

A new species of Rhodocybe from Finland

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Rhodocybe fuscofarinacea Kosonen & Noordel., belonging to the section *Rhodophana*, is described as new from Finland. The differences between this and related taxa are discussed, and a key is presented to the European taxa in section *Rhodophana*.

Key words: *Agaricales*, *Basidiomycotina*, *Entolomataceae*, *Rhodocybe*, *Rhodocybe fuscofarinacea*, sp. nova

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Introduction

The genus *Rhodocybe* belongs to the agaric family Entolomataceae, and can be distinguished from the other two genera in this family (*Entoloma* and *Clitopilus*) by its minutely warted spores. The genus has recently been monographed (Baroni 1981; Baroni & Halling 1992) and is therefore relatively well-known. Noordeloos (1983) published a key to the European taxa and monographed *Rhodocybe* for the Netherlands (Noordeloos 1988). The present paper deals with a *Rhodocybe* species collected by the second author in Finland, which could not be named with the above-mentioned literature. Apparently it represents a species hitherto unknown.

***Rhodocybe fuscofarinacea* Kosonen & Noordel., sp. nova — Fig. 1.**

Basidiomata collybioidea. Pileus ad 20 mm latus, fuscus, hygrophanus, papillatus interdum subdepressus, versus marginem paulisper striatus,

glabrus; lamellae moderate distantes, adnatae, emarginatae, sordide albae demum sordide roseae; stipes fuscus, glaber, politus; odore valde farinaceo; sapore farinaceo-amaro. Sporae in cumulo roseae, 6.0–8.0 × 4.5–5.0 µm, Q = 1.45–1.8, ellipsoideae vel lacrymoideae; basidia 4-sporigera, fibulata; pileipellis cutis hyphis 2–5 µm latis pigmentis parietalibus vel leviter incrustatis; fibulae presentes. Habitat ad terram in horto sub Freesia.

Type: Finland. Etelä-Häme: Kangasala, Ruutana (natl. grid ref. 68278:3413), 13. VIII. 1988 *L. Kosonen* (L, holotype; TUR, H, isotypes).

Basidiocarps single or caespitose. *Pileus* up to 20 mm broad, convex then plano-convex to flattened, sometimes with distinct papilla, otherwise slightly depressed at centre, with inflexed margin, strongly hygrophanous when moist, slightly translucently striate at margin when old, when young very dark blackish brown, then dark to medium brown (within the range of Munsell 10 YR 4/3 to 3/6), slightly paler at margin, glabrous, smooth or slightly uneven, pallescent on drying. *Lamellae* L = 20–30, I = 1–

