Morphological Characterization of Fungi Isolated from Shoots of *Prunus mandshurica* (Maxim.) Koehne in Blagoveshchensk (Amur Region, Russia)

Alternaria alternata (Fr.) Keissl. (Figure S1)

Colonies are 50–60 mm diam. after 7 days of growth on Czapek's agar (Cz), mostly olive black, gray, and olive gray on oatmeal agar (OA) and potato-sucrose agar (PSA), sometimes brown on Cz. Conidiophores are brown, smooth, short, about 50 µm long, usually branched, bearing long branched chains of conidia. Conidia are 25–55 × 10–15 µm, obclavate and ellipsoid in shape, brown, with a short lighter beak, usually with 3–7 transverse septa and 1–2 longitudinal septa. The morphological characteristics correspond to the descriptions of *Alternaria alternata* provided in the mycological keys [35,36] and the section Alternaria D.P. Lawr., Gannibal, Peever & B.M. Pryor 2013 [39].

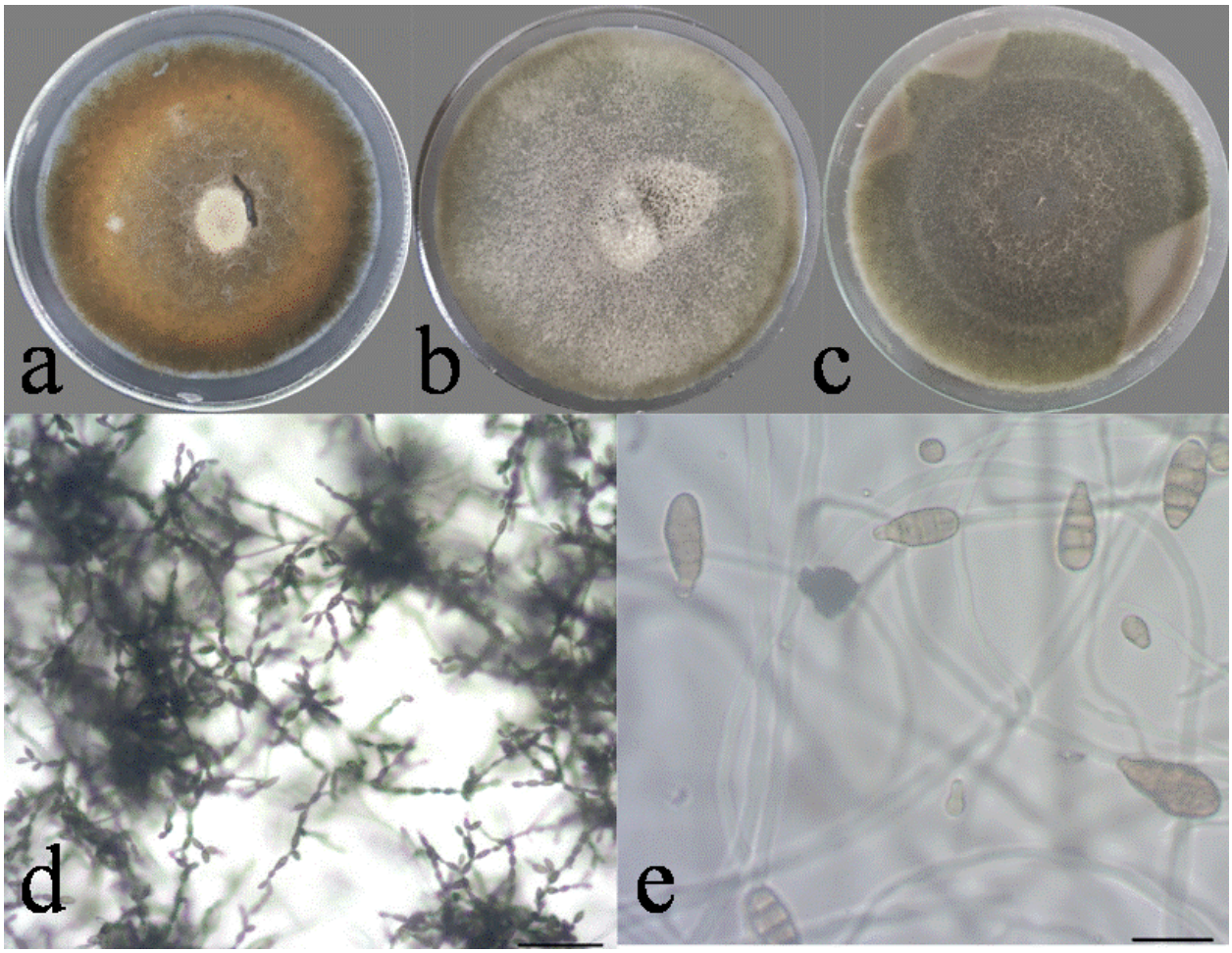

