

New records of microfungi from Mt. Strandzha in Turkey (south-eastern Europe). I

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Abstract. Thirty eight species from eighteen genera of ascomycetous and anamorphic fungi are reported for the first time from Mt. Strandzha in Turkey.

Key words: anamorphic fungi, ascomycetes, fungal diversity, Mt. Strandzha, Turkey.

Introduction

The flora of Mt. Strandzha in Turkey has been extensively studied, except for the microfungi. Some information, though, was provided by Stoykov & Denchev (2007). In 2005–2006, during field investigations in Mt. Strandzha in Turkey, 38 species from 18 genera of non-lichenized *Pezizomycotina* and anamorphic fungi were collected and identified. These collections are reported herein. All species of these fungi are new records for the mycobiota of Turkey.

Materials and methods

Specimens were taken to the laboratory and examined under a Leica DM-E compound microscope. Sections were hand cut using a razor blade. The fungi were identified using the relevant literature (Allescher 1901, 1903; Jaczewski 1913; Grove 1937; Munk 1957; Naumov 1964; Ellis 1976; Smyk 1980; Sutton 1980; Dennis 1981; Teterevnikova-Babayana *et al.* 1983; Sivanesan 1984; Smitskaya *et al.* 1986; Ellis & Ellis 1987; Ignatavičiūtė & Treigienė 1998; Mel'nik 2000; Rogers *et al.* 2008; Boehm *et al.* 2009). The author abbreviations of fungi are according to www.indexfungorum.org (accessed 2011). Host plants were identified using the *Flora of Turkey and East Aegean Islands* (Davis 1965–1985) and *Flora of European Turkey* (Webb 1966). Taxa, family, and author citations were listed according to Cannon & Kirk (2007),

Kirk *et al.* (2008), and www.indexfungorum.org (accessed 2011). Family and species names are listed in alphabetical order in text. All specimens are deposited at the Mycological Collection of the Arts and Sciences Faculty of Ahi Evran University (AhEUM), Kırşehir, Turkey.

Abbreviation: EH: Collection number of Elşad Hüseyin.

List of specimens

Ascomycota

Hysteriaceae

Hysterium angustatum Alb. & Schwein.

Ascomata with base immersed, in group, black, straight or curved, lengthened, 1–3 mm in long and 0.5–0.7 mm in width. Asci 8-spored, clavate, 75–90 × 15–16 µm. Ascospores distichous, brown, 3 (–4) septate, oblong-ellipsoid, 17.5–20 × 6–8 µm.

On decorticated dead wood of *Phillyrea latifolia* L. (*Oleaceae*). Kırklareli Prov., Demirköy Distr., flooded forests of İğneada, 41°47'835" N, 27°59'843" E, 1 m, 20 Jun 2005, EH (AhEUM 185).

Incertae sedis

Botryodiplodia majuscula Sacc. [anamorphic *Diaporthales*]

Stromata black, immersed becoming erumpent, cushion-shaped, rounded, 1–1.2 mm in diam. Conidiomata immersed, 12–25 in each stroma, black, globose-conical, (250–) 300–

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350 µm in diam. Conidiophores hyaline, cylindrical, 7–10 × 2–2.5 µm. Conidia dark brown, 1-septate, oblong-ovoid, ovoid or ellipsoid, (27–) 28–37 × 13–15 (–16) µm.

On bark of dead branches of *Quercus hartwissiana* Steven (*Fagaceae*). Kırklareli Prov., Demirköy Distr., near Karacadağ, Akbay, 41°56'426" N, 27°47'875" E, 268 m, 16 Jun 2005, EH (AhEUM 13b).

Cytospora antarctica Speg. [anamorphic *Pezizomycotina*]

Stromata immersed, black, obtuse-conical, 0.5–1 mm in diam., 2–4 locular, loculi 180–200 µm in diam. Conidiophores branched, filiform, 20–25 × 1 µm. Conidia unicellular, hyaline, cylindrical with rounded ends, 2–3 × 1–1.5 µm.

On dead branches of *Alnus glutinosa* (L.) Gaertner subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., Incesirt village, 41°52'717" N, 27°36'640" E, 380 m, 17 Jun 2005, EH (AhEUM 28h).

