocarnescens</i> (Henn.) M. Pieri & B. Rivoire	Polyporales	Meruliaceae	Ghobad-Nejhad 862, NH16004	LC
<i>Ceriporia purpurea</i> (Fr.) Donk	Polyporales	Meruliaceae	–	–
<i>Ceriporia viridans</i> (Berk. & Broome) Donk	Polyporales	Meruliaceae	–	–
<i>Ceriporiopsis gilvescens</i> (Bres.) Doma�nski	Polyporales	Meruliaceae	–	–
<i>Cerrena unicolor</i> (Bull.) Murrill	Polyporales	Polyporaceae	MA11, 210	R
<i>Cinereomyces vulgaris</i> (Fr.) Spirin	Polyporales	Polyporaceae	–	–
<i>Corioloopsis gallica</i> (Fr.) Ryvarden	Polyporales	Polyporaceae	MA13, 21, 45, 69, 234, 251	C
<i>Corioloopsis trogii</i> (Berk.) Doma�nski	Polyporales	Polyporaceae	–	–
<i>Daedalea quercina</i> (L.) Pers.	Polyporales	Fomitopsidaceae	–	–
<i>Daedaleopsis confragosa</i> (Bolton) J. Schr�t.	Polyporales	Polyporaceae	MA171, 231, 236, 237, 240, 259, 233	C
<i>Daedaleopsis tricolor</i> (Bull.) Bondartsev & Singer	Polyporales	Polyporaceae	–	–
<i>Dichomitus campestris</i> (Qu�el.) Doma�nski & Orlicz	Polyporales	Polyporaceae	–	–
<i>Fistulina hepatica</i> (Schaeff.) With.	Agaricales	Fistulinaceae	–	–
<i>Fomes fomentarius</i> (L.) J.J. Kickx	Polyporales	Polyporaceae	MA10, 71, 77, 132	LC
<i>Fomitiporia punctata</i> (P. Karst.) Murrill	Hymenochaetales	Hymenochaetaceae	MA197	R
<i>Fomitopsis pinicola</i> (Sw.) P. Karst.	Polyporales	Fomitopsidaceae	–	–
<i>Fuscoporia contigua</i> (Pers.) G. Cunn. [= <i>Phellinus contiguus</i> (Pers.) Pat.]	Hymenochaetales	Hymenochaetaceae	MA24, Nazari 13E	R
<i>Fuscoporia ferruginosa</i> (Schrad.) Murrill [= <i>Phellinus ferruginosus</i> (Schrad.) Pat.]	Hymenochaetales	Hymenochaetaceae	MA199	R
<i>Fuscoporia torulosa</i> (Pers.) T. Wagner & M. Fisch. [= <i>Phellinus torulosus</i> (Pers.) Bourdot & Galzin]	Hymenochaetales	Hymenochaetaceae	MA97	R
<i>Ganoderma applanatum</i> (Pers.) Pat.	Polyporales	Ganodermataceae	–	–
<i>Ganoderma australe</i> (Fr.) Pat.	Polyporales	Ganodermataceae	MA6, 33, 41, 106, 135, 156, 168, 162, 172, 185, 193, 195, 225	C

Species	Order	Family	Sample numbers	Occurrence
<i>Ganoderma lucidum</i> (Curtis) P. Karst.	Polyporales	Ganodermataceae	MA68, 81, 108, 118, 143, 144, 169	C
<i>Ganoderma resinaceum</i> Boud.	Polyporales	Ganodermataceae	–	–
<i>Ganoderma tsugae</i> Murrill	Polyporales	Ganodermataceae	–	–
<i>Gloeophyllum sepiarium</i> (Wulfen) P. Karst.	Gloeophyllales	Gloeophyllaceae	–	–
<i>Gloeophyllum trabeum</i> (Pers.) Murrill	Gloeophyllales	Gloeophyllaceae	MA52, 57, 78, 83, 85, 94, 116, 137, 141, 173, 212, 219	C
<i>Gloeoporus dichrous</i> (Fr.) Bres.	Polyporales	Meruliaceae	MA250	R
<i>Grifola frondosa</i> (Dicks.) Gray	Polyporales	Fomitopsidaceae	–	–
<i>Hapalopilus nidulans</i> (Fr.) P. Karst.	Polyporales	Polyporaceae	MA103, 140	R
<i>Hyphodontia flavipora</i> (Berk. & M.A. Curtis ex Cooke) Sheng H. Wu [= <i>Schizopora flavipora</i> (Berk. & M.A. Curtis ex Cooke) Ryvarden]	Hymenochaetales	Tubulicrinaceae	MA76, 88, 142, 152, 155, 163, 183, 184	C
<i>Hyphodontia radula</i> (Pers.) Langer & Vesterh. [= <i>Schizopora radula</i> (Pers.) Hallenb.]	Hymenochaetales	Tubulicrinaceae	MA88, 89, 111, 117, 130, 170, 207	C
<i>Hyphodontia paradoxa</i> (Schrad.) Langer & Vesterh. [= <i>Schizopora paradoxa</i> (Schrad.) Donk]	Hymenochaetales	Tubulicrinaceae	–	–
<i>Inonotus cuticularis</i> (Bull.) P. Karst.	Hymenochaetales	Hymenochaetaceae	MA114	R
<i>Irpex lacteus</i> (Fr.) Fr.	Polyporales	Phanerochaetaceae	MA1, 54, 64, 101, 253, 228	C
<i>Laetiporus sulphureus</i> (Bull.) Murrill	Polyporales	Fomitopsidaceae	–	–
<i>Lenzites betulina</i> (L.) Fr. [= <i>Trametes betulina</i> (L.) Pilát]	Polyporales	Polyporaceae	MA243, 248, 190	LC
<i>Lenzites warnieri</i> Durieu & Mont. [= <i>Trametes warnieri</i> (Durieu & Mont.) Zmitr., Wasser & Ezhov]	Polyporales	Polyporaceae		
<i>Meripilus giganteus</i> (Pers.) P. Karst.	Polyporales	Polyporaceae	MA153	R
<i>Oligoporus hibernicus</i> (Berk. & Broome) Gilb. & Ryvarden	Polyporales	Polyporaceae	MA252	R
<i>Oligoporus tephroleucus</i> (Fr.) Gilb. & Ryvarden	Polyporales	Polyporaceae	MA60, 61	R
<i>Perenniporia fraxinea</i> (Bull.) Ryvarden	Polyporales	Polyporaceae	MA19, 20, 38, 145	LC
<i>Phellinus igniarius</i> (L.) Quél.	Hymenochaetales	Hymenochaetaceae	–	–
<i>Phellinus inermis</i> (Ellis & Everh.) G. Cunn.	Hymenochaetales	Hymenochaetaceae	–	–
<i>Phellinus tuberculatus</i> (Baumg.) Niemelä	Hymenochaetales	Hymenochaetaceae	MA27, 178, 181, 182, 189, 198	C
<i>Phylloporia ribis</i> (Schumach.) Ryvarden	Hymenochaetales	Hymenochaetaceae	MA199	R
<i>Phylloporia</i> sp.	Hymenochaetales	Hymenochaetaceae	MA134	R
<i>Polyporus arcularius</i> (Batsch) Fr.	Polyporales	Polyporaceae	–	–
<i>Polyporus badius</i> (Pers.) Schwein.	Polyporales	Polyporaceae	–	–
<i>Polyporus squamosus</i> (Huds.) Fr.	Polyporales	Polyporaceae	–	–
<i>Polyporus tuberaster</i> (Jacq.) Fr.	Polyporales	Polyporaceae	MA55	R
<i>Polyporus udus</i> Jungh.	Polyporales	Polyporaceae	MA75	R
<i>Polyporus varius</i> (Pers.) Fr.	Polyporales	Polyporaceae	MA58, 59, 72, 90	LC
<i>Pycnoporus cinnabarinus</i> (Jacq.) P. Karst.	Polyporales	Polyporaceae	–	–

