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PRELIMINARY CHECKLISTS OF MACROMYCETES OF THE EAST AND MIDDLE BLACK SEA REGIONS OF TURKEY

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Cystoderma amianthinum (Scop.) Fayod
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ABSTRACT

This paper includes a list of the fungi recorded in the East and Middle Black Sea regions of Turkey between 2002 and 2012. The first part of the study is based on macromycete specimens collected from the Region in 2002-2005. As a result of field and laboratory studies, 213 species and infraspecific taxa were identified. Further specimens were collected and identified adding 81 species to the list in 2008. During the period of 2007 – 2010 we collected new specimens from the region, visited the Royal Botanic Garden Edinburgh and compared them with the British collections. During these studies, we identified 128 new species and infraspecific taxa for the region and added them to the list. Currently, the number of species and infraspecific taxa in the list stands at 422.

Key words – Fungal diversity, mushrooms, Black Sea Region

INTRODUCTION

The Black Sea Region extends from the border of Georgia in the east to the eastern edge of the Adapazari plain in the west and covers about 18 percent of the land in Turkey. The region has a steep, rocky coast with rivers cutting back through the Northern Anatolian mountains. The area has a rainy coastline with its dense forests covering the Black Sea Mountains. The Black Sea region is divided into east, middle and west sections based on their geographical characteristics (Fig. 1). The region is under the mild and humid climatic conditions (Atalay, 1994). The Northern Anatolian Mountains form a barrier between the Black Sea and inland parts of Central Anatolia. This is an important factor in determining climatic and ecological conditions.

Fungal specimens of the present study were collected during field trips to the East and Middle Black Sea regions of Turkey between 2002 and 2010. Some species in the list were collected many times from the region and evaluated for different purposes. A number of records were first time records for Turkish Mycota (Yalınkılıç *et al.*, 1992; Sesli & Baydar, 1995a; Sesli, 1996a; Sesli, 1997; Sesli, 1998a; Sesli, 1998b; Sesli & Türkekul, 2000a; Sesli, Wright & Türkekul, 2000; Asan *et al.*, 2002; Sesli, 2005; Sesli, 2006; Denchev, Sesli & Bancheva, 2008; Sesli, Antonin & Denchev, 2009; Sesli & Castellano,

2009; Sesli, 2010). We also included some other lists connected with the fungi of the region (Sesli & Baydar, 1995b; Sesli & Baydar, 1996b; Sesli & Denchev, 2005 and Sesli & Denchev, 2008). Some species in the list were collected and identified during local studies in the region (Sesli, 1993; Baydar & Sesli, 1994; Sesli, 1998c; Sesli, 1999a; Sesli & Türkekul, 2000b; Sesli & Türkekul, 2000c; Türkekul & Sesli, 2003).

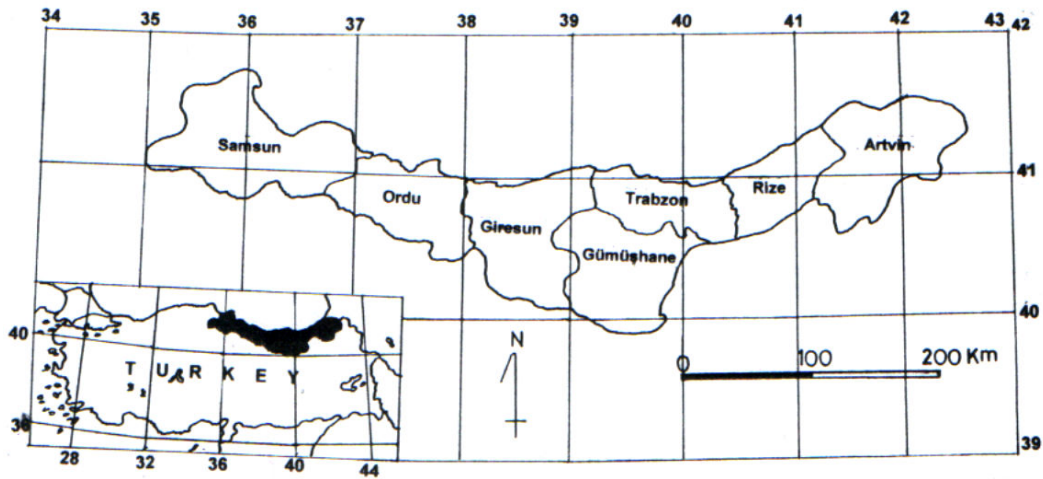


Fig.1. Location of the sampling area.