Figure S1. *Alternaria alternata*: colonies on Cz (a), PSA (b), and OA (c) after 10 d of growth; conidiophores and chains of conidia (d); conidia (e). Scale bars: d = 100 µm, e = 20 µm.

Alternaria tenuissima (Kunze) Wiltshire (Figure S2)

Colonies are about 50 mm diam. after 7 days of growth on Cz, olive brown on Cz, gray and olive gray on OA and PSA. Conidiophores are up to 100 µm long, brown, smooth, bearing longer chains of conidia with rare secondary chains. Conidia are 30–85 × 8–20 µm, obclavate, ovoid or rounded, long-beaked, light brown, with 4–7 transverse septa and 0–3 longitudinal septa. Morphological characteristics correspond to the description of *Alternaria tenuissima* provided in the mycological keys [35,36].

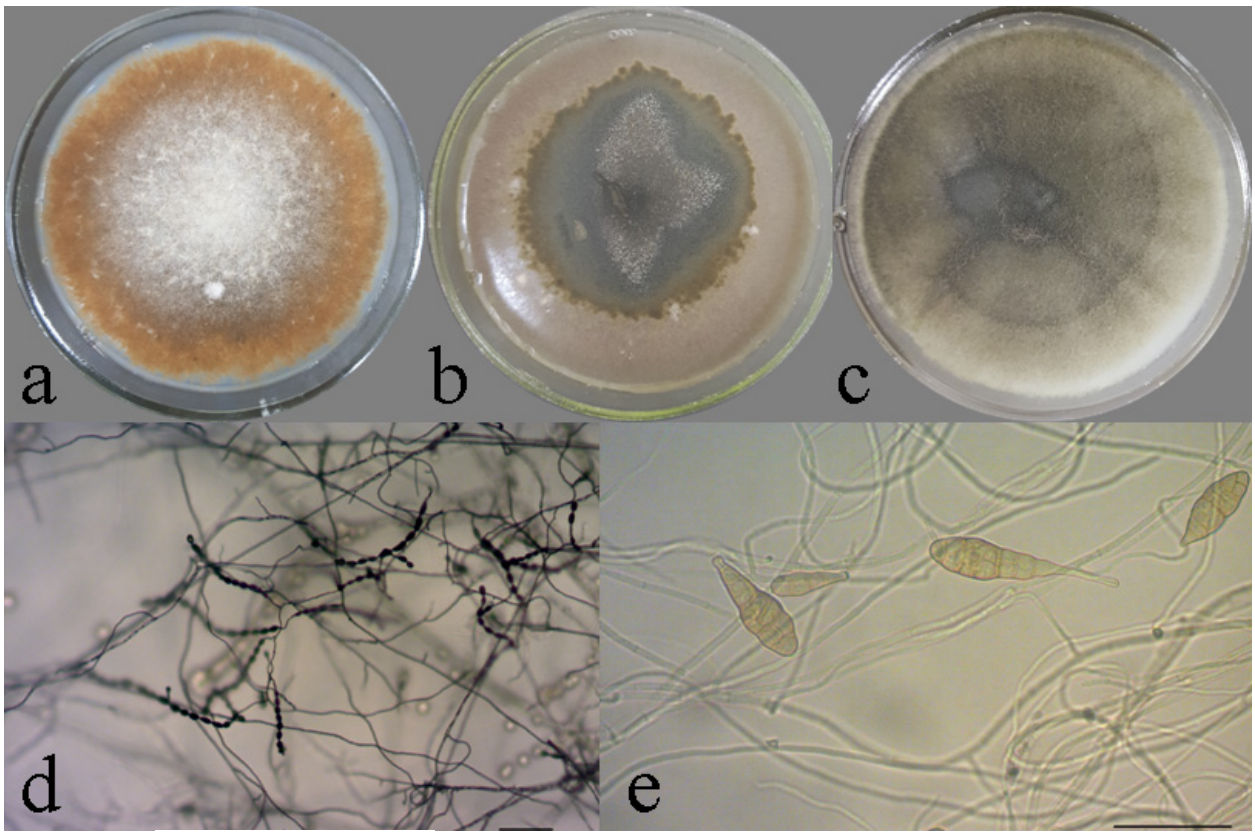

Figure S2. *Alternaria tenuissima*: colonies on Cz (a), PSA (b), and OA (c) after 10 d of growth; conidiophores and chains of conidia (d); conidia (e). Scale bars: d = 100 µm, e = 50 µm.