Phoma cornicola D. Sacc. [anamorphic *Didymella*]

Conidiomata scattered, immersed, chestnut, globose, 150–200 µm in diam, with 50–70 × 18–30 µm chinked ostioles. Conidiophores hyaline, simple, cylindrical, 5–6 µm long. Conidia unicellular, hyaline, broadly ellipsoid, ovoid, 3–4 × 2–2.5 µm.

On dead thin branches of *Cornus mas* L. (*Cornaceae*). Kırklareli Prov., Demirköy Distr., Karacadağ region, 41°59'493" N, 27°49'784" E, 157 m, 16 Jun 2005, EH (AhEUM 12).

Phoma desolationis Speg. [anamorphic *Didymella*]

Conidiomata gregarious, immersed, black or dark brown, globose, 80–100 µm in diam. Conidiophores simple, hyaline, cylindrical. Conidia unicellular, hyaline, allantoid or cylindrical, with round ends, 2–3 × 0.5–0.7 µm.

On living leaves of *Fagus orientalis* Lipsky (*Fagaceae*). Kırklareli Prov., Demirköy Distr., Yenice-Demirköy region, near Yeşilce village, 41°54'109" N, 27°42'268" E, 432 m, 17 Jun 2005. EH (AhEUM 23a).

Phoma endoleuca Sacc. [anamorphic *Didymella*]

Conidiomata scattered, subimmersed, dark chestnut, depressed globose, globose, 190–230 µm in diam., with round ostiole 12–20 µm in diam. Conidiophores simple, hyaline, short, cylindrical. Conidia unicellular, hyaline, guttulate, spindle-ellipsoid, oblong-ellipsoid, 5–6 × 2–2.5 µm.

On thin dead branches of *Alnus glutinosa* subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, R. 41°53'288" N, 27°33'698" E, 285 m, 18 Jun 2005, EH (AhEUM 38c).

Phoma glomerata (Corda.) Wollenw. & Hochapfel. [anamorphic *Didymella*]

Conidiomata scattered, almost superficial, chestnut, ellipsoid, depressed globose, 200–220 µm in diam, with simple ostiole 20–40 µm in diam. Conidiophores hyaline,

filiform. Conidia unicellular, hyaline, biguttulate, ovoid, ellipsoid, 5–7 × 2.5–3 µm.

On dead wood of *Quercus petraea* (Mattuschka) Liebl. subsp. *petraea* (*Fagaceae*). Kırklareli Prov., Demirköy Distr., between İğneada-Demirköy villages, 41°52'843" N, 27°53'986" E, 30 m, 7 Nov 2006, EH (AhEUM 78).

Phoma microsperma Preuss [anamorphic *Didymella*]

Conidiomata gregarious, immersed, dark chestnut, depressed globose, 110–130 µm in diam. Conidiophores hyaline, cylindrical, short. Conidia unicellular, hyaline, cylindrical with round ends, 3–4 × 1 µm.

On dead branches and twigs of *Tilia argentea* Desf. ex DC. (*Tiliaceae*). Kırklareli Prov., Demirköy Distr., near Nursery garden, 41°49'428" N, 27°46'572" E, 277 m, 19 Jun 2005, EH (AhEUM 77-3).

Phoma urens Ellis & Everh. [anamorphic *Didymella*]

Conidiomata gregarious, subimmersed, pale or dark brown, depressed globose, 130–200 µm in diam, with round ostiole 25–30 µm in diam. Conidiophores hyaline, filiform. Conidia unicellular, hyaline, oblong-ellipsoid, ellipsoid or ovoid, 5.5–7 × 2.5–3 µm.

On decorticated wood of dead branches of *Populus tremula* L. (*Salicaceae*). Kırklareli Prov., Demirköy Distr., Çakmaktepe region, in the area of village Bıçkıdere, 41°47'683" N, 27°48'785" E, 207 m, 6 Nov 2006, EH (AhEUM 195).

Septonema strictum Corda [anamorphic *Dothideomycetes*]

Colonies prostrate, dark chestnut, black, shining. Conidiophores scattered, moderately brown, from base slightly branched, curved or straight, generally short, 2–4 µm in width. Conidia smooth, dark-reddish brown, in long chains, straight or curved, 2–21-septate, cylindrical, 20–145 × 10–12.5 µm.