Other species in the list were collected, analyzed and reported in biochemical communications (Sesli & Tüzen, 1999b; Yıldırım *et al.*, 2005; Dalman *et al.*, 2005; Kolcuoğlu *et al.*, 2005; Faiz *et al.*, 2005; Çolak *et al.*, 2005; Sesli *et al.*, 2006; Sesli & Dalman, 2006; Sesli & Tüzen, 2006; Tüzen, Sesli & Soylak, 2007a; Kolcuoglu *et al.*, 2007b; Sesli, 2007c; Yaylı *et al.*, 2007d; Colak *et al.*, 2007e; Colak *et al.*, 2007f; Sesli, *et al.*, 2008; Keskin *et al.*, 2008; Cakmak *et al.*, 2008; Özel *et al.*, 2008; Torun *et al.*, 2008; Colak, *et al.*, 2009a; Colak *et al.*, 2009b; Sağlam Ertunga *et al.*, 2009; Ayaz *et al.*, 2011a; Ayaz *et al.*, 2011b; Ayaz *et al.*, 2011c).

During the period of 2007 – 2010 we collected and identified 128 new species and infraspecific taxa for the region and were added to the list. The aim of this study is to give a complete list of fungi collected from the East and Middle Black Sea regions of Turkey between 2002 and 2010 and to provide a literature review concerned with these fungi.

MATERIALS AND METHODS

The specimens especially collected for the present study were examined according to Clémenton (2009). General properties of the specimens and vegetation were noted in the field. Photographs of specimens were taken in the field and fungal materials examined in the laboratory after collection. Spore prints were made to determine the colour of spores and used for measurements. Excised pieces of fungus pilei were moistened by adding a few drops of Clémenton's solution and after being given some time to dry, they were sectioned by hand using a razor blade. The sections were subsequently stained with ammoniated Congo red and examined by microscopy. The specimens were identified according to Corner (1966, 1968), Phillips (1981), Moser (1983), Breitenbach & Kränzlin (1984-2000), Arora (1986), Singer (1986), McKenny *et al.* (1987), Riva (1988), Bresinsky & Besl (1990), Baiano, Garofoli, & Parrettini (1993), Dähncke (1993), Stamets (1996), Bessette *et al.* (1997), Bas *et al.* (1999), Læssøe (2000), Knudsen & Vesterholt (2008) and Sterry & Hughes (2009). Author names were given according to Kirk *et al.* (2008) and fungal names according to Index Fungorum and Mycobank. The collections were deposited at a personal herbarium of Fatih Faculty in Karadeniz Technical University, Trabzon (SES at KATO).

RESULTS & DISCUSSION

The study is based on the fungal specimens collected from East and Middle Black Sea regions of Turkey between 2002 and 2010. As a result of field and laboratory studies 213 species and infraspecific taxa were identified in 2002-2005. Later, new specimens were collected, identified and 81 species were added to the list. The list included 294 species and infraspecific taxa in 2008. During the period of 2007 – 2010 connected with a project (Karadeniz Technical University Scientific Research Project: 2009.116.002.2) we collected new specimens from the region, visited the Royal Botanic Garden Edinburgh in May – October 2011 and compared them with British collections. At the end, we identified 128 new species and infraspecific taxa for the region and added to the list. The studies are still ongoing and we concentrate here, especially on some newly recorded species in the list. We intend to provide

descriptions, photos and microscopical drawings about these fungi in future when we complete the research. To date, the total number of species of larger ascomycetes, and larger basidiomycetes, recognized as occurring in the region which were collected and identified between 2002 and 2012 is 422, including 27 species of ascomycetes, and 395 species of basidiomycetes. We intend to update regularly the internet version of this paper and to add new records for the region to the list. The taxa are given below in alphabetical order.



