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TWO NEW MYCENAS OF SECTION FRAGILIPEDES FROM SOUTHERN NORWAY.

A. ARONSEN

Torødveien 54, N-3135 Torød, Norway

Mycena austera and *Mycena parca*, belonging to section *Fragilipedes*, are proposed as new species. *Mycena austera* is identified mainly by the 4-spored basidia, the absence of clamp connections, the dark pileus, and the nitrous odour. The species is compared with *M. leptocephala* and *M. deceptor*. *Mycena parca* is compared with *M. leptocephala* from which it differs mainly on account of the absence of nitrous odour, and differently shaped cheilocystidia and terminal cells of the cortical layer of the stipe.

Section *Fragilipedes* (Fr.) Quél. is the largest section in *Mycena*, and in spite of the impressive work by Maas Geesteranus (1988) there still seem to occur undiscovered species. *Mycena austera* and *M. parca*, found in the County of Vestfold in southern Norway, do not match any of the species described so far.

Mycena austera Aronsen, *spec. nov.* — Figs. 1–7

Pileus usque ad 20 mm latus, vulgo umbonatus, obscure griseus. Caro odore nitroso. Lamellae 26–30 stipitem attingentes, adscendentes, grisae. Stipes –50 × 3 mm, glaber, griseolus. Basidia 29–35 × 8–9 µm, clavata, 4-sporigera. Sporae 9.3–11(–12.5) × 5.1–6.5 µm, amyloideae. Cheilocystidia 50–103 × 13–24 × 3.5–6.5 µm, fusiformia. Pleurocystidia similia. Trama lamellarum Melzeri reagente vinescens. Hyphae pileipellis 2.7–6.3 µm latae, diverticulatae, subgelatinosae, cellulae terminales varieformes. Hyphae stipitipellis 1.8–2.5 µm latae, leves vel diverticulatae, haud gelatinosae, caulocystidia 2.5–10 µm latae, crasse diverticulata.

Fibulae desunt.

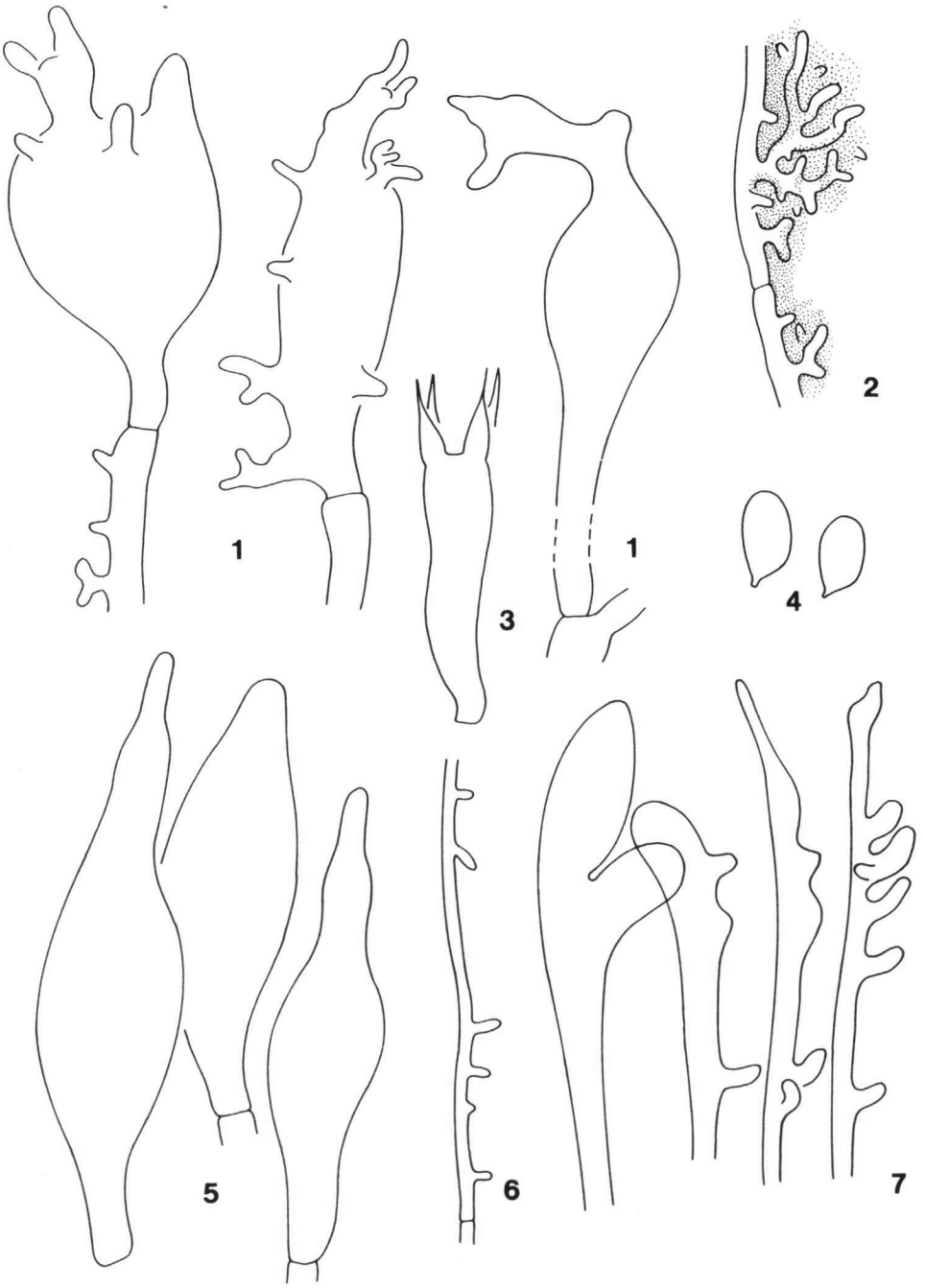
Terricola. Basidiomata gregaria vel caespitosa.