On decorticated wood of dead branches of *Carpinus betulus* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, 41°53'012" N, 27°33'697" E, 284 m, 18 Jun 2005, EH (AhEUM 65).

Sphaeropsis atra (Preuss) Sacc. [anamorphic *Pezizomycotina*]

Conidiomata scattered, immersed, dark chestnut, black, globose or depressed globose, 180–300 µm in diam, with ostiole 25–30 µm in diam. Conidiophores hyaline, short-cylindrical. Conidia unicellular, guttulate, dark brown, ellipsoid, oblong-ovoid, (22.5–) 24–25 (–32) × 9.5–12 µm.

On dead thin branches of *Cornus mas* (*Cornaceae*). Kırklareli Prov., Demirköy Distr., Karacadağ area, 41°59'493" N, 27°49'784" E, 157 m, 16 Jun 2005, EH (AhEUM 12b); in the area of village Karanlıkköy, in valley, 41°53'149" N, 27°33'734" E, 275 m, 18 Jun 2005, EH (AhEUM 12e).

Sphaeropsis guttifera G.H. Otth [anamorphic *Pezizomycotina*]

Conidiomata scattered, immersed, becoming erumpent, papillate, black, globose, 270–500 µm in diam. Conidiophores hyaline, long, filiform. Conidia unicellular, dark brown, guttulate, ovoid, pyriform or ellipsoid, 19–25 × 10–11 µm.

On dead branches of *Tilia argentea* (*Tiliaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, 41°52'987" N, 27°33'665" E, 295 m, 18 Jun 2005, EH (AhEUM 71a); near nursery garden, 41°49'428" N, 27°46'572" E, 277 m, 19 Jun 2005, EH (AhEUM 77b).

Sphaeropsis märtensii (West.) Sacc. [anamorphic *Pezizomycotina*]

Conidiomata scattered, immersed, black, papillate, globose, 200–220 µm in diam. Conidiophores hyaline, cylindrical. Conidia unicellular, brown, 1-guttulate, ellipsoid, oblong-ovoid, 23–31 × 10–12.5 µm.

On thick dead branches of *Tilia argentea* (*Tiliaceae*). Kırklareli Prov., Demirköy Distr., in the area of nursery garden, 41°49'428" N, 27°46'572" E, 277 m, 19 Jun 2005, EH (AhEUM 77a), together with *Cytospora guttifera* (DC.) Fr., EH (AhEUM 77c) and *Hendersonia vagans* Fuckel, EH (AhEUM 157a).

Sphaeropsis quercina Cooke & Harkn. [anamorphic *Pezizomycotina*]

Conidiomata scattered, immersed, becoming erumpent, papillate, black, globose or depressed globose, 250–300 (–450) µm in diam. Conidiophores hyaline, cylindrical or filiform. Conidia unicellular, dark brown, guttulate, cylindrically-ellipsoid, broadly-cylindrical, with round ends, 22.5–24 × (8–) 9–10 (–12) µm.

On bark of dead branches of *Quercus hartwisiana* (*Fagaceae*). Kırklareli Prov., Demirköy Distr., Karacadağ, Akbay environs, 41°56'426" N, 27°47'875" E, 268 m, 16 Jun 2005, EH (AhEUM 13d).

Sphaeropsis salicicola Pass. [anamorphic *Pezizomycotina*]

Conidiomata scattered, immersed becoming erumpent, dark brown, almost black, globose, 500–600 µm in diam. Conidiophores hyaline, filiform. Conidia unicellular, dark brown, ovoid, ellipsoid or broadly ellipsoid, 20–25 × 9–12.5 µm.

On thin dead branches of *Salix cinerea* L. (*Salicaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, 41°53'288" N, 27°33'698" E, 285 m, 18 Jun 2005, EH (AhEUM 36-2).

Sphaeropsis saffras Cooke & Ellis [anamorphic *Pezizomycotina*]

Conidomata scattered, immersed, black, globose or depressed globose, 400–500 µm in diam. Conidiophores hyaline, cylindrical, short. Conidia unicellular, dark brown, granulate and guttulate, oblong-ovoid, ellipsoid, 30–35 × (12.5–) 14–18 µm.