THE LISTS

A. ASCOMYCOTA

ALEURIA aurantia (Pers.) Fuckel, *BISPORELLA citrina* (Batsch) Korf & S.E. Carp., *BULGARIA inquinans* (Pers.) Fr., *FLAVOSCYPHA cantharella* (Fr.) Harmaja, *GYROMITRA infula* (Schaeff.) Quél., *HELVELLA acetabulum* (L.) Quél., *Helvella atra* J. Koenig, *Helvella crispa* (Scop.) Fr., *Helvella lacunosa* Afzel., *Helvella leucopus* Pers., *HUMARIA hemisphaerica* (F.H. Wigg.) Fuckel, *HYPOXYLON fragiforme* (Pers.) J. Kickx, *Hypoxylon fuscum* (Pers.) Fr., *LEPTOPODIA elastica* (Bull.) Boud., *MITROPHORA semilibera* (DC.) Lév., *MORCHELLA esculenta* (L.) Pers., *Morchella esculenta* (L.) Pers. var. *umbrina* (Boud.) S. Imai, *NECTRIA cinnabarina* (Tode) Fr., *PEZIZA ampelina* Quél., *Peziza applanata* (Hedw.) Fr., *Peziza arvernensis* Boud., *Peziza cerea* Sowerby, *Peziza succosa* Berk., *SPATHULARIA flavida* Pers., *XYLARIA hypoxylon* (L.) Grev., *Xylaria polymorpha* (Pers.) Grev., *VERPA conica* (O.F. Müll.) Sw. var. *conica*.

B. BASIDIOMYCOTA

AGARICUS arvensis Schaeff., *Agaricus augustus* Fr., *Agaricus bisporus* (J.E. Lange) Pilát, *Agaricus campestris* L. var. *campestris*, *Agaricus langei* (F.H. Møller) F.H. Møller, *Agaricus multiformis* var. *elegantior* Fr., *Agaricus porphyrizon* P.D. Orton, *Agaricus rapipes* Krombh., *Agaricus silvicola* (Vittad.) Peck, *Agaricus xanthodermus* Genev., *AGROCYBE cylindracea* (DC.) Maire, *Agrocybe praecox* (Pers.) Fayod, *ALBATRELLUS cristatus* (Schaeff.) Kotl. & Pouzar, *AMANITA caesarea* (Scop.) Pers., *Amanita crocea* (Quél.) Singer, *Amanita excelsa* (Fr.) Bertill., *Amanita franchetii* (Boud.) Fayod, *Amanita gemmata* (Fr.) Bertill., *Amanita inaurata* Secr. ex Gillet, *Amanita muscaria* var. *aureola* (Kalchbr.) Quél., *Amanita*