Holotypus: Norway: Vestfold, Nøtterøy, Torød, 5 Nov. 1991. Leg. A. Aronsen A 17/91 (O).

Etymology: Austerus, dark.

Basidiomata gregarious to cespitose. Pileus up to 20 mm across, conical to convex, flattening with age, mostly with a prominent umbo, translucent-striate, sulcate, hygrophanous, fairly dark grey with a darker, greyish brown to almost black centre, the margin paler to whitish. Odour nitrous. Taste not recorded. Lamellae 26–30 reaching the stipe, ascending, narrowly adnate, with or without a short decurrent tooth, 1 mm broad (dry), somewhat intervenose with age, grey to dark grey, the edge convex, paler. Stipe up to 50 × 3 mm, straight to somewhat curved, terete, hollow, glabrous (at least in older specimens), pale grey at the apex, darker greyish downwards, paler than the pileus, the base densely covered with long, coarse, flexuous, whitish fibrils.

Basidia 29–35 × 8–9 µm, clavate, 4-spored, clampless, with plump sterigmata 9–12 µm long. Spores 9.3–11.0(–12.5) × 5.1–6.5 µm, pip-shaped, smooth, amyloid. Cheilo-



Figs. 1–7. *Mycena austera* (holotype). 1. Terminal elements of pileipellis; 2. hypha of pileipellis; 3. basidium; 4. spores; 5. cheilocystidia; 6. hyphae of stipe surface; 7. caulocystidia. Bar = 10 µm.

cystidia 50–103 × 13–24 × 3.5–6.5 µm, occurring mixed with basidia, fusiform, clampless, smooth. Pleurocystidia numerous, similar.

Lamellar trama brownish vinescent in Melzer's reagent. Hyphae of the pileipellis 2.7–6.3 µm wide, clampless, covered with simple to very much branched excrescences 2.5–22.5 × 2 µm which tend to become covered with gelatinous matter; terminal cells 45–70 × 12.5–24 µm, variously shaped, subcylindrical, fusiform, clavate, frequently covered with coarse excrescences 4.5–11 × 2.5 µm. Hyphae of the cortical layer of the stipe 1.8–2.5 µm wide, clampless, smooth to sparsely covered with simple, cylindrical excrescences 1.8–4.5 × 1.8–2.5 µm; terminal cells (caulocystidia) 2.5–10 µm wide, with few to fairly numerous, coarse excrescences.

Growing terrestrial among grass and fallen leaves under *Salix*.

Material examined: Norway: Vestfold, Nøtterøy, Torød, 4 Nov. 1991 (A 16b/91), 5 Nov. 1991 (A 17/91) (holotype) (O).