Species	Order	Family	Sample numbers	Occurrence
<i>Rigidoporus ulmarius</i> (Sowerby) Imazeki	<i>Polyporales</i>	<i>Meripilaceae</i>	–	–
<i>Skeletocutis nivea</i> (Jungh.) Jean Keller	<i>Polyporales</i>	<i>Polyporaceae</i>	–	–
<i>Trametes gibbosa</i> (Pers.) Fr.	<i>Polyporales</i>	<i>Polyporaceae</i>	MA29, 176, 191, 211, 223	C
<i>Trametes hirsuta</i> (Wulfen) Pilát	<i>Polyporales</i>	<i>Polyporaceae</i>	MA14, 188, 218	LC
<i>Trametes ochracea</i> (Pers.) Gilb. & Ryvardeen	<i>Polyporales</i>	<i>Polyporaceae</i>	–	–
<i>Trametes versicolor</i> (L.) Lloyd	<i>Polyporales</i>	<i>Polyporaceae</i>	MA9, 39, 63, 66, 74, 128, 149, 164, 165, 167, 187, 192, 204, 208, 224, 226, 229, 245	C
<i>Trichaptum bifforme</i> (Fr.) Ryvardeen	<i>Polyporales</i>	<i>Polyporaceae</i>	MA5, 32, 47, 53, 98, 100, 105, 107, 148, 150, 166	C
<i>Tyromyces kmetii</i> (Bres.) Bondartsev & Singer	<i>Polyporales</i>	<i>Polyporaceae</i>	MA179	R

CONCLUSIONS

Altogether, 66 polypore species are known from Gilan Province (Tab. 2). However, the checklist provided here is not exhaustive yet. Considering the diversity of habitats and some still unexplored areas in Gilan Province, we believe that with more inventories a number of species will be added to the checklist. The majority of species belong to the orders *Polyporales* and *Hymenochaetales*. Common species include *Daedaleopsis confragosa*, *Ganoderma australe*, *Ganoderma lucidum*, *Gloeophyllum trabeum* (Fig. 1e), *Hyphodontia flavipora*, *Hyphodontia radula*, *Irpex lacteus*, *Phellinus tuberosus*, *Trametes gibbosa*, *Trametes versicolor* and *Trichaptum bifforme*. The following species were collected once or a few times during the study: *Abortiporus fractipes* (Fig. 1a), *Antrodiella fragrans*, *Fomitiporia punctata*, *Fuscoporia contigua*, *Fuscoporia ferruginosa*, *Fuscoporia torulosa* (Fig. 1d), *Gloeoporus dichrous* (Fig. 1f), *Inonotus cuticularis*, *Meripilus giganteus* (Fig. 1g), *Oligoporus hibernicus*, *Phylloporia ribis*, *Polyporus tuberaster*, *Polyporus udus* and *Tyromyces kmetii*.

The new records reported here extend our knowledge about the general distribution of some polypore species. *Antrodiella fragrans*, *Ceriporia aurantio-carnescens*, and *Tyromyces kmetii* are rare species in Europe and have already been reported from the Caucasus region. *Polyporus udus* is mainly found in eastern Asia and has recently been recorded from the Russian Caucasus.

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