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About the Institute
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

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A NEW TREMELLA FROM MEXICO

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Tremella aurantiolutea Lowy, sp. nov. Figs. 1-2

Fructificatio in humido duro-elastica gelatinosa, circa 4 cm lata, 1.5 cm alta; lobuli solidi, homogenei, imbricati, usque ad 1 mm crassi; marginibus inspissatis, circa 1.5 mm crassis; in superficie superiore laevis, inferiore rugulosa; in sicco aliquantulum contractio, duro coriacea; aurantio-lutea per omnes partes, sed in zona angusta (circa 2 mm lata) pigmentum margine permultum intentus; hymenio amphigeneo, circa 45 µm lata cum basidia conferta; hyphae enodosae; probasidia globosa vel subglobosa, 9-11 µm diam; metabasidia ovoidea vel subpyriforme, cruciatim septata, 12-18 (-20) X 9-11.5 µm; sterigmata matura perangusta, apex amplificatus ad 5 µm diam, cum spiculis brevibus; basidiosporae ovoidae, (7.5-) 8.0-9.0 (-10) µm X 5-6 µm, per repetitionem germinantes vel promycelium promittentes.

Holotype: Mexico. El Mirador, Municipio de Totultla, Est. Veracruz. On dead wood in oak forest, 23-III-1972. Alt. 1000 m. Leg. F. Ventura No. 5429 (ENCB); Isotype (LSUM).

Fructification tough rubbery gelatinous when wet, ± 4 cm broad X 1.5 cm thick, with solid, homogeneous, imbricate lobes ± 1 mm thick, with margins thickened to ± 1.5 mm; superior surface smooth, inferior surface rugulose; drying tough coriaceous, somewhat diminished in size; orange-yellow pigment prominent throughout, with a 2 mm marginal zone bearing deeper orange pigmentation, becoming more intense when soaked, the rest of the fruiting body fading to a lighter hue; hymenium amphigenous, ± 45 µm wide, densely crowded with basidia; hyphae without clamp connections; probasidia spherical to subspherical, 9-11 µm diam; metabasidia becoming ovoid to subpyriform, 12-18 (-20) X 9-11.5 µm,

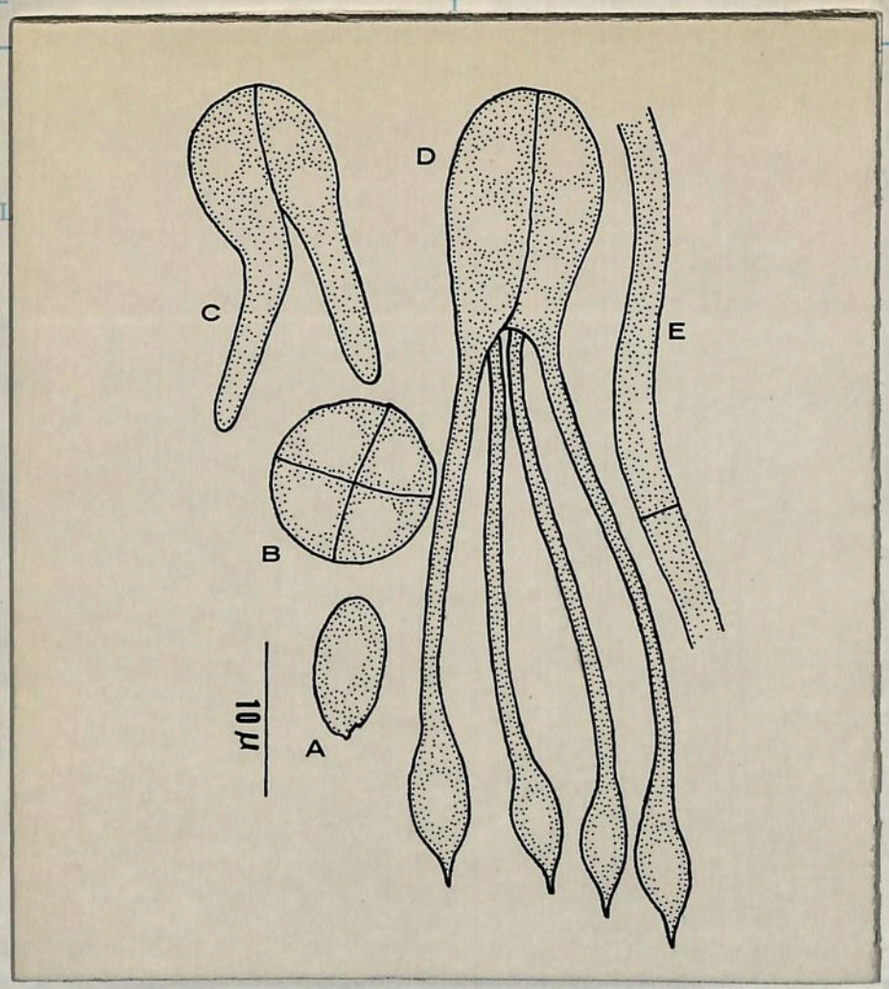

Fig. 1. *Tremella aurantiolutea* Lowy. A, basidiospore; B, apical view of cruciate septate basidium; C, 2-sterigmate developing basidium; D, mature metabasidium with 