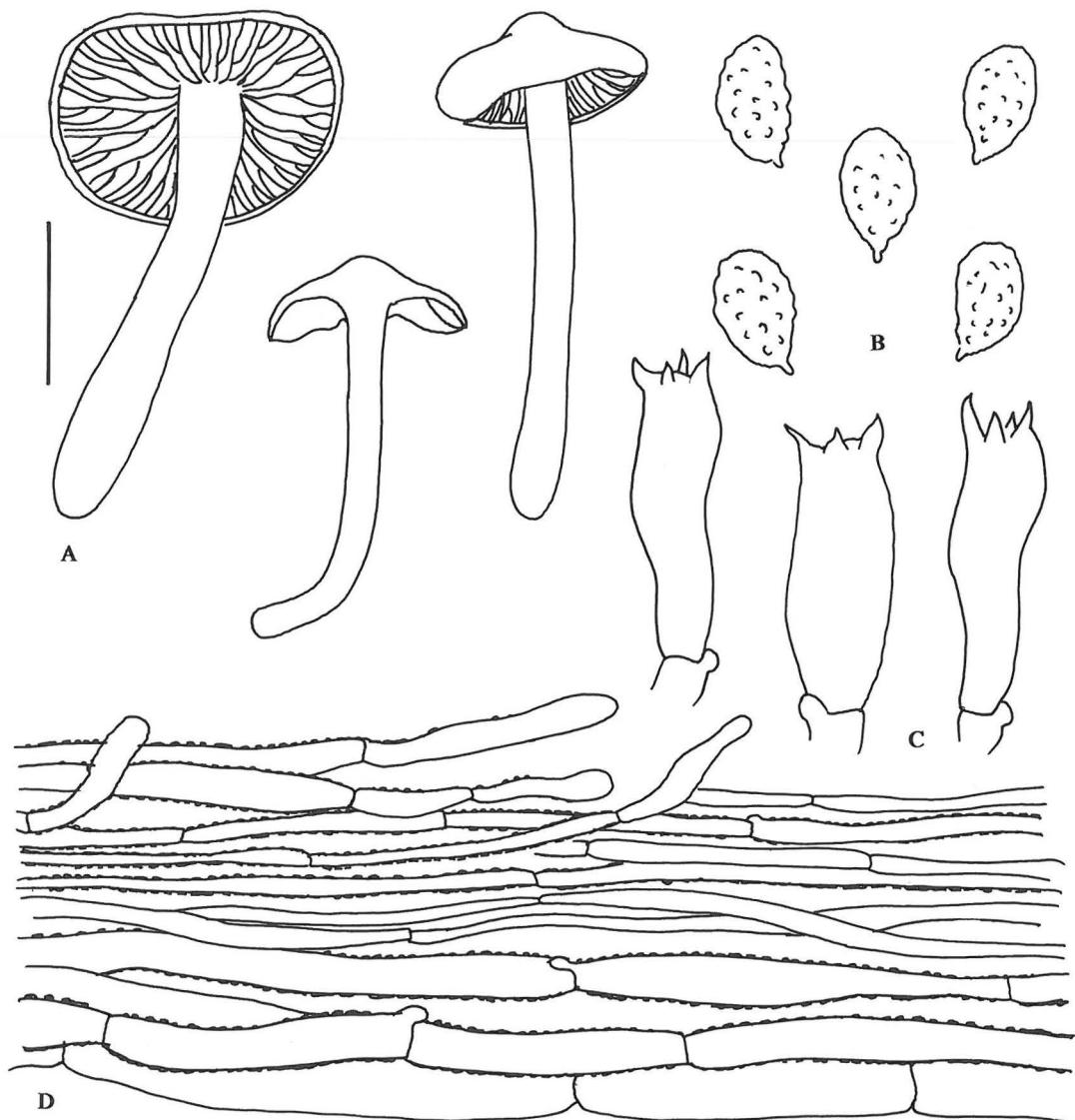


Fig. 1a-d. *Rhodocybe fuscofarinacea* Kosonen & Noordel. — a) basidiocarps, b) spores, c) basidia, d) pileipellis. All figs from holotype. Bar equals 1 cm (a), 10 µm (b), 15 µm (c and d).

3, subdistant, adnate, emarginate, narrowly subventricose, whitish-brownish then sordid pink, with entire, slightly darker and watery grey edge. Stipe 20–40 × 2–5 mm, cylindrical,

straight or curved towards base, concolorous with or slightly paler than pileus, glabrous, smooth, polished. Context in pileus concolorous with surface, in stipe paler than surface. Smell

strongly farinaceous-rancid. *Taste* farinaceous and somewhat bitter. *Spore-print* pink.

Spores $6.0\text{--}8.0 \times 4.5\text{--}5.0 \mu\text{m}$, average spore $7.5 \times 4.5 \mu\text{m}$, $Q = 1.4\text{--}1.8$, average $Q = 1.6$, lacrymoid-narrowly ellipsoid in outline, pustulate-warted in side-view, weakly angular-pustulate in polar view, colourless, thin-walled. *Basidia* $21\text{--}32 \times 6\text{--}9 \mu\text{m}$, 4-spored, clamped. Hymenial cystidia absent. *Pileipellis* a cutis of narrow, cylindrical hyphae, $2\text{--}5 \mu\text{m}$ wide with scattered ascending, subcylindrical to subclavate terminal endings, $20\text{--}45 \times 2\text{--}7 \mu\text{m}$. *Pileitrama* regular, made up of subcylindrical to inflated elements, $(12\text{--})22\text{--}70(-110) \times 4\text{--}15 \mu\text{m}$. *Pigment* parietal in upper layer of pileus, in places encrusting the narrowest hyphae of pileipellis and near the septae of the trama hyphae. *Clamps* present and abundant in hymenium, but scattered in all other tissues.