Aureobasidium pullulans (de Bary et Löwenthal) G. Arnaud

Colonies are up to 30 mm diam. after 5–7 days of growth on Cz, whitish, becoming black with age, with a slimy consistency. Conidiophores are inconspicuous. Conidia are in slimy masses, budding from thick-walled dark-colored mycelium cells. Conidia are hyaline, frequently budding, one-celled, variable in shape and size, mainly 5–10 × 3–5 µm, enlarging with age. Morphological characteristics correspond to the description of *Aureobasidium pullulans* provided in the mycological keys [35,36].

Cladosporium cladosporioides (Fresen.) G.A. de Vries

Colonies are 25–35 mm diam. after 5–7 days of growth on Cz, olive green, velvety. Conidiophores are smooth, without swellings, about 100–300 µm long. Conidia are 3–10 × 2–4 µm, in long branched chains, one-celled, ellipsoid or limoniform, smooth, light brown in color. Morphological characteristics correspond to the description of *Cladosporium cladosporioides* provided in the mycological keys [35,36] and the monograph [38].

Cladosporium herbarum (Pers.) Link

Colonies are up to 25 mm diam. after 5–7 days of growth on Cz, olive green, velvety. Conidiophores are conspicuous, erect and curved, with swellings, brown in color, smooth, about 150–200 µm long, up to 10 µm wide at the sites of swelling. Conidia are 5–20 × 3–6 µm, in long branched chains, elongate-ellipsoid, brown, verruculose, with pronounced hila. Morphological characteristics correspond to the description of *Cladosporium herbarum* provided in the mycological keys [35,36] and the monograph [38].

Diaporthe eres Nitschke (Figure S3).

Culture characteristics. Colonies on PSA are 85–90 mm diam. after 14 days of growth, with regular margin; aerial mycelium is abundant, floccose, light gray near the margin and stone gray in the center; substrate mycelium is light gray near the margin and brownish gray in the

center. Colonies on OA are 90 mm diam. after 14 days of growth, with regular margin; aerial mycelium is not abundant, floccose, light gray.

Characteristics of spore-bearing structures. Conidiomata are pycnidial, on PSA abundant, concentrated near the center of colony, composed in conglomerates, rarely solitary, mostly superficial or semi-immersed in agar medium, with conidia exuding from the pycnidia in beige gray drops, on OA not abundant, scattered, mostly solitary, immersed or semi-immersed in agar medium, covered with aerial mycelium. On PSA, pycnidial wall is pseudoparenchymatous, pycnidia are 242–448 × 329–437 µm, contain two types of conidia (alpha and beta). Alpha conidia are 6.15–9.25 (8.02±0.29) × 1.94–2.78 (2.38±0.1) µm, aseptate, smooth, globose to bean-shaped, often with pointed beaks, hyaline, biguttulate with one guttule at each end. Beta conidia are 18.45–45.68 (27.04±2.42) × 1.09–1.57 (1.24±0.06) µm, smooth, elongated, filiform, curved, sometimes strongly hooked. Exudate contains mostly alpha conidia, whereas conidia of both types are in pycnidia.