On thin dead branches of *Ulmus laevis* Pallas (*Ulmaceae*). Kırklareli Prov., Demirköy Distr., Flooded forests of İğneada, 41°48'654" N, 27°56'541" E, 10 m, 25 Jun 2006, EH (AhEUM 176).

Sphaeropsis tiliacea Peck [anamorphic *Pezizomycotina*]

Conidiomata scattered, immersed, becoming erumpent, with ostiole, black, depressed globose, 450–550 µm in diam. Conidiophores hyaline, filiform, 20–25 × 1.5–2 µm. Conidia unicellular, dark brown or chestnut, guttulate, ellipsoid, ovoid or oblong, (20–) 22–22.5 (–25) × 9–10 (–12.5) µm.

On thin dead branches of *Tilia argentea* (*Tiliaceae*). Kırklareli Prov., Demirköy Distr., nursery garden environs, 41°49'422" N, 27°46'592" E, 275 m, 19 Jun 2005, EH (AhEUM 75a).

Trochila craterium (DC.) Fr.

Ascomata hypophyllous, gregarious, erumpent, dark brown or grayish brown, round, 300–500 µm in diam, with a circular epidermal lid. Asci 8-spored, cylindrically clavate, (60–) 65–70 × 9–10 µm. Ascospores hyaline, unicellular, mono- or distichous, 7–8 × 4–5 µm.

On fallen leaves and petioles of *Hedera helix* L. (*Araliaceae*). Kırklareli Prov., Demirköy Distr., Flooded forests of İğneada, 41°48'672" N, 27°56'580" E, 7 m, 25 Jun 2005, EH (AhEUM 178).

Massariaceae

Massaria subpustulosa (G.H. Otth) Jacz.

Ascomata gregarious, immersed up to 1/3, black, globose, 400–500 µm in diam, with simple papillate ostiole, 50–60 µm in diam. Asci 8-spored, clavate, 140–150 × 10–12 µm. Ascospores monostichous, dirty brown, 3-septate, broadly fusiform, with round ends, 20–27 × 7.5–10 µm.

On decorticated wood of *Carpinus betulus* L. (*Betulaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, in valley, 41°53'170" N, 27°31'730" E, 275 m, 18 Jun 2005, EH (AhEUM 51).

Melanconidaceae

Melanconium apiocarpum Link [anamorphic *Melanconis*]

Conidiomata acervulate, immersed, black, spherically conical, 500–750 µm in diam. Conidiophores hyaline, filiform, up to 50 µm long and up to 3 µm thick. Conidia unicellular, smoky gray, guttulate, ovoid, obovoid, ellipsoid, (7–) 10–12.5 × 6–7 (–7.5) µm.

On bark of fallen dead branches of *Alnus glutinosa* subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., Incesirt village, 41°52'717" N, 27°36'640" E, 380 m, 17 Jun 2005, EH (AhEUM 28f).

On dead branches of *Carpinus betulus* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., near nursery garden, 41°49'422" N, 27°46'592" E, 275 m, 19 Jun 2005, EH (AhEUM 76). Conidia 11–15 × (7.5–) 8.5–9 (–9.5) µm.

Melanconium didymoideum Vestergr. [anamorphic *Melanconis*]

Conidimata acervulate, numerous, scattered, immersed, black or dark brown, depressed-spherical, 1–2 mm in diam. Conidiophores hyaline, simple, filiform, 30–50 × 3 µm. Conidia unicellular, dark brown, oblong-ellipsoid, cylindrical with round ends, 8–11 × 5–6 µm.

On fallen dead thick branches of *Alnus glutinosa* subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., Incesirt village, 41°52'717" N, 27°36'640" E, 380 m, 17 Jun 2005, EH (AhEUM 28).

Melanconium ramulorum (Corda) Sacc. [anamorphic *Melanconis*]

Conidiomata acervulate, scattered, immersed, black or dark brown, truncately conical, 225–300 µm in diam. Conidiophores hyaline, filiform, are big as conidia or more. Conidia unicellular, 1-biguttulate, dark brown, ellipsoid, ovoid, oblong-ovoid, (9–) 10–12.5 × 6.5–8 µm.