Following the key to sect. *Fragilipedes* (Maas Geesteranus, 1988), *M. austera* comes close to *M. deceptor* Maas G., but there are several differences. In the former species the pileus is dark grey and centrally almost black, 26–30 lamellae reach the stipe, and the smell is nitrous. In *M. deceptor* the pileus is pale vinaceous brown, dingy brown or greyish brown, 14–22 lamellae reach the stipe, and the smell is indistinctive. In addition *M. deceptor* has a smaller pileus (4–8 mm), whitish lamellae and a narrow stipe (0.5–0.75 mm wide). Microscopically there seems to be little to separate the two species, but in *M. austera* the hyphae of the pileipellis are gelatinizing while they are not in *M. deceptor*. The conspicuous, variously shaped terminal cells of the pileipellis in *M. austera* may also be a decisive difference.

Macroscopically the material was first mistaken for *M. leptocephala* (Pers.: Fr.) Gillet, but it can be told apart from that species on account of the absence of clamp connections, the cheilocystidia occurring mixed with the basidia, the conspicuous terminal cells of the pileipellis, and the differently shaped caulocystidia. (4-spored *M. leptocephala* may also very rarely occur devoid of clamps (Maas Geesteranus,1991: 548).)

The presence or absence of clamps is generally a very reliable character in *Mycena*, but there are a few exceptions (Aronsen, in prep.). Taking into account the remote possibility that the species described here would be found in a form possessing clamps too, there is still no other species known to fit the description.

Mycena parca Aronsen, *spec. nov.* — Figs. 8–12

Basidiomata gregaria. Pileus 7–15 mm latus, parabolicus, primo pruinosus, glabrescens, translucente striatus, sulcatus, griseus. Odor indistinctus. Sapor ignotus. Lamellae 17–22 stipitem attingentes, adscendentes, dente anguste adnatae, griseae, margine albae. Stipes –60 × 1.5 mm, procerus, cylindraceus, cavus, glaber, apice pallide griseus, infra griseobrunneus, basi fibrillis longis, crassis, flexuosis albidisque munitus. Basidia c. 27 × 7 µm, clavata, 4-sporigera, fibulata. Sporae 7.0–9.0 × 4.5–6.0 µm, leves, amyloideae. Cheilocystidia 38–68 × 9–16 × 2.5–5 µm, lageniformia, fibulata, levia. Pleurocystidia simila, haud numerosa. Trama lamellarum iodi ope brunneo-vinescens. Hyphae pileipellis 2.7–4.5 µm latae, fibulatae, surculis 4.5–18 × 1.8–2.2 µm, cylindraceis, curvatis vel flexuosis praeditae. Hyphae stipitis corticales 1.6–3.5 µm latae, fibulatae, leves, cellulae terminales haud numerosae, 45–65 × 5.5–7 µm, clavatae.

Inter aciculas *Juniperi communis*.

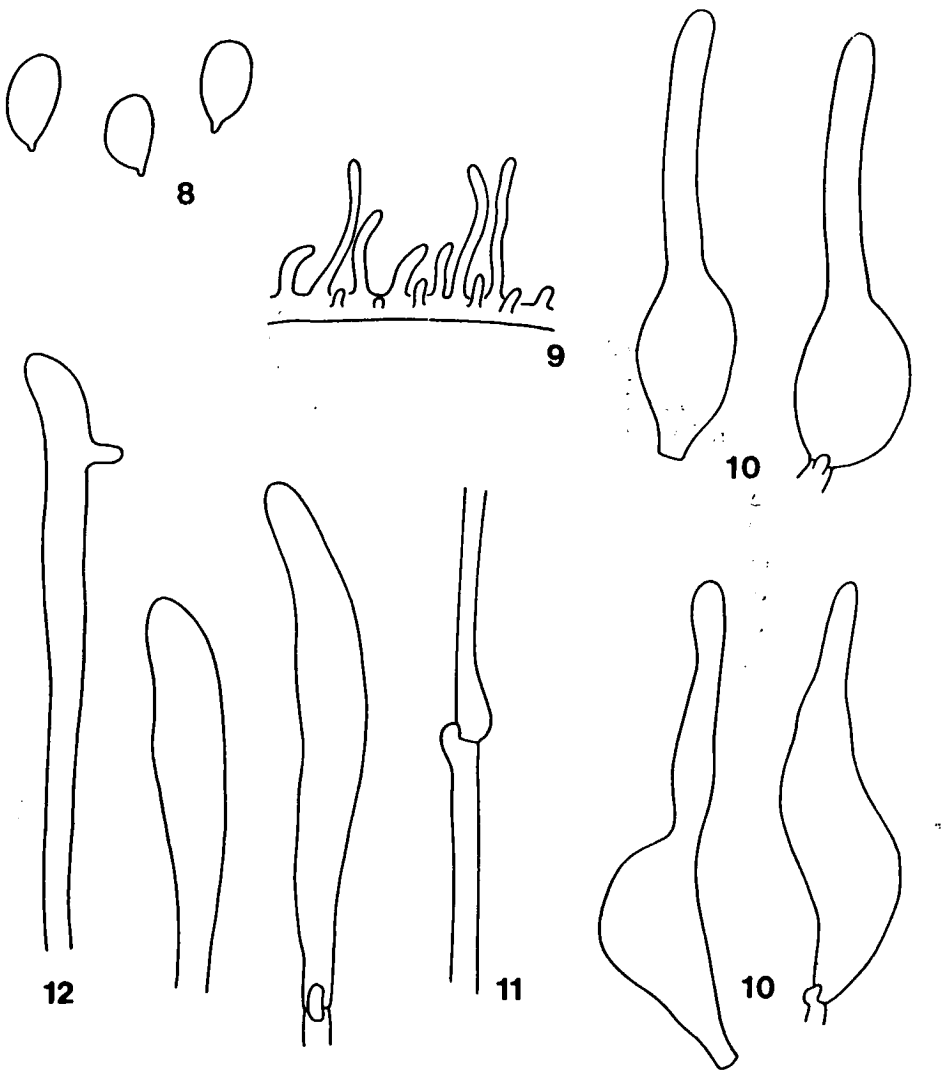
Holotypus: Norway: Vestfold, Tjøme, Moutmarka, 30 Aug. 1992.