muscaria (L.) Lam. var. *muscaria*, *Amanita pantherina* (DC.) Krombh., *Amanita phalloides* (Fr.) Link, *Amanita rubescens* Pers. var. *rubescens*, *Amanita spissa* (Fr.) P. Kumm., *Amanita strobiliformis* (Paulet) Bertill., *Amanita submembranacea* (Bon) Gröger var. *submembranacea*, *Amanita vaginata* (Bull.) Lam. var. *vaginata*, *AMYLOSTEREUM areolatum* (Chaillet) Boidin, *ARMILLARIA borealis* Marxm. & Korhonen, *Armillaria ectypa* (Fr.) Lamoure, *Armillaria mellea* (Vahl) P. Kumm., *Armillaria obscura* (Schaeff.) Herink, *Armillaria solidipes* Peck, *ASTEROPHORA parasitica* (Bull.:Fr.) Sing., *ASTRAEUS hygrometricus* (Pers.) Morgan, *AURICULARIA auricula-judae* (Bull.) J. Schröt., *Auricularia mesenterica* (Dicks.) Pers., *BASIDIORADULUM radula* (Fr.) Nobles, *BOLETOPSIS leucomelaena* (Pers.) Fayod, *BOLETUS badius* (Fr.) Fr., *Boletus calopus* Pers., *Boletus chrysenteron* Bull., *Boletus edulis* Bull., *Boletus erythropus* Pers., *Boletus luridus* Schaeff., *Boletus queletii* Schulzer, *Boletus satanas* Lenz, *BOLBITIUS titubans* (Bull.) Fr., *Bolbitius titubans* var. *olivaceus* (Gillet) Arnolds, *BOVISTA plumbea* Pers., *CALOCERA viscosa* (Pers.) Fr., *CALOCYBE chrysenteron* (Bull.) Singer, *CANTHARELLUS amethysteus* (Quél.) Sacc., *Cantharellus aurora* (Batsch) Kuyper, *Cantharellus cibarius* Fr. var. *cibarius*, *Cantharellus cibarius* var. *ferruginascens* (P.D. Orton) Courtec., *Cantharellus cinereus* Pers., *Cantharellus tubaeformis* (Bull.) Fr., *Cantharellus tubaeformis* var. *lutescens* Fr., *CHROOGOMPHUS rutilus* (Schaeff.) O.K. Mill., *CHRYSOMPHALINA chrysophylla* (Fr.) Cléménçon, *CLATHRUS ruber* P. Micheli ex Pers., *CLAVARIA fragilis* Holmsk., *CLAVARIADELPHUS pistillaris* (L.) Donk, *Clavariadelphus truncatus* (Quél) Donk, *CLAVULINA cinerea* (Bull.) J. Schröt. f. *cinerea*, *Clavulina rugosa* (Bull.) J. Schröt., *CLIMACOCYSTIS borealis* (Fr.) Kotl. & Pouzar, *CLITOCYBE candicans* (Pers.) P. Kumm. *Clitocybe ditopa* (Fr.) Gillet, *Clitocybe geotropa* (Bull. ex DC.) Quél. *Clitocybe gibba* (Pers.) P. Kumm., *Clitocybe houghtonii* (W. Phillips) Dennis, *Clitocybe metachroa* (Fr.) P. Kumm., *Clitocybe odora* (Bull.) P. Kumm., *Clitocybe*

phaeophthalma (Pers.) Kuyper, *Clitocybe phyllophila* (Pers.) P. Kumm., *Clitocybe vibecina* (Fr.) Quél., *CLITOPILUS geminus* (Paulet) Noordel. & Co-David, *Clitopilus prunulus* (Scop.) P. Kumm., *CHONDROSTEREUM purpureum* (Pers.) Pouzar, *Collybia butyracea* (Bull.) P. Kumm. var. *asema* (Fr.) Quél., *Collybia butyracea* (Bull.) P. Kumm. var. *butyracea*, *COPRINELLUS disseminatus* (Pers.) J.E. Lange, *Coprinellus micaceus* (Bull.) Vilgalys, Hopple & Jacq. Johnson, *Coprinellus truncorum* (Scop.) Redhead, Vilgalys & Moncalvo, *Coprinellus xanthothrix* (Romagn.) Vilgalys, Hopple & Jacq. Johnson, *Coprinopsis atramentaria* (Bull.) Redhead, Vilgalys & Moncalvo, *COPRINUS comatus* (O.F. Müll.) Pers., *CORIOLUS fibula* (Fr.) Quél., *CORTINARIUS bulbosus* (Sowerby) Fr., *Cortinarius bulliardii* (Pers.) Fr., *Cortinarius caesiocanescens* M.M. Moser, *Cortinarius corrosus* Fr., *Cortinarius elegantissimus* Rob. Henry, *Cortinarius glaucopus* (Schaeff.) Fr., *Cortinarius infractus* Berk., *Cortinarius largus* Fr., *Cortinarius moenne-locozii* Bidaud, *Cortinarius subbalaustinus* Rob. Henry, *Cortinarius subtorvus* Lamoure, *Cortinarius subturbinatus* Rob. Henry, *Cortinarius talus* Fr., *CRATERELLUS cornucopioides* (L.) Pers., *CREPIDOTUS lundellii* Pilát, *Crepidotus variabilis* (Pers.) P. Kumm., *CRUCIBULUM crucibuliforme* (Scop.) V.S. White, *Crucibulum laeve* (Huds.) Kambly, *CYATHUS olla* (Batsch) Pers., *CYSTODERMA amianthinum* (Scop.) Fayod, *Cystoderma carcharias* (Pers.) Fayod, *Cystoderma cinnabarinum* (Alb. & Schwein.) Fayod, *Cystoderma terryi* (Berk. & Broome) Harmaja, *DACRYMYCES variisporus* McNabb, *DAEDALEA quercina* (L.) Pers., *DAEDALEOPSIS confragosa* (Bolton) J. Schröt., *DATRONIA mollis* (Sommerf.) Donk, *ENTOLOMA chalybeum* (Pers.) Noordel., *Entoloma chalybaeum* var. *lazulinum* (Fr.) Noordel., *Entoloma sericellum* (Fr.) P. Kumm., *Entoloma sinuatum* (Bull.) P. Kumm., *EXIDIA glandulosa* (Bull.) Fr., *FAYODIA bisphaerigera* (J.E. Lange) Singer, *FOMES fomentarius* (L.) J. Kickx, *FOMITOPSIS pinicola* (Sw.) P. Karst., *FLAMMULINA velutipes* (Curtis) Singer, *GALERINA paludosa* (Fr.) Kühner, *Galerina*