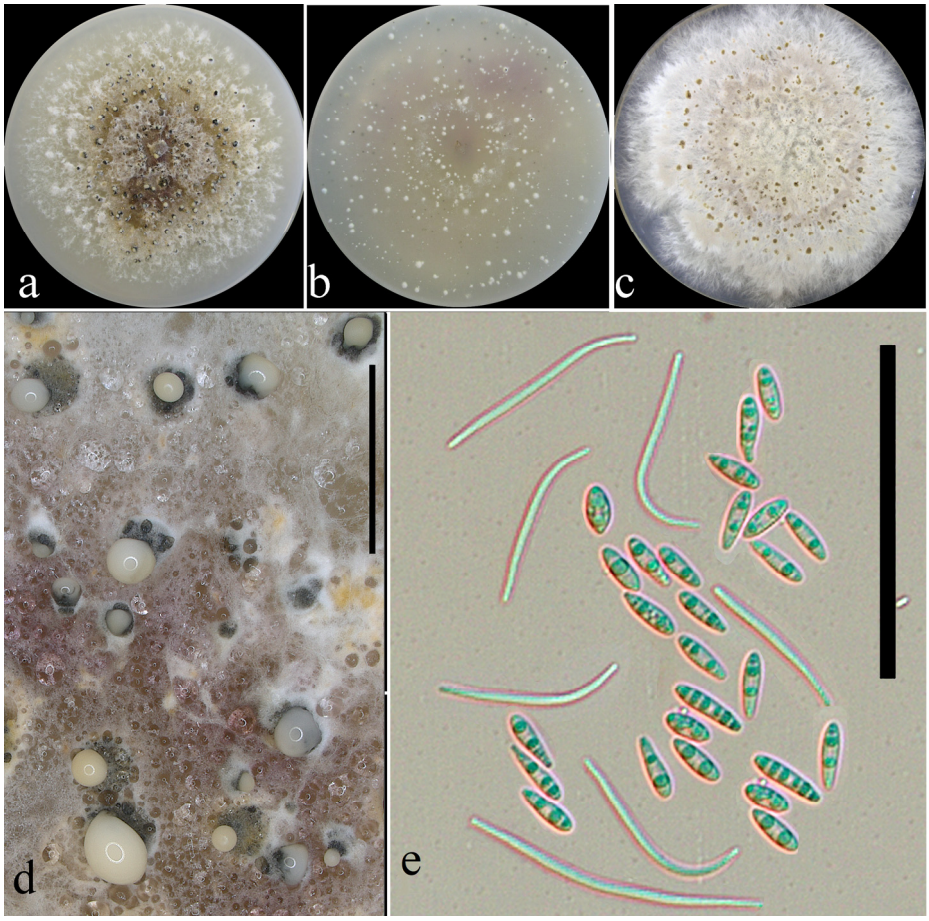

Figure S3. *Diaporthe eres* (MF-Pm-1a): colonies on PSA (a), OA (b), and Cz (c) after 14 d of growth; pycnidia on PSA (d); alpha and beta conidia on PSA (e). Scale bars: c = 5 µm, d = 50 µm.

Epicoccum nigrum Link (Figure S4)

Colonies are 60 mm diam. after 4 days of growth on Cz, prostrate, fast growing. Mycelia are yellow, orange or red in color, becoming dark with age; the reverse side is dark red. Reddish-orange exudate is sometimes observed on the colony surface. Conidiophores are short, about 5–15 × 3–6 µm. Conidia are spherical, clavate, pear-shaped, with a short light stalk (basal cell), golden brown, black, with wart-like surface ornaments, 15–25 µm in diameter. Morphological characteristics correspond to the description of *Epicoccum nigrum* provided in the mycological

keys [35].

