

Discomycetes on Decayed Tree Fern.
(1) *Lachnum pteridophyllum* (Rodway)
Spooner New to Japan¹

By

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Abstract *Lachnum pteridophyllum* (Rodway) Spooner was newly found from Japan. *Lachnum pteridophyllum* inhabits on the rachis of decayed tree ferns, *Cyathea* spp.

While collecting the Discomycetous fungi in Yaku-shima Island in October 1995 and in Iriomote-jima Island in November 1995, NAGAO collected the apothecia of Hyaloscyphaceae on the rachis of decayed tree ferns. In November 1988, DOI also collected the apothecia of Hyaloscyphaceae on the rachis of decayed tree ferns in Amami-oshima Island. We studied these specimens and identified the fungus as *Lachnum pteridophyllum*. This species is new to Japan. All collections are deposited in the herbarium of the National Science Museum, Tokyo (TNS).

Lachnum pteridophyllum (Rodway) Spooner, Bibliotheca Mycologica 116: 470 (1987). [Figs. 1, 2]

Dasyscypha pteridophylla Rodway, Papers and Proceedings of the Royal Society of Tasmania 1920: 158 (1921).

Dasyscyphus varians Rehm var. *pteridophyllus* (Rodway) Haines, Mycotaxon 11: 209 (1980).

Apothecia very minute, 0.1–0.3 mm diam., gregarious, stipitate. Disc concave, pale ochraceous, shaded by the inrolled margin when dried. Receptacle cupulate, heavily covered with hairs containing pale yellow pigment and bearing

¹ This study was carried out in 1995 when Nagao was a Research Fellow of the Department of Botany, National Science Museum, Tokyo.

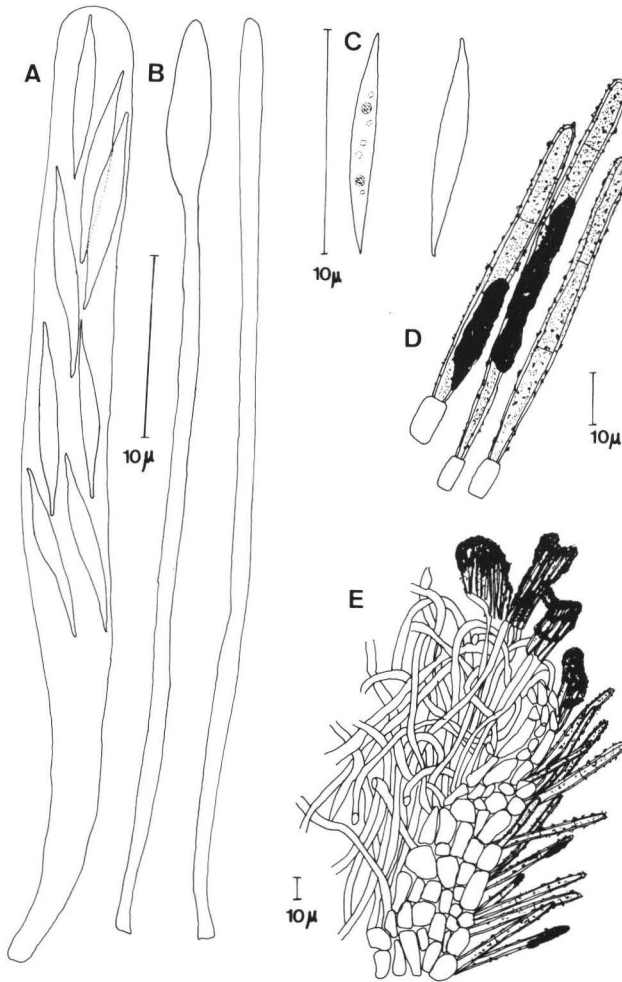


Fig. 1. *Lachnum pteridophyllum* (Rodway) Spooner (TNS-F-180383). A. Ascus and ascospores. B. Paraphyses. C. Ascospores. D. Hairs. E. Vertical section at margin.