unicolor (Vahl) Singer, *GANODERMA applanatum* (Pers.) Pat., *Ganoderma lucidum* (Curtis) P. Karst., *GEASTRUM fimbriatum* Fr., *Geastrum quadrifidum* Pers., *Geastrum rufescens* Pers., *Geastrum sessile* (Sowerby) Pouzar, *Geastrum schmidelii* Vittad., *GLOEOPHYLLUM odoratum* (Wulfen) Imazeki, *GOMPHIDIUS glutinosus* (Schaeff.) Fr., *Gomphidius gracilis* Berk., *GOMPHUS clavatus* (Pers.) Gray, *Gomphus stereoides* Corner, *GYMNOPIUS sapineus* (Fr.) Maire, *GYMNOPIUS acervatus* (Fr.) Murrill, *Gymnopus dryophilus* (Bull.) Murrill, *Gymnopus peronatus* (Bolton) Gray, *HANDKEA excipuliformis* (Scop.) Kreisel, *Handkea utriiformis* (Bull.) Kreisel, *HEBELOMA sinapizans* (Fr.) Sacc., *HETEROBASIDION annosum* (Fr.) Bref., *HOHENBUEHELIA mastrucata* (Fr.) Singer, *HYDNELLUM aurantiacum* (Batsch) P. Karst., *Hydnellum auratile* (Britzelm.) Maas Geest., *Hydnellum caeruleum* (Hornem.) P. Karst., *Hydnellum concrescens* (Pers.) Banker, *Hydnellum ferrugineum* (Fr.) P. Karst., *Hydnellum peckii* Banker, *Hydnellum scrobiculatum* (Fr.) P. Karst., *HYDNUM repandum* L., *HYGROCYBE calyptriformis* (Berk. & Broome) Fayod, *Hygrocybe cantharellus* (Schwein.) Murrill, *Hygrocybe coccinea* (Scop.) P. Kumm., *Hygrocybe conica* (Scop.) P. Kumm. var. *conica*, *Hygrocybe intermedia* (Pass.) Fayod, *Hygrocybe persistens* (Britzelm.) Singer var. *konradii* (R. Haller Aar.) Boertm., *Hygrocybe pratensis* (Schaeff.) Murrill, *Hygrocybe psittacina* (Schaeff.) P. Kumm. var. *psittacina*, *Hygrocybe punicea* (Fr.) P. Kumm., *Hygrocybe virginea* var. *ochraceopallida* (P.D. Orton) Boertm., *Hygrocybe virginea* (Wulfen) P.D. Orton & Watling var. *virginea*, *HYGROPHOROPSIS aurantiaca* (Wulfen) Maire, *HYGROPHORUS cerasinus* Berk., *Hygrophorus chrysodon* (Batsch) Fr., *Hygrophorus discoideus* (Pers.) Fr., *Hygrophorus discoxanthus* (Fr.) Rea, *Hygrophorus erubescens* (Fr.) Fr., *Hygrophorus gliocyclus* Fr., *Hygrophorus hedrychii* (Velen.) K. Kult, *Hygrophorus ligatus* Fr., *Hygrophorus olivaceoalbus* (Fr.) Fr., *Hygrophorus penarius* Fr., *Hygrophorus piceae* Kühner, *Hygrophorus pudorinus* (Fr.) Fr., *Hygrophorus*