On dead thin branches of *Fagus orientalis* (*Fagaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, in valley, 41°53'149" N, 27°33'734" E, 275 m, 18 Jun 2005, EH (AhEUM 55a).

Melogrammataceae

Melogramma campylosporium Fr.

Stromata black, immersed, becoming erumpent, depressed globose, cushion-shaped, 1.5–2 mm in diam. and 0.5 mm in high. Ascomata monostichous, suberumpent, papillate, obovoid, 250–350 µm. Asci 8-spored, cylindrically clavate, 100–115 × 10–12.5 µm. Ascospores, distichous, 1–2-guttulate, dirty brown, 3-septate, fusiform, (33–) 37.5–42.5 × 4.5–5 µm

On bark of dead thin branches of *Alnus glutinosa* subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., Çakmaktepe region, in the area of village Bıçkıdere, 41°47'710" N, 27°48'396" E, 230 m, 6 Nov 2006, EH (AhEUM 193).

Mytilinidiaceae

Taeniolella alta (Ehrenb.) S. Hughes [anamorphic *Glyphium*]

Colonies cushion-shaped or prostrate, dark brown. Conidiophores sparse, simple, straight or curved, brown, 4–9 µm in width. Conidia from moderately brown to dark brown or olive brown, guttulate, 2–6- (mostly 3-) septate, cylindrical with round ends, 20–60 × 10–12.5 µm.

On dead wood of *Carpinus betulus* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, in valley, 41°53'170" N, 27°31'730" E, 275 m, 18 Jun 2005, EH (AhEUM 51a), together with *Massaria subpustulosa* (G.H. Otth) Jacz, EH (AhEUM 51).

Taeniolella pulvillus (Berk. & Broome) M.B. Ellis [anamorphic *Glyphium*]

Colonies cushion-shaped, compact, black. Conidiophores tufts from pale brown to moderately brown, short, straight or curved, simple, 3–6 µm in width. Conidia brown, smooth, sometimes warted, straight or curved, 2–11-septate, cylindrical, 15–40 × 5–7 µm.

On bark of dead branches of *Sorbus domestica* L. (*Rosaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Sivrice, 41°48'924" N, 27°56'040" E, 106 m, 25 Jun 2005, EH (AhEUM 175).

Taeniolella stilbospora (Corda) S. Hughes [anamorphic *Glyphium*]

Colonies cushion-shaped or prostrate, velvet-like, from dark brown to black. Conidiophores in tufts or scattered, simple, curved, brown or olive brown, 10–15 × 3–5 µm. Conidia straight or curved, from pale brown to dark brown, 3–24-septate, cylindrical, 20–130 × (5–) 6–7.5 µm.

On bark of thick branches of *Alnus glutinosa* subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, in valley, 41°53'170" N, 27°33'730" E, 275 m, 18 Jun 2005, EH (AhEUM 50).

Phaeosphaeriaceae

Hendersonia fiedleri Westend. [anamorphic *Didymella*]

Conidiomata gregarious, immersed, dark brown, globose, 130–200 µm in diam. Conidiophores cylindrical, sizes like these of conidia. Conidia clay coloured, 3-septate, broadly fusiform, ellipsoid, 17.5–21 × 7–9 µm.

On thin dead branches of *Cornus mas* (*Cornaceae*). Kırklareli Prov., Demirköy Distr., flooded forests of İğneada, 41°47'835" N, 27°59'843" E, 2 m, 25 Jun 2005, EH (AhEUM 183a).

Hendersonia sarmentorum Westend. [anamorphic *Didymella*]

Conidiomata subimmersed, scattered, solitary, blackish, greyish brown, globose or depressed globose, 150–200 µm in diam. Conidiophores hyaline, cylindrical, 11–13 × 1.5–2 µm. Conidia brown, 3-septate, cylindrical or ellipsoid, 9–11 × 4–5 µm.

On dead branches of *Tilia argentea* (*Tiliaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, 41°52'982" N, 27°33'665" E, 295 m, 18 Jun 2005, EH (AhEUM 71).