large light yellowish brown or yellowish brown particles. Stipe central, cylindric, usually shorter than the disc diam., covered with similar hairs. Hairs 25–67.5 μm long and 3.8 μm diam. around the receptacle, cylindric, obtuse, pale yellow, septate, finely granulate entirely and bearing large, light yellowish brown or yellowish brown particles which sometimes gathered several hairs adhering one another. This large brown yellowish particles dissolved in Melzer's reagent. Asci 42.5–57.5 × 2.5–3.8 μm, 8-spored, cylindric-clavate, gradually narrowed to a short stipe, apex narrowed, obtusely conical, the pore stained blue in Melzer's reagent. Ascospores 10–15 × ca. 1 μm, hyaline, narrowly fusoid, acute at both ends, often

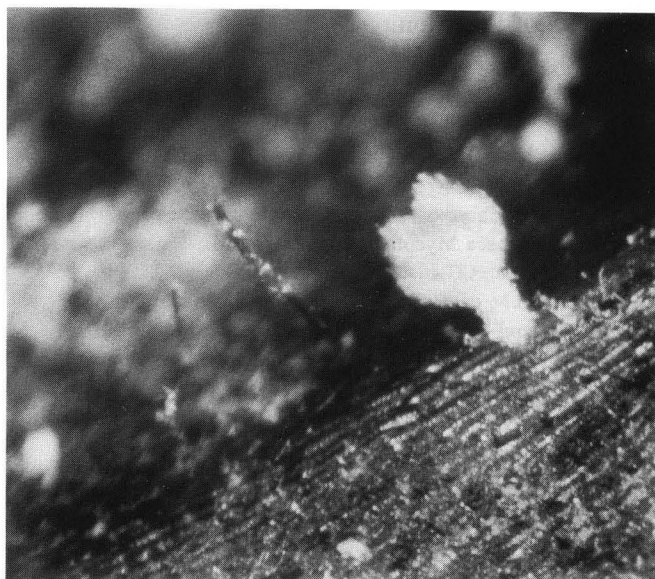


Fig. 2. Apothecium of *Lachnum pteridophyllum* (Rodway) Spooner (TNS-F-180383).

pointed at one end, straight or slightly curved, sometimes containing a row of guttules, non-septate. Paraphyses narrowly lanceolate or subcylindric, hyaline, exceeding the asci level. Subhymenium not clearly differentiated. Medullary excipulum composed of interwoven hyphae ca. $2\ \mu\text{m}$ diam. in the receptacle. Ectal excipulum composed of angular to round prismatic cells mostly $7.5 \times 5\ \mu\text{m}$.

Hab. On the rachis of decayed tree fern, *Cyathea spinulosa*, in Isso, Yaku-shima Island, Kagoshima Pref., Oct. 27, 1995, *H. Nagao* (TNS-F-180391); on the rachis of decayed tree fern, *Cyathea* sp., in Sumiyoshi, Amami-oshima Island, Kagoshima Pref., Nov. 21, 1988, *Y. Doi* (TNS-F-180383), and on the rachis of decayed tree fern, *Cyathea lepifera*, in Komi, Iriomote-jima Island, Okinawa Pref., Nov. 18, 1995, *H. Nagao* (TNS-F-180392).

Distr. Australia, Colombia, Jamaica, Mexico, Panama, Peru, Puerto Rico, Tasmania, New Zealand, Papua New Guinea. New to Japan.

In our collections of pteridiocolous species collected on *Cyathea* spp. *Lachnum pteridophyllum* is characterized by the inrolled margin when dried and large yellowish brown particles. HAINES (1980) considered *Dasyscyphus pteridophylla* Rodway as the variety of *Dasyscyphus varians*, and noted that var. *pteridophyllus* differed from var. *varians* by the spore shape. SPOONER (1987) transferred *Dasyscyphus pteridophylla* to the genus *Lachnum*. Our specimens show some disagreement with the description of SPOONER (1987). The size of ascospores is smaller than $11\text{--}17\ \mu\text{m}$, and ectal excipulum is composed of angular to round prismatic cells rather than those as he drew. However, these differences could be

regarded in the range of variation.

References

- Haines, J. H., 1980. Studies in the Hyaloscyphaceae I: some species of *Dasyscyphus* on tropical ferns. *Mycotaxon* 11: 189–216.
- Spooner, B. M., 1987. Helotiales of Australasia: Geoglossaceae, Orbiliaceae, Sclerotiniaceae, Hyaloscyphaceae. *Bibliotheca Mycologica* 116: 470–474.