russula (Schaeff.) Kauffman, *Hygrophorus unicolor* Gröger, *HYPHOLOMA capnoides* (Fr.) P. Kumm., *Hypholoma fasciculare* (Huds.) P. Kumm., *Hypholoma lateritium* (Schaeff.) P. Kumm., *Hypholoma radicosum* J. E. Lange, *Hypholoma sublateritium* (Schaeff.) Quél., *INOCYBE amethystina* Kuyper, *Inocybe rimosa* (Bull.) P. Kumm., *Inocybe sindonia* (Fr.) P. Karst., *Inocybe squamata* J.E. Lange, *Inocybe whitei* (Berk. & Broome) Sacc., *INONOTUS hispidus* (Bull.) P. Karst., *KUEHNEROMYCES mutabilis* (Schaeff.) Singer & A.H. Sm., *LACCARIA amethystina* Cooke, *Laccaria bicolor* (Maire) P.D. Orton, *Laccaria laccata* (Scop.) Cooke, *LACRYMARIA lacrymabunda* (Bull.) Pat., *LACTARIUS acerrimus* Britzelm., *Lactarius affinis* Peck, *Lactarius aurantiacus* (Pers.) Gray, *Lactarius azonites* (Bull.) Fr., *Lactarius bertillonii* (Neuhoff ex Z. Schaeff.) Bon, *Lactarius britannicus* D.A. Reid, *Lactarius camphoratus* (Bull.) Fr., *Lactarius circellatus* Fr., *Lactarius deliciosus* (L.) Gray, *Lactarius deterrimus* Gröger, *Lactarius evosmus* Kühner & Romagn., *Lactarius flavidus* Boud., *Lactarius fulvissimus* Romagn., *Lactarius insulsus* (Fr.) Fr., *Lactarius luteolus* Peck., *Lactarius piperatus* (L.) Pers., *Lactarius resimus* (Fr.) Fr., *Lactarius rufus* (Scop.) Fr., *Lactarius scrobiculatus* (Scop.) Fr., *Lactarius subdulcis* (Pers.) Gray, *Lactarius tuomikoskii* Kytöv., *Lactarius uvidus* (Fr.) Fr., *Lactarius vellereus* (Fr.) Fr. var. *vellereus*, *Lactarius volemus* (Fr.) Fr., *Lactarius zonarius* (Bull.) Fr., *LAETIPORUS sulphureus* (Bull.) Murrill, *LECCINUM oxydabile* (Singer) Singer, *Leccinum pseudoscabrum* (Kallenb.) Šutara, *LENTINELLUS cochleatus* (Pers.) P. Karst., *Lentinellus cochleatus* var. *inolens* (Konrad & Maubl.) Kühner & Romagn., *Lentinellus vulpinus* (Sowerby) Kühner & Maire, *LENZITES betulina* (L.) Fr., *LEPIOTA alba* (Bres.) Sacc., *Lepiota clypeolaria* (Bull.) P. Kumm., *Lepiota cristata* (Bolton) P. Kumm., *Lepiota ignivolvata* Bousset & Joss., *Lepiota magnispora* Murrill, *LEPISTA flaccida* (Sowerby) Pat., *Lepista inversa* (Scop.) Pat., *Lepista nuda* (Bull.) Cooke, *LEUCOAGARICUS leucothites* (Vittad.) M.M. Moser ex Bon, *Leucoagaricus nymphaeum* (Kalchbr.) Bon, *LEUCOPAXILLUS*

