

Short Communication

A new species of *Cortinarius* Sect. *Sericeocybe* from JapanShinnosuke Miyauchi¹⁾ and Hisayasu Kobayashi²⁾¹⁾ Bio-Engineering, Nagaoka University of Technology, 1603-1, Kamitomioka, Nagaoka 940-2188, Japan²⁾ Life Web, Graduate School of Human and Environmental Studies, Kyoto University, Kyoto 606-8501, Japan

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Cortinarius prunicola sp. nov., found in orchards and plantations of *Prunus mume*, is described and illustrated. It is characterized by its dry and violet-white carpophores, unpleasant odor, and its close association with *P. mume* in spring and early summer. The differences between *C. prunicola* and similar species are briefly discussed.

Key Words—*Cortinarius prunicola*; *Cortinarius* Sect. *Sericeocybe*; new species; Rosaceae; taxonomy.

Many species of *Cortinarius* are found in both hardwood and coniferous forests from summer to fall, but species associated with Rosaceae have not been reported (Moser and Horak, 1975; Moser, 1983; Hongo, 1987; Phillips, 1991; Dähncke, 1993; Bidaud et al., 1994).

Recently, a *Cortinarius* was found in orchards and plantations of *Prunus mume* Sieb. & Zucc. in western and central Japan. We examined habitat, and fresh and dried specimens. As a result, it was found that the fungus represents an undescribed species in the section *Sericeocybe*. It is described here as a new species.

Color designations in parentheses in the species description follow Kornerup and Wanscher (1978).

Cortinarius prunicola Miyauchi & His. Kobayashi, sp. nov. Figs. 1, 2

Pileo 40–60 mm lato, hemisphaerico vel campanulato dein convexo, margine stricto dein leviter undulato, fibroso-micaceo, sicco, udo leviter viscido, pallide lilacino in juvenilibus, dein subochraceo; lamellis subconfertis, emarginato-adnatis, pallide griseo-lilacinis; stipite 40–60 mm longo, 5–10 mm crasso, sicco, sursum subattenuato, supra pileo concolori, velo pallide lilacino; carne pallide lilacina, sapore miti, odore foetido; sporis ellipsoideis, 7.0–9.0 × 5.0–6.5 μm, asperatis, basidiis 4-sporigeris, 25–28 × 6–7 μm.

Holotypus: Kurosaki, Mitsu-cho, Hyogo Pref., 28 May 1996, H. Kobayashi, Y. Hirayama et S. Miyauchi leg., in Herbario TNS conservatus (no. TNS-F-174725).

Etymology: *prunicola* means *Prunus*-dweller.

Pileus 40–60 mm in diam, hemispherical or campanulate when young, becoming plano-convex, with a straight or slightly wavy margin, fibrous, somewhat silky or glimmering, not hygrophanous, slightly viscid when wet, pale violet to violet white (18A3–18A2) when young, becoming grayish orange (5B5) or brownish orange (5C5) from the center with age. Lamellae fairly crowded, adnate to slightly sinuate, somewhat ventri-

cose, lilac gray (15B2–16B2) when young, turning grayish orange to brownish orange (5B4–5C4) with age. Stipe 40–60 × 5–10 mm, cylindric, attenuated upwards, fusiform at the base, not viscid, pale lilac (16A2–16A3) at first, brownish orange (5B3–6C4) when old, marked with irregular bands of yellowish fibrils from the veil. Cortina pale lilac, soon evanescent. Context concolorous with the surface when young, becoming pale yellowish orange (4B7) in the stipe when old, firm, no reaction with 5% KOH. Taste not distinctive, smell strong and unpleasant. Spores broadly ellipsoid to ellipsoid, 7.0–9.0 × 5.0–6.5 μm, quotient 1.3–1.5, non-amyloid, finely warted (Fig. 1d). Basidia 25–28 × 6–7 μm, 4-spored (Fig. 1f). Cheilo-, pleuro-, pileo- and caurocystidia absent. Cuticles of the cap surface moderately thin, hyaline, hyphae with clamps (Fig. 1e).

Habitat and distribution: Gregarious to subcespitoso on the ground in *P. mume* orchards or plantations, in western and central Japan from spring to early summer.

Holotype: Kurosaki, Mitsu-cho, Hyogo Pref. in *P. mume* orchard, 28 May 1996, collected by H. Kobayashi, Y. Hirayama and S. Miyauchi (No. TNS-F-174725 (*Cortinarius*), preserved in National Science Museum, Tsukuba herbarium); Isotype in Miyauchi private herbarium as No. SM9605282H. Other specimens examined: Kitano-tenmangu Shrine, Kyoto-shi, Kyoto Pref. in *P. mume* plantation, 4 June 1993, collected by H. Kobayashi; Arai, Shintou-mura, Kitagunma-gun, Gunma Pref. in *P. mume* orchard, 1 June 1993, collected by S. Kunitomo; Nagaokakyo-shi, Kyoto Pref. in *P. mume* orchard, 8 May 1994, collected by H. Kobayashi; Minami-ikuta, Tamaku, Kawasaki-shi, Kanagawa Pref. in *P. mume* orchard, 19 May 1994, collected by E. Kikuchi; Ohmiya-cho, Wakaba-ku, Chiba-shi, Chiba Pref. in *P. mume* plantation, 19 May 1995, collected by T. Fukiharuru; Ujitawara-cho, Kyoto-shi, Kyoto Pref. in *P. mume* plantation, 13 May 1995, collected by H. Kobayashi.