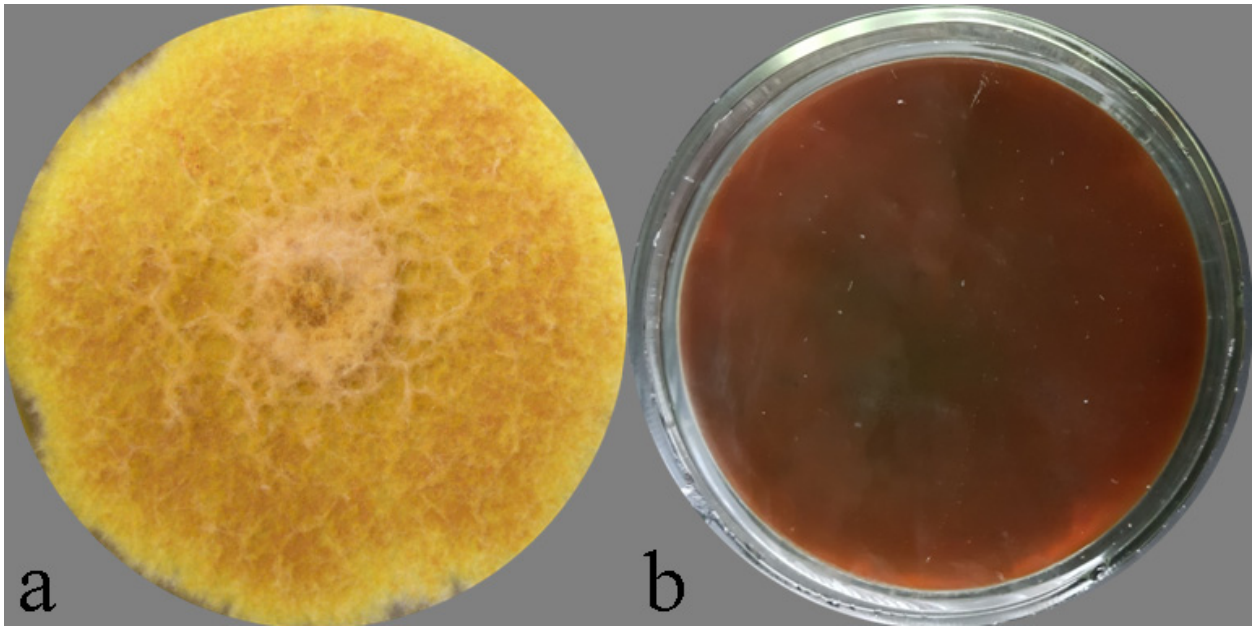

Figure S4. *Epicoccum nigrum*: a colony on Cz after 14 d of growth. The reverse side is shown on (b).

Fusarium graminearum Schwabe (Figure S5)

Colonies reached 85 mm diam. after 10 days of growth on Cz. The aerial mycelium is well developed, long, fluffy, white, yellow, pink-yellow, eventually becoming brown and red; the reverse side is from coral red to wine red with a yellow tint. Macroconidia were poorly formed after 7 days of growth, and typical sporulation was noted on 15–25 days. Macroconidia are fusiform to sickle-shaped, curved, with distinct septa, mostly 3–5 septate. The apical cell is conical, elongated and narrowed, the basal cell is with a distinct stalk. Macroconidia are 30–50 × 3–4 µm if 3 septate, and 41–60 × 4.5–5.5 µm if 5 septate. Chlamydospores were not noticed. Morphological characteristics correspond to the description of *Fusarium graminearum* provided in the mycological keys [35,37].