paradoxus (Costantin & L.M. Dufour) Boursier, *LYCOPERDON lividum* Pers., *Lycoperdon perlatum* Pers., *Lycoperdon pyriforme* Schaeff., *Lycoperdon umbrinum* Pers., *LYOPHYLLUM multiforme* (Peck) H.E. Bigelow, *MACROLEPIOTA excoriata* (Schaeff.) M. M. Moser, *Macrolepiota mastoidea* (Fr.) Singer, *Macrolepiota permixta* (Barla) Pacioni, *Macrolepiota procera* (Scop.) Singer var. *procera*, *MARASMIELLUS ramealis* (Bull.) Singer, *MARASMIUS anomalus* Lasch, *Marasmius oreades* (Bolton) Fr., *Marasmius rotula* (Scop.) Fr., *MEGACOLLYBIA platyphylla* (Pers.) Kotl. & Pouzar, *MELANOLEUCA melaleuca* (Pers.) Murrill, *Melanoleuca subalpina* (Britzelm.) Bresinsky & Stangl, *Melanoleuca substrictipes* Kühner, *MERIPILUS giganteus* (Pers.) P. Karst., *MYCENA abramsii* (Murrill) Murrill, *Mycena acicula* (Schaeff.) P. Kumm., *Mycena aetites* (Fr.) Quél., *Mycena aurantiomarginata* (Fr.) Quél., *Mycena cinerella* (P. Karst.) P. Karst., *Mycena epipterygia* (Scop.) Gray var. *epipterygia*, *Mycena epipterygia* var. *pelliculosa* (Fr.) Maas Geest., *Mycena epipterygia* var. *viscosa* (Maire) Ricken, *Mycena galericulata* (Scop.) Gray, *Mycena laevigata* (Lasch) Gillet, *Mycena latifolia* (Peck) A.H. Sm., *Mycena maculata* P. Karst., *Mycena pseudocorticola* Kühner, *Mycena pura* (Pers.) P. Kumm., *Mycena rosella* (Fr.) P. Kumm., *Mycena subviscosa* G. Stev., *Mycena zephirus* (Weinm.) P. Kumm., *MYCETINIS alliaceus* (Jacq.) Earle, *MUTINUS caninus* (Huds.) Fr., *OUDEMANSIELLA mucida* (Schrad.) Höhn., *PANAEOLUS acuminatus* (Schaeff.) Quél., *Panaeolus papilionaceus* (Bull.) Quél., *Panaeolus rickenii* Hora, *PANELLUS stipticus* (Bull.) P. Karst., *PAXILLUS leptopus* Fr., *PHALLUS hadriani* Vent., *Phallus impudicus* L., *PELLINUS chrysoloma* (Fr.) Donk, *Phellinus igniarius* (L.) Quél., *Phellinus vorax* (Harkn.) Černý, *PHELLODON confluens* (Pers.) Pouzar, *Phellodon tomentosus* (L.) Banker, *PHOLIOTA lenta* (Pers.) Singer, *Pholiota limonella* (Peck) Sacc., *Pholiota lubrica* (Pers.) Singer, *PHYTOCONIS ericetorum* (Pers.) Redhead & Kuyper, *PLEUROCYBELLA porrigens* (Pers.) Singer, *PLEUROTUS cornucopiae* (Paulet) Rolland, *Pleurotus ostreatus*