This species is considered to belong to the section

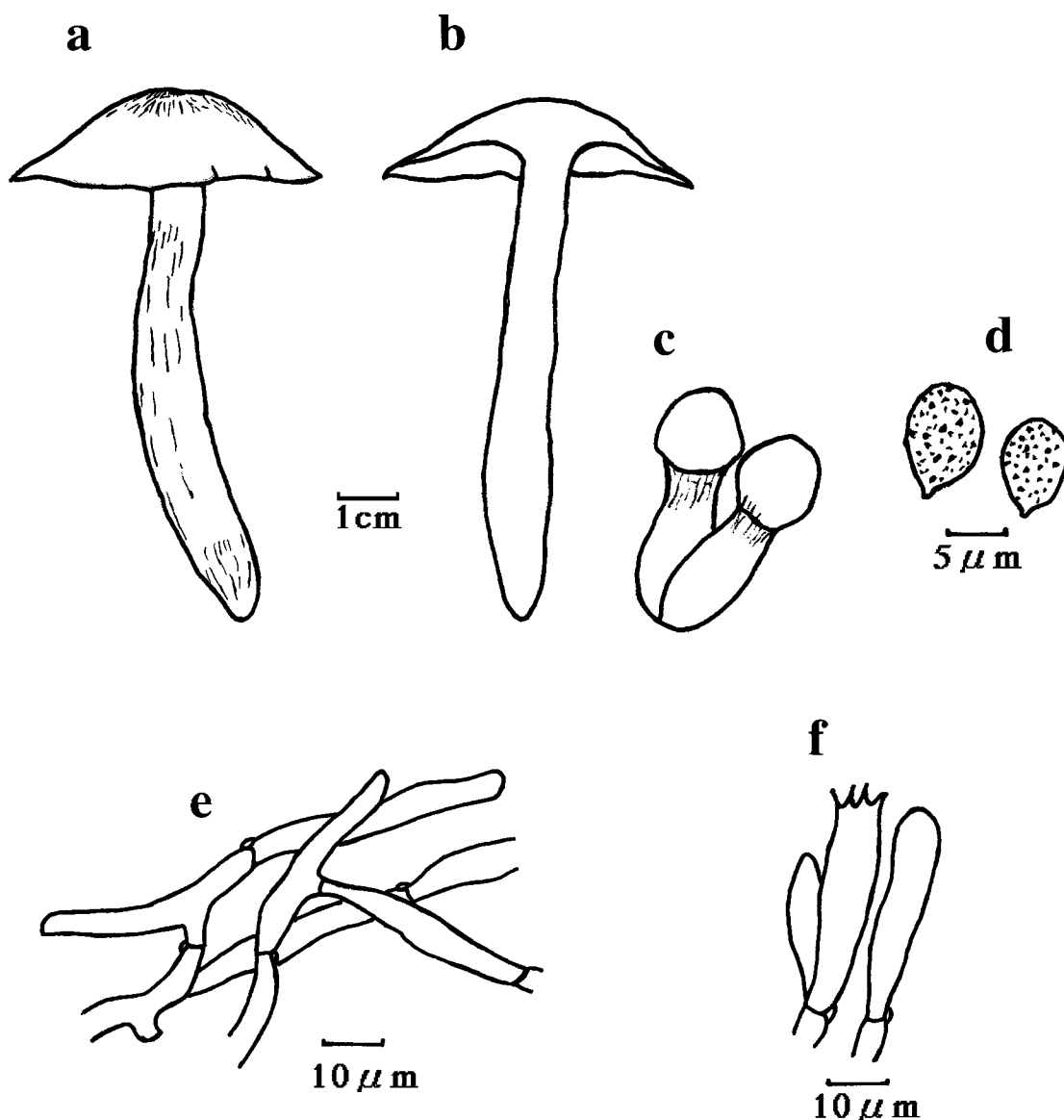


Fig. 1. *Cortinarius prunicola*.

a. Mature basidiocarp; b. Cross section of a basidiocarp; c. Immature basidiocarps; d. Spores; e. Pileus surface hyphae; f. Basidia.

Sericeocybe in the subgenus *Sericeocybe* P. D. Orton. (Kühner and Romagnesi, 1953; Singer, 1986), since the carpophore is pale lilac when young, the pileus is slightly slimy when wet and not hygrophanous, the stipe is not viscid, and the odor is strong.

Cortinarius prunicola resembles *Cortinarius camphoratus* (Fr.) Fr. (Marklund and Melot, 1994; Bessette et al., 1997) and *Cortinarius subalboviolaceus* Hongo (Hongo, 1963). But it is easily distinguished from the former by its smaller, shorter spores and its habitat, and from the latter by the ochraceous pileus when mature, strong odor, and habitat.

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Fig. 2. *Cortinarius prunicola* (left: two mature basidiocarps; right: three immature ones).

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