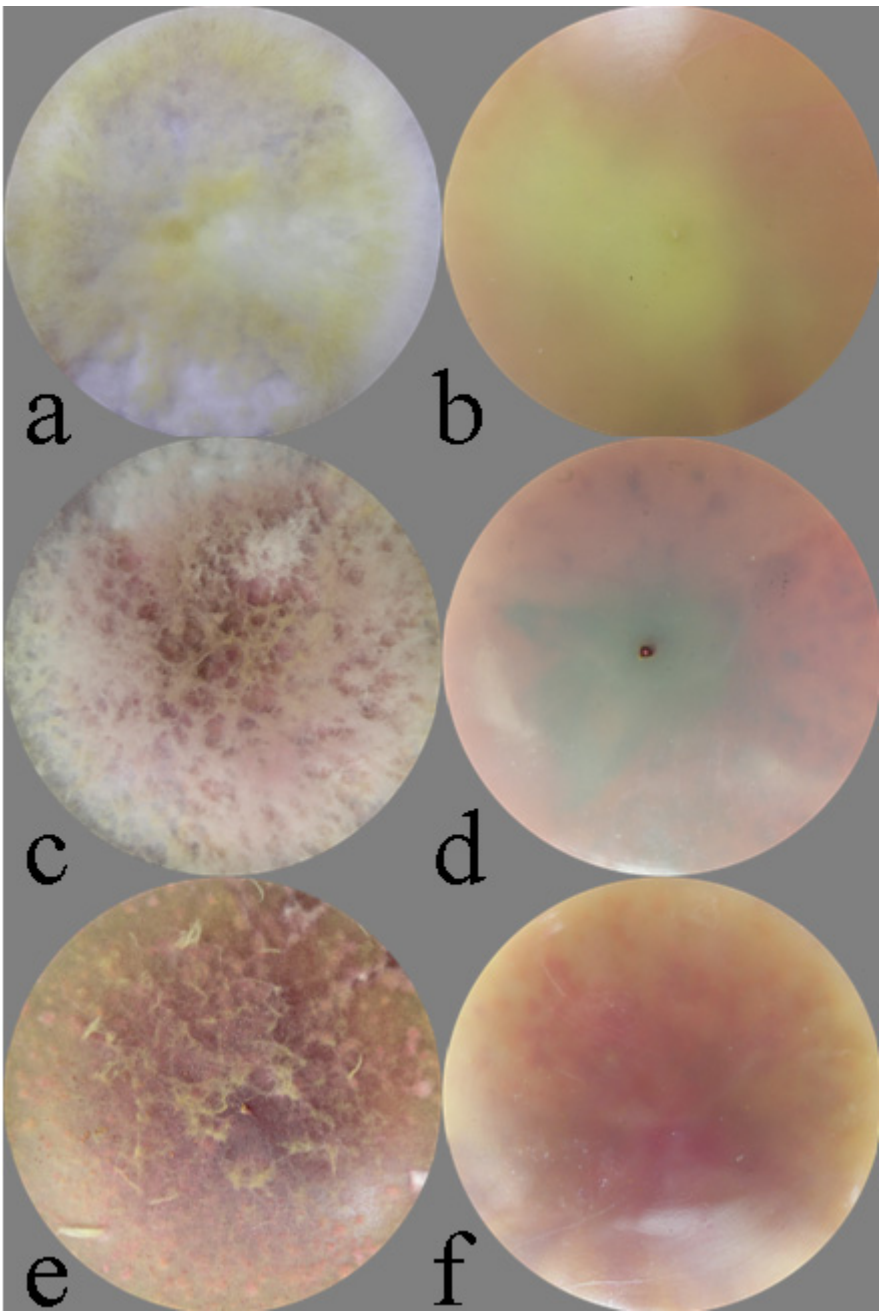

Figure S5. *Fusarium graminearum*: colonies on Cz (a, b), PSA (c, d), and OA (e, f) after 14 d of growth. The reverse sides are shown on (b, d, f).

Fusarium oxysporum Schltdl. (Figure S6)

Colonies reached 50–60 mm diam. after 10 days of growth on Cz. The aerial mycelia are fluffy, floccose, tomentose, white, sometimes with a peach tint; the reverse side is whitish with different tints of yellow, pink and violet. Conidia of two types: microconidia and macroconidia. Microconidia are 5–9 × 2.5–3 µm, one-celled, oval, ellipsoid, and cylindrical, formed abundantly in false heads. Macroconidia are 25–60 × 3–5 µm, fusiform to sickle-shaped, ellipsoid-curved or almost straight with a gradually narrowed apical cell, usually 3 septate. Chlamydospores were formed abundantly after 25 days of growth. They are intercalary and terminal, mostly solitary. Morphological characteristics correspond to the description of *Fusarium oxysporum* provided in the mycological keys [35,37].