(Jacq.) P. Kumm., *PLUTEUS cervinus* (Schaeff.) P. Kumm. var. *cervinus*, *POLYPORUS badius* (Pers.) Schwein., *Polyporus corylinus* Mauri, *Polyporus squamosus* (Huds.) Fr., *Polyporus umbellatus* (Pers.) Fr., *PORPHYRELLUS porphyrosporus* (Fr. & Hök) E.-J. Gilbert, *POSTIA caesia* (Schrad.) P. Karst., *Postia stiptica* (Pers.) Jülich, *Postia tephroleuca* (Fr.) Jülich, *PSATHYRELLA candolleana* (Fr.) Maire, *PSEUDOCLITOCYBE cyathiformis* (Bull.) Singer, *PSEUDOCRATERELLUS sinuosus* (Fr.) Corner, *PSEUDOHYDNUM gelatinosum* (Scop.) P. Karst., *PSEUDOINONOTUS dryadeus* (Pers.) T. Wagner & M. Fisch., *RAMARIA aurea* (Schaeff.) Quél., *Ramaria botrytis* (Pers.) Ricken, *Ramaria flava* (Schaeff.) Quél., *Ramaria formosa* (Pers.) Quél., *Ramaria pallida* Maire, *Ramaria stricta* (Pers.) Quél., *Ramaria stricta* var. *concolor* Corner, *RHIZOPOGON marchii* (Bres.) Zeller & C.W. Dodge, *Rhizopogon roseolus* (Corda) Th. Fr., *RHODOCOLLYBIA butyracea* (Bull.) Lennox f. *butyracea*, *Rhodocybe popinalis* (Fr.) Singer, *RUSSULA aeruginea* Fr., *Russula albonigra* (Krombh.) Fr., *Russula alnetorum* Romagn., *Russula anthracina* Romagn., *Russula aurea* Pers., *Russula cavipes* Britzelm., *Russula claroflava* Grove, *Russula cyanoxantha* (Schaeff.) Fr., *Russula delica* Fr., *Russula emetica* (Schaeff.) Pers., *Russula foetens* Pers., *Russula fragilis* Fr., *Russula grata* Britzelm., *Russula heterophylla* (Fr.) Fr., *Russula laccata* Huijsman, *Russula luteotacta* Rea, *Russula nobilis* Velen., *Russula ochroleuca* Pers., *Russula paludosa* Britzelm., *Russula parazurea* Jul. Schäff., *Russula risigallina* (Batsch) Sacc., *Russula rosea* Pers., *Russula rubra* (Lam.) Fr., *Russula torulosa* Bres., *Russula velenovskyi* Melzer & Zvára, *Russula virescens* (Schaeff.) Fr., *Russula xerampelina* (Schaeff.) Fr., *SARCODON imbricatus* (L.) P. Karst, *Sarcodon leucopus* (Pers.) Maas Geest. & Nannf., *Sarcodon squamosus* (Schaeff.) Quél., *SEBACINA epigaea* (Berk. & Broome) Bourdot & Galzin, *Sebacina incrustans* (Pers.) Tul. & C. Tul., *SCLERODERMA areolatum* Ehrenb., *Scleroderma citrinum* Pers., *Scleroderma verrucosum* (Bull.) Pers., *SCHIZOPHYLLUM commune* Fr., *STEREUM*

hirsutum (Willd.) Pers., **STROPHARIA** *aeruginosa* (Curtis) Quél., *Stropharia semiglobata* (Batsch) Quél., **SUILLUS** *bovinus* (Pers.) Roussel, *Suillus collinitus* (Fr.) Kuntze, *Suillus granulatus* (L.) Roussel, *Suillus mediterraneensis* (Jacquet. & J. Blum) Redeuilh, **TAPINELLA** *atrotomentosa* (Batsch) Šutara, *Tapinella panuoides* (Batsch) E.-J. Gilbert, **TERANA** *caerulea* (Lam.) Kuntze, **THELEPHORA** *palmata* (Scop.) Fr., *Thelephora penicillata* (Pers.) Fr., **TRAMETES** *gibbosa* (Pers.) Fr., *Trametes hirsuta* (Wulfen) Pilát, *Trametes versicolor* (L.) Lloyd, **TREMELLA** *foliacea* Pers., *Tremella mesenterica* Retz., **TRICHOLOMA** *album* (Schaeff.) P. Kumm., *Tricholoma apium* Jul. Schäff., *Tricholoma basirubens* (Bon) A. Riva & Bon, *Tricholoma hemisulphureum* (Kühner) A. Riva, *Tricholoma imbricatum* (Fr.) P. Kumm., *Tricholoma josserandii* Bon, *Tricholoma saponaceum* (Fr.) P. Kumm. var. *saponaceum*, *Tricholoma sejunctum* (Sowerby) Quél., *Tricholoma terreum* (Schaeff.) P. Kumm., *Tricholoma vaccinum* (Schaeff.) P. Kumm. var. *vaccinum*, *Tricholoma virgatum* (Fr.) P. Kumm., **TRICHOLOMOPSIS** *rutilans* (Schaeff.) Singer, **TUBARIA** *furfuracea* (Pers.) Gillet, *Tubaria hiemalis* Romagn. ex Bon, **TULOSTOMA** *brumale* Pers., **XERULA** *pudens* (Pers.) Singer, *Xerula radicata* (Relhan) Dörfelt.



Mycena epipterygia var. *viscosa* (Maire) Ricken
13 September 2010, Hidirnebi - Trabzon

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