Habitat: on moist garden soil in flower-bed under *Freesia*.

Rhodocybe fuscofarinacea belongs to section *Rhodophana* on account of the collybioid habit of the basidiocarps and the clamped hyphae (Baroni 1981; Noordeloos 1983). It keys out in the group of *R. nitellina* (Fr.) Singer, and *R. melleopallens* P.D.Orton, but differs from both taxa by the dark brown colour of the basidiocarps, and also by the presence of a small papilla at the centre of the pileus in some specimens. In addition, the spores of *R. fuscofarinacea* are different in size and shape. *Rhodocybe hispanica* Esteve-Rav. & G.Moreno (Esteve-Raventós & Moreno 1987) is closely similar, but differs by the grey tinges in all parts of the basidiocarps and by its broader spores. *Rhodocybe griseospora* (A.Pearson) P.D.Orton differs by having a paler, honey-coloured, translucently striate pileus, and greyish spore-deposit.

Key to the species of section *Rhodophana* in Europe

1. Spores $(4.0\text{--})4.5\text{--}7.0 \times 3.0\text{--}4.0(-4.5) \mu\text{m}$, average $Q = 1.3\text{--}1.4$; pileus and stipe rather pale yellow-brown *R. melleopallens*
- Spores larger; pileus and stipe with darker colour ... 2
2. Pileus and stipe honey-coloured to orange or reddish brown 3
- Pileus and stipe dull coloured brown, grey-brown or grey 4
3. Pileus honey-coloured; spores $6.5\text{--}8.5(-9.0) \times (3.5\text{--})4.0\text{--}5.0(-5.5) \mu\text{m}$, $Q = 1.5\text{--}1.9$; spore deposit greyish *R. griseospora*
- Pileus vivid orange to red or red-brown; spores $7.0\text{--}10.0 \times 5.0\text{--}5.5 \mu\text{m}$, average $Q = 1.4\text{--}1.5$; spore deposit pinkish brown *R. nitellina*
4. Pileus and stipe dark grey or grey-brown; lamellae with distinct grey tinge; spores $7.0\text{--}10.0 \times 4.5\text{--}6.0 \mu\text{m}$ *R. hispanica*
- Pileus and stipe dark brown; lamellae sordid pink when mature; spores $6.0\text{--}8.0 \times 4.5\text{--}5.0 \mu\text{m}$, average $Q = 1.6$ *R. fuscofarinacea*

References

- Baroni, T. 1981: A revision of the genus *Rhodocybe* Maire (Agaricales). — Beih. Nova Hedwigia 67: 1-194.
 Baroni, T. & Halling, R. 1992: New species of *Rhodocybe* from South America with a key to species. — Mycologia 84: 411-421.
 Esteve-Raventós, F. & Moreno, G. 1987: Chorologische und bibliographische Daten über die Arten der Gattung *Rhodocybe* in Spanien. *Rhodocybe hispanica* spec. nov. — Beitr. Kenntn. Pilze Mitteleur. 3: 157-162.
 Noordeloos, M.E. 1983: Notulae ad floram agaricinam neerlandicam I-III. Marasmiellus, Macrocytidia, and *Rhodocybe*. — Persoonia 12: 31-49.
 Noordeloos, M.E. 1988: *Rhodocybe*. In: Bas, C. et al. (eds.), Flora agaricina neerlandica 1: 77-182. — Balkema, Rotterdam & Brookfield.

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