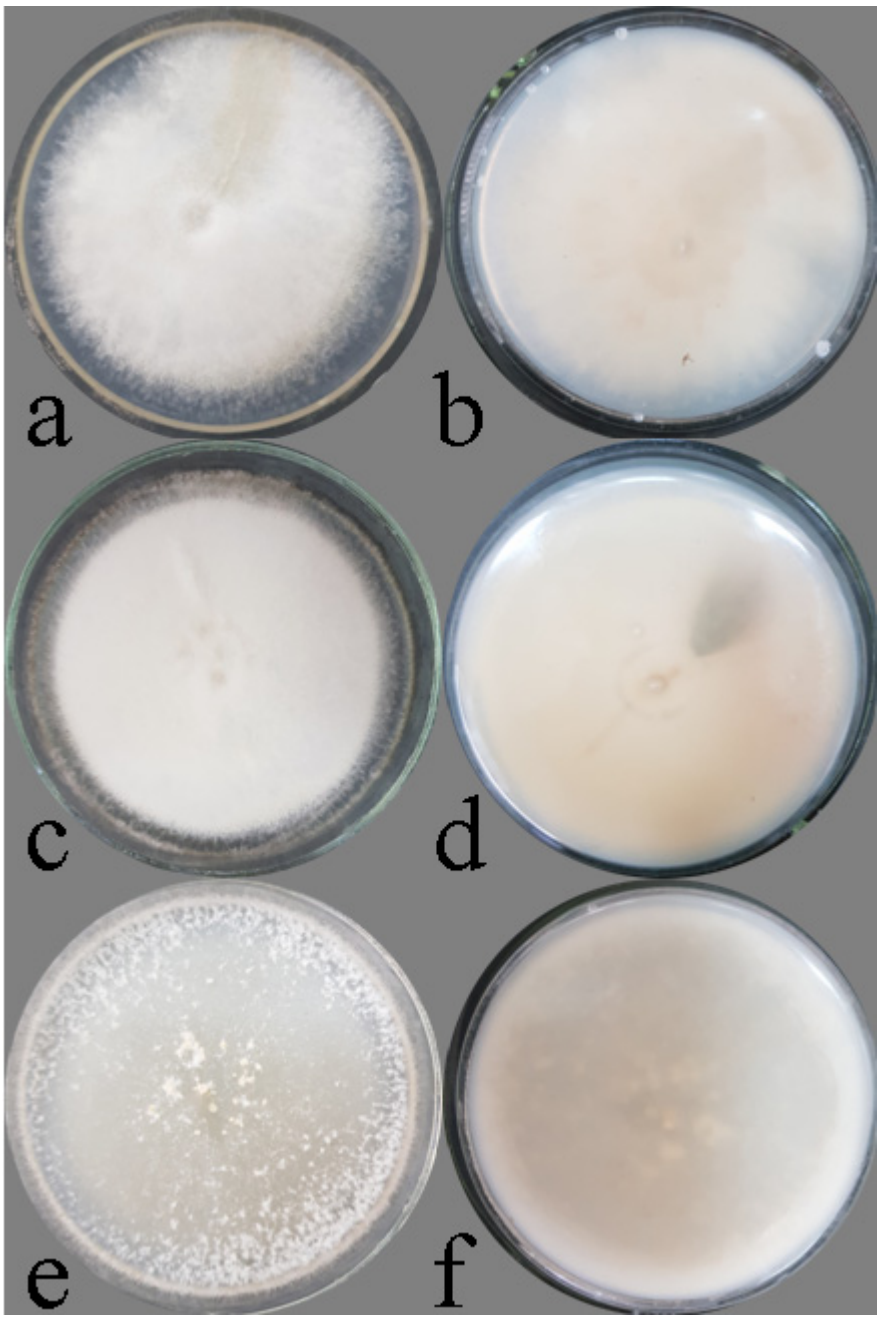

Figure S6. *Fusarium oxysporum*: colonies on Cz (a, b), PSA (c, d), and OA (e, f) after 14 d of growth. The reverse sides are shown on (b, d, f).

Nothophoma quercina (Syd. & P. Syd.) Qian Chen & L. Cai (Figure S7).

Culture characteristics. Colonies on PSA are 58–80 mm diam. after 14 days of growth, with irregular margins; aerial mycelium is scanty, light gray; substrate mycelium is light gray olive near the margin and dark yellow olive in the center. Colonies on OA are 87–90 mm diam. after 14 days of growth, with regular margin; aerial mycelium is scanty light gray; substrate mycelium is dark khaki near the margin and gray umber in the center.

Characteristics of spore-bearing structures. Conidiomata are pycnidial, on PSA abundant, scattered, arranged in radial lines or concentric rings, composed in conglomerates, rarely solitary, mostly superficial or semi-immersed in agar medium, on OA not abundant, scattered, mostly solitary, immersed or semi-immersed in agar medium. On PSA, pycnidial wall is pseudoparenchymatous, pycnidia are 71.57–263.33 × 59.95–304.26 µm, globose, mostly with single ostiole. Conidia are 4.12–6.39 (5.26±0.12) × 2.61–5.22 (3.71±0.1) µm, occasionally much bigger (9.04–11.44 × 4.27–5.36 µm), bean shaped, rounded, turn brown with age.