Hendersonia tiliae Lév. [anamorphic *Didymella*]

Conidiomata immersed, per 2–5 in group, black, globose, 200–250 µm in diam. Conidiophores hyaline, cylindrical, 12–15 × 1.5–2 µm. Conidia clay-coloured, 1–3-septate, oblong-ovoid, ellipsoid, broadly fusiform, 13–18 × 6.5–8 µm.

On bark of dead branches of *Tilia argentea* (*Tiliaceae*). Kırklareli Prov., Demirköy Dist., near nursery garden, 41°49'428" N, 27°46'572" E, 277 m, 19 Jun 2005, EH (AhEUM 77-2), together with *Sphaeropsis mespili* Hollós, EH (AhEUM 157b).

Pseudovalsaceae

Coryneum japonicum (Sacc.) B. Sutton [anamorphic *Pseudovalsula*]

Conidiomata erumpent, scattered, black, numerous, round, oblong flat or domed, 2–4 mm long and 0.5–1 mm width. Conidiophores pale brown, 25–30 × 3–4 µm. Conidia brown, 4–7-distoseptate, straight or curved, narrowly fusiform, 55–67 × 12.5–14 µm.

On bark of dead branches of *Quercus hartwisiana* (*Fagaceae*). Kırklareli Prov., Demirköy Distr., around

Karacadağ-Akbay villages, 41°56'426" N, 27°47'875" E, 268 m, 16 Jun 2005, EH (AhEUM 13).

Coryneum megaspermum Syd. & P. Syd. [anamorphic *Pseudovalsula*]

Conidiomata erumpent, scattered, black, cushion-shaped, round or oblong, above 2–3 mm long and 1–2 mm width. Conidiophores pale brown, 30–40 × 3.5–4.5 µm. Conidia brown, 9–13-distoseptate, straight or curved, fusiform, 90–115 (–125) × (13–) 15 µm.

On bark of dead branches of *Fagus orientalis* (*Fagaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, in valley, 41°53'170" N, 27°33'730" E, 275 m, 18 Jun 2005, EH (AhEUM 53).

Pseudovalsula titan (Berk. & Ravenel) Sacc.

Stromata scattered, immersed, black, intra brownish, conical, 1.5–2 mm in diam. Ascomata immersed, one seriate, spherical, 300–500 µm in diam. Asci 8-spored, cylindrical, 175–200 × 40–45 µm. Ascospores distichous, dark brown, 3 (–5) septate, guttulate, fusiform, 75–90 (–97) × 21–22 (–23) µm.

On dead thin branches of *Cornus mas* (*Cornaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, 41°53'098" N, 27°33'709" E, 275 m, 18 Jun 2005, EH (AhEUM 59f).

Rhytismataceae

Coccomyces coronatus (Schumach.) De Not.

Ascomata gregarious, black, embedded, lens-shaped, 1–2 mm in diam. Asci 8-spored, clavate, 110–180 × 11–14 µm. Ascospores hyaline, oblong-clavate, 33–40 × 3–3.5 µm.

On fallen wintered leaves of *Quercus robur* L. subsp. *robur* (*Fagaceae*). Kırklareli Prov., Demirköy Distr., Incesirt village, Rezve valley, 41°55'106" N, 27°34'409" E, 293 m, 17 Jun 2005, EH (AhEUM 74).

Sydowiellaceae

Stegophora ulmea (Fr.) Syd. & P. Syd. [anamorph: *Asteroma ulmeum* (Miles) B. Sutton]

Spots epiphyllous, yellowish or whitish, circular, 1–2 mm in diam. Conidiomata acervulate, brownish, immersed, irregular, almost rounded, 160–200 (–500) µm in diam. Conidiophores hyaline, cylindrical, 18–12 × 1.5–2 µm. Conidia unicellular, hyaline, straight or curved, cylindrical, rod-like, 5.5–7.5 × 2.5–3 (–3.5) µm,

On living leaves of *Ulmus laevis* (*Ulmaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, 41°53'284" N, 21°33'712" E, 285 m, 18 Jun 2005, EH (AhEUM 42).

