

Materials for the fungus flora of Japan (44)*

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Summary

One psilopezoid discomycete species, *Pachyella violaceonigra* is described and illustrated. This is the first record of the species from Japan.

98. *Pachyella violaceonigra* (Rehm) Pfister, Can. J. Bot. 51(11): 2021, 1973. Figs. 1–4

Apothecium flat, somewhat convoluted, broadly attached to rotten wood or to the neighboring soil; margin not distinct, 0.5–2 cm in diam.; black with violaceous hue; relatively fragile except for the gelatinous undermost layer in which hyphoid hairs are embedded; becoming shallow cupulate, thin, and black when dried.

Hymenium ca. 500 μm thick with paraphyses slightly extending beyond the asci; subhymenium rather indistinct.

Ectal excipulum two-layered; outer layer composed of thin-walled septate elongate cells of ca. 100–200 $\mu\text{m} \times 6\text{--}8 \mu\text{m}$, arranged in parallel, embedded in gelatinous matrix (hyphoid hairs in Pfister, 1973); inner layer textura globulosa to textura angularis, three to five cells thick, cells about 40–60 $\mu\text{m} \times 20\text{--}35 \mu\text{m}$.

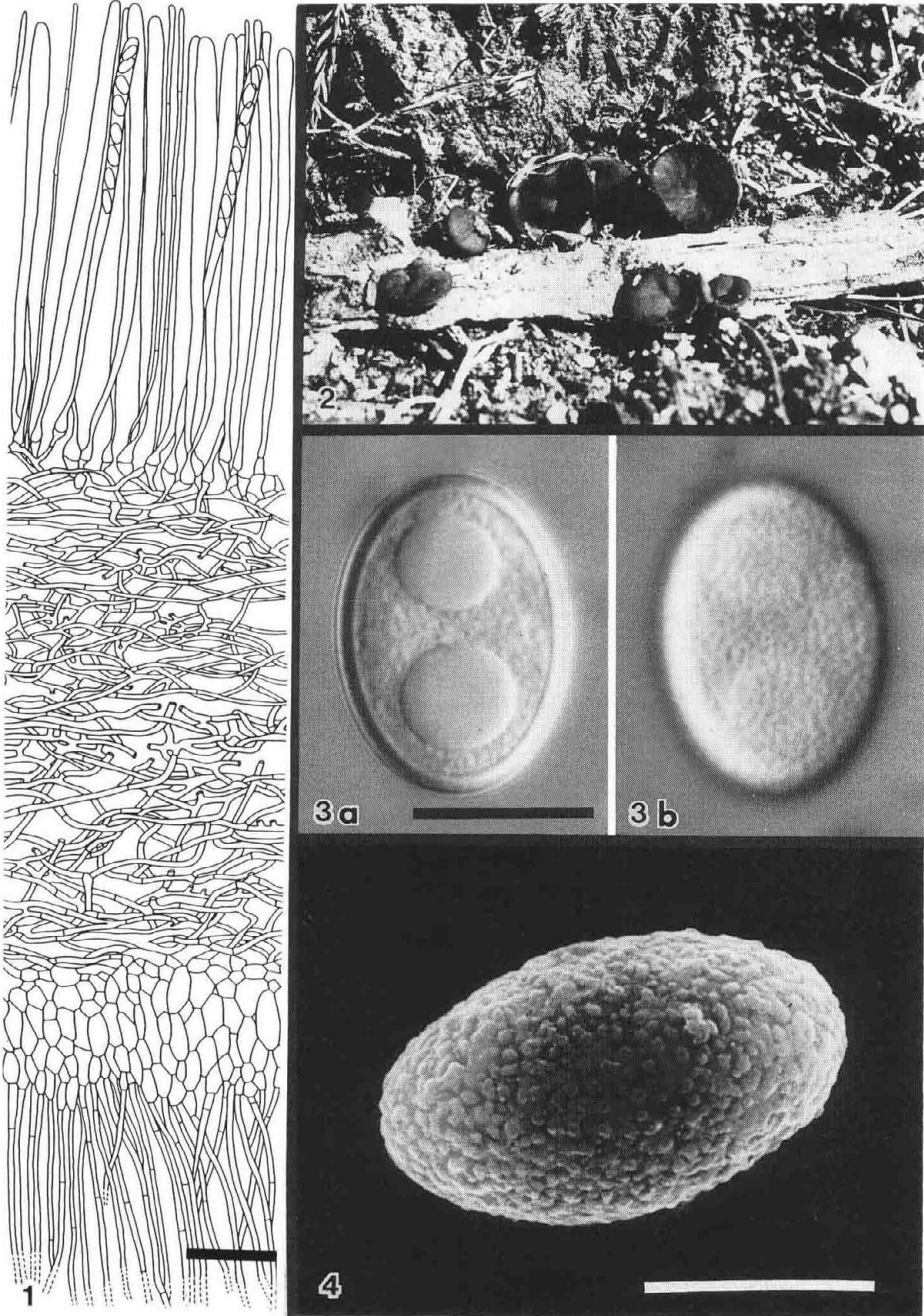
Medullary excipulum textura intricata, with sparse gelatinous matrix, closely woven toward the subhymenium, composed of cells of 5–8 μm in diam.

Asci 8-spored, cylindrical, apex rounded, diffusely stained with Melzer's reagent, 420–470 $\mu\text{m} \times 18\text{--}25 \mu\text{m}$, tapering toward the base and stipitate.

Ascospores relatively thick-walled, slightly verrucose by light microscopy (Fig. 3), ellipsoidal, 16–28 $\mu\text{m} \times 10\text{--}14 \mu\text{m}$, mostly two guttulate, less frequently one guttulate.

Paraphyses filiform, not branched, septate, 2–4 μm in diam., enlarged at the tip up to 6 μm , apical cells containing brownish granules.

* (43) Katumoto, K., this Transactions 29: 359–362, 1988.



Habitat: On wet and very rotten wood half burried in loamy soil (Fig. 2), Mt. Tsukuba, Tsukuba-gun, Ibaraki Pref., 28 March, 1990, collected by K. Furuya, Y. Otani, and T. Hosoya. Dried specimens deposited in the Herbarium of the National Science Museum (TNS-F-52056) and Sankyo Tsukuba Research Laboratories (TRL-40).

Japanese name: "Keshi-murasaki-chawantake."

Notes: The ascospores did not germinate on 2% malt agar nor in water drops.

Generally the present fungus is in good agreement with the former descriptions of *P. violaceonigra* (Rehm) Pfister (Pfister, 1973; Breitenbach and Kränzlin, 1981). This is the first record of the species from Japan. It might be noted that the surface view by SEM (Fig. 4) shows that the warts on the surface of the spore are a little more glossy than those previously reported (Pfister, 1975).

Literature cited

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摘 要

日本菌類誌資料(44)

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日本新産の psilopezoid discomycete である *Pachyella violaceonigra* (Rehm) Pfister を記載, 図示した. 和名をケシムラサキチャワンタケとした. 本材料の形態は, おおむね Pfister の記載に合致したが, 子嚢胞子の表面は, より粗であった.

Figs. 1–4. *Pachyella violaceonigra*.

Fig. 1. Line drawing of a cross section of an apothecium. (scale bar=100 μ m).

Fig. 2. Habit photograph of the ascocarps.

Fig. 3. Two micrographs of the same ascospore photographed at different focuses. Note the relatively thick wall of the ascospore (3a), and the fine warts on the surface (3b). (scale bar=10 μ m).

Fig. 4. Surface view of the ascospores under SEM. Note the fine warts which do anastomose. (scale bar=10 μ m).