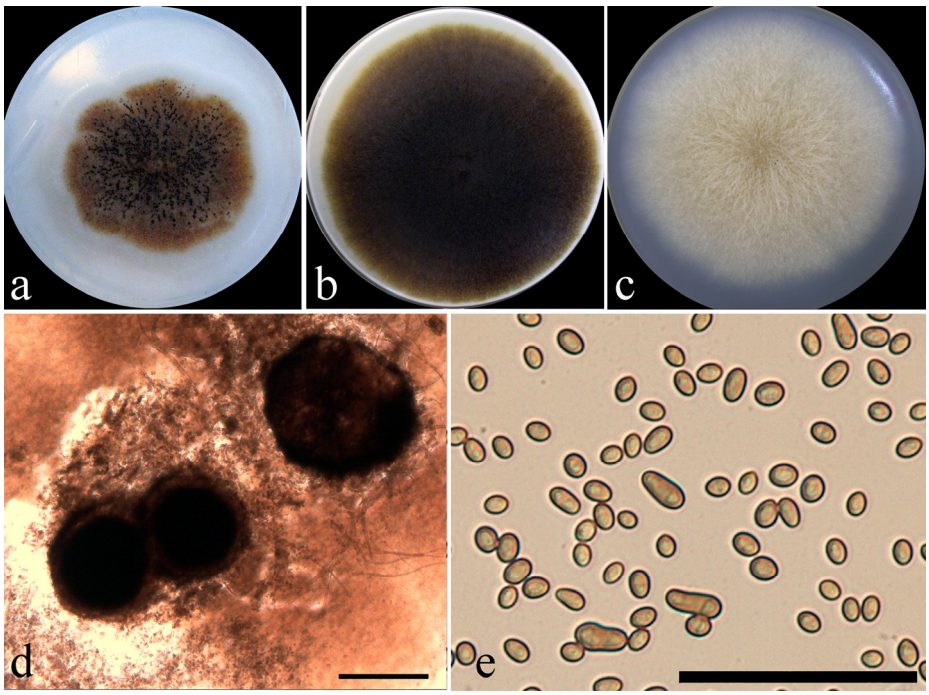

Figure S7. *Nothophoma quercina* (MF-Pm-13a): colonies on PSA (a), OA (b), and Cz (c) after 14 d of growth; pycnidia on PSA (d); conidia on PSA (e). Scale bars: c = 200 µm, d = 50 µm.

Sarocladium strictum (W. Gams) Summerb.

Colonies reached 30 mm diam. after 7 days of growth on Cz, white and whitish pink. Conidiophores are mostly unbranched. Conidia are cylindrical, 3–5 × 1.5–2 µm, in slimy heads. Morphological characteristics correspond to the description of *Acremonium strictum* W. Gams provided in the mycological keys [35,36].

Trispermum myrti (Lind) S. Hughes (Figure S8)

Colonies are growing slowly, reaching 5–10 mm diam. after 7–10 days of growth on Cz, dark gray and gray olive in color. Conidia are solitary, colored, formed on hyphae or inconspicuous conidiophores, composed of an pear-shaped or ellipsoid stem cell and with up to 5 diverging multi-celled arms, up to 35 µm. Morphological characteristics correspond to the description of *Trispermum myrti* provided in the article [34].

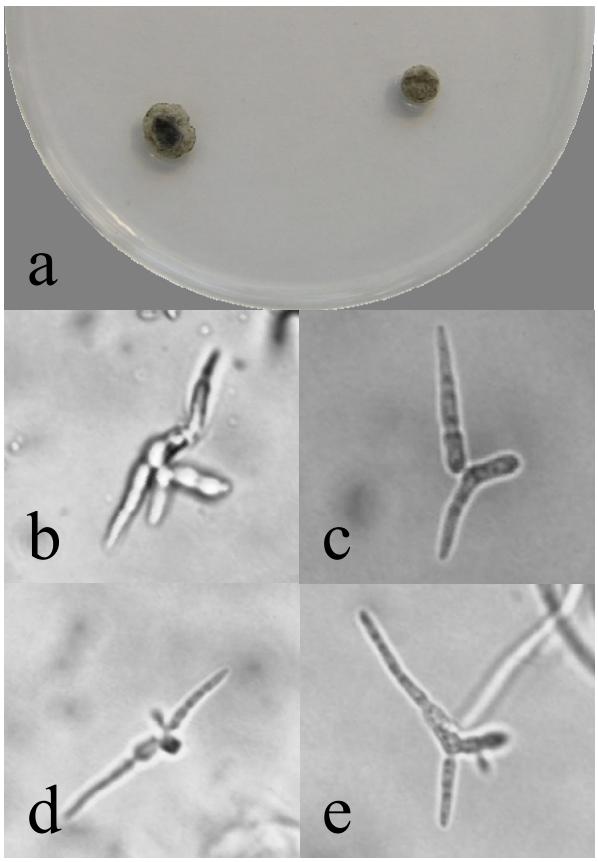

Figure S8. *Tripospermum myrti*: colonies on Cz (a), and conidia in different planes (b–e).

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