Valsaceae

Valsa ceratosperma (Tode) Maire

Stromata irregular scattered, immersed, brownish chestnut, almost spherical or truncately-conical, 0.75–1.5 mm in diam. Ascomata immersed, black, 5–20 in each

stroma, 200–400 µm in diam, with 300–600 µm long necks protruding through raised, greyish brown discs. Asci 8-spored, narrowly clavate, (30–) 38–45 × 7–8 µm. Ascospores hyaline, distichous, curved, cylindrical, 7.5–10 × 2–2.5 µm.

On bark of dead branches of *Ulmus laevis* (*Ulmaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karanlıkköy, in valley, 41°53'122" N, 27°33'729" E, 275 m, 18 Jun 2005, EH (AhEUM 58).

Xylariaceae

Hypoxylon peckianum Sacc.

Stromata superficial, dark chestnut, in groups, almost round, 0.5–2 mm in diam. Ascomata immersed, one seriate, ovoid, small. Asci 8-spored, cylindrical, 100–132 × 7–7.5 µm. Ascospores monostichous, chestnut, biguttulate, ellipsoid, 12.5–15 × 5–6 µm.

On bark of thin dead branches of *Alnus glutinosa* subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., Incesirt village, 41°52'717" N, 27°36'640" E, 380 m, 17 Jun 2005, EH (AhEUM 28d).

Hypoxylon subterraneum Fuckel

Stromata dark chestnut to blackish, scattered, superficial, on blackened wood and bark, more or less spreading, oblong, 1–2 mm in long. Ascomata of various sizes, in dense groups, chestnut, spherical, 250–300 µm in diam. Asci 8-spored, cylindrical, 100–110 × 5.5–6 µm. Ascospores monostichous, chestnut, biguttulate, ellipsoid, 9–10 × 4–5 µm.

On wood and bark of thick dead branches of *Fagus orientalis* (*Fagaceae*). Kırklareli Prov., Demirköy Distr., in the area of village Karacadağ, Yeşilce village, 41°54'109" N, 27°42'268" E, 432 m, 17 Jun 2005, EH (AhEUM 24).

Rosellinia rimiricola Rehm

Ascomata gregarious, superficial, papillate, blackish brown, hard, spherically conical, 240–280 µm in diam. Asci 8-spored, cylindrical, 80–120 × 7–8 µm. Ascospores unicellular, monostichous, brown, 1-guttulate, ellipsoid or more or less globose, 10–14 × 7–7.5 µm.

On dead undecayed wood of thick branches of *Alnus glutinosa* subsp. *glutinosa* (*Betulaceae*). Kırklareli Prov., Demirköy Distr., around Karanlıkköy village, 41°53'284" N, 21°33'712" E, 285 m, 18 Jun 2005, EH (AhEUM 41).

Discussion

In the light of the literature (Bremer & Petrak 1947; Bremer *et al.* 1948, 1952a, b; Petrak 1953, 1957; Karel 1958; Göbelez 1963, 1964; Lohwag 1963; Öner & Ekmekçi 1974; Tamer & Öner 1978; Baydar 1982; Öner *et al.* 1984; Tamer *et al.* 1989, 1990; Güven & Tamer 1993; Altan & Tamer 1996; Hüseyinov & Selçuk 1999; Braun *et al.* 2000; Hüseyin & Selçuk 2001; Hüseyinov *et al.* 2002; Hüseyin *et al.* 2003, 2005, 2009; Mel'nik *et al.* 2004; Erdoğan & Hüseyin 2007, 2008; Stoykov & Denchev 2007; Selçuk *et al.* 2009;

Göçmen *et al.* 2011) on Turkish microfungi, all species of micromycetes represented in this work are reported for the first time in Turkey. The diagnostic features of species of Turkish specimens have subtle differences from the classic features of European specimens. The fungi described in this work were in consort relationships with 14 higher plants species from 9 families. The collected 38 species belong to two trophic groups. Xylotrophs (34 species) are richest by the number of species and dominant among the trophic groups. Phyllostrophs are represented by *Coccomyces coronatus*, *Phoma desolationis*, *Stegophora ulmea* and *Trochila craterium* only. The collection includes generally holarctic, paleoarctic and euro-caucasian elements of boreal geographical type.

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