Leg. A. Aronsen (A 16/92) (O); isotypus, No. 998.279-774 (L).

Etymology: Parcus, stingy, referring to the avarice of the fungus to form caulocystidia.

Basidiomata gregarious. Pileus 7–15 mm across, parabolical, at first pruinose, glabrescent, translucent-striate, sulcate, grey. Odour not distinct. Taste not recorded. Lamellae 17–22 reaching the stipe, ascending, narrowly adnate with a short tooth, grey with white edge. Stipe up to 60 × 1.5 mm, straight, terete, hollow, glabrous, apically pale grey, grey-brown below, the base covered with long, coarse, flexuous, whitish fibrils.

Basidia c. 27 × 7 µm, clavate, 4-spored, clamped, with sterigmata c. 7 µm long. Spores 7.0–9.0 × 4.5–6.0 µm, pip-shaped, smooth, amyloid. Cheilocystidia 38–68 × 9–16 × 2.5–5 µm, forming a sterile band, lageniform, clamped, smooth. Pleurocystidia similar, not numerous. Lamellar trama brownish vinescent in Melzer's reagent. Hyphae of the



Figs. 8–12. *Mycena parca* (holotype). 8. Spores; 9. hyphae of pileipellis; 10. cheilocystidia; 11. hypha of stipe surface; 12. caulocystidia. Bar = 10 µm

pileipellis 2.7–4.5 µm wide, clamped, but clamps hard to find, not very densely covered with cylindrical, curved to flexuous excrescences 4.5–18 × 1.8–2.2 µm. Hyphae of the cortical layer of the stipe 1.6–3.5 µm wide, clamped, smooth, terminal cells scarce, 45–65 × 5.5–7 µm, clavate.

Collected among needles under *Juniperus communis*.

Holotype: Norway, Vestfold, Tjøme, Moutmarka, 30 Aug. 1992. Leg. A. Aronsen (A 16/92) (O).

The species keys out near *M. fragillima, M. subexcisa, M. subcana,* and *M. leptocephala* (Maas Geesteranus, 1988: 48), of which *M. leptocephala* seems to be the closest. There are, however, several deviating features. *Mycena leptocephala* is usually nitrous-smelling, with the lamellae rather darker grey, and the pileus often more brownish grey. The cheilocystidia in *M. parca* are predominantly lageniform, the hyphae of the pileipellis are generally unbranched, and with no tendency to gelatinize, and the end cells of the cortical layer of the stipe are scarce and fairly narrow. The cheilocystidia in *M. leptocephala* are variously shaped, but rarely lageniform, the hyphae of the pileipellis are often branched, and with a tendency to become somewhat gelatinized, and the end cells of the cortical layer of the stipe are much more numerous and more inflated.

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