TREMELLA COPPINSII, A NEW LICHENICOLOUS BASIDIOMYCETE FROM SARAWAK

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During an expedition in Sarawak, Dr Brian Coppins collected several samples of *Platismatia regenerans* W. L. Culb. & C. F. Culb. with an unknown lichenicolous *Tremella* species.

Tremella coppinsii Diederich & Marson, sp. nov. (Fig. 1).

Basidiomata lichenicola, dispersa, in thallis Platismatine regenerantis crescentia, pulviniformia, aurantiaca, tremellodica, in sicco cornea et atra, 0-30-7 mm diam; superficies rugosa. Hymenium hyalinum, in potassio lutescens, ex textura gelatinosa constans. Hyphae fibulatae. Hypobasidis abugbloosa, ellipsoidea vel ovoidea, 8-31-x 4-8µm, 2-4-cellularia. Basidiosporae subglobosae, guttulatae, 6-5-7-5 x 4-6µm. Cellulae conidiogenae 7-10 x 2-4µm. Conidia subglobosa vel ovalia, 2-5-x-11-5-3µm.

Holotype: Sarawak, Gunong Mulu National Park, 4th Division, Baram District, Gunong Mulu, summit, alt. 2325m, on Platismatia regenerans, 27 iv 1978. Coppins 5011 (E). Isotype: herb. Diederich.

Basidiocarps parasymbiotic, scattered on the thallus of Platismatian regenerans. pulvinate, reddish orange, gelatinous, drying borny and becoming black, 0·3·0·7mm diam; surface rugose. Hymenium hyaline, becoming yellow with KOH, consisting of textura gelatinosa. Internal hyphae with clamp connections, thick-walled, 2·5-3·3·µm diam or thin-walled, 1µm diam. Hypobasidia subglobose, ellipsoid or ovate, 8-13×4-8µm, becoming 2-4-celled by longitudinal septa, the cells often unequal in size. Epibasidia 1-3µm thick, shrunken in herbarium material. Basidiospores subglobose, with oil drops, sometimes germinating by repetition, (5·5-)6·5-7·5(-9)×4-6µm. Conidiogenous cells 7-10×2-4µm. Conidiogenous cells 7-10×2-4µm.

Tremella coppinsii is easily separated from the only hitherto known lichenicolous Tremella species, T. lichenicola Diederich, by the colour of the basidiocarps, the much smaller 4-celled basidia, the smaller basidiospores, the hyphae with clamp connections and the host (Diederich, 1986:2-5). The only fungicolous Tremella species with small orange basidiocarps, 4-celled basidia and clamp connections is T. versicolor Berk. & Br. This species has, however, larger aggregated basidiocarps (2-3mm diam.), spherical basidia and different hosts (Aleurodiscus lividocoeruleus (Karst.) Lemke and Peniophora nuda (Fr.) Bres.) (Jülich, 1984:426).

The new Tremella seems to be frequent in the area of the host (i.e. the high mountains of Sarawak, Borneo) whose thallus is not damaged.

Tremella coppinsit is named in honour of Dr Brian Coppins who discovered this fungus during the Royal Geographical Society Mulu Expedition 1977–78, and who was also the first to mention the presence of a Tremella species (T. lichenicola) on Mycoblastus sterilis Coppins & James (Coppins & James (Tempolin & James (Temp

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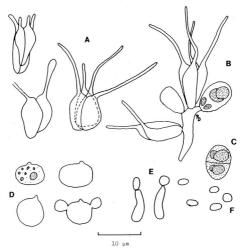


Fig. 1. Tremella coppinsii (holotype): A, basidia; B, two young and two mature basidia; C, young basidium; D, basidiospores, one germinating by repetition; E, conidiogenous cells with conidia; F, conidia.

Other specimens examined:

SARAWAK. Gunong Mulu National Park, 4th Division, Baram District, Gunong Mulu, by main path on west ridge below summit, alt. 2000m, 1978, Coppins 5009 (E); ibid., first knoll along ridge to SE of summit, 1978, Coppins 5015 (E).

REFERENCES

COPPINS, B. J. & JAMES, P. W. (1979). New or interesting British lichens IV. Lichenologist 11:139-179.

DIEDERICH, P. (1986). Lichenicolous fungi from the Grand Duchy of Luxembourg and surrounding areas. Lejeunia N. S. 119:1–26.

JÜLICH, W. (1984). Die Nichtblätterpilze, Gallertpilze und Bauchpilze. In Kleine Kryptogamenflora, 2b(1):9+626pp. Stuttgart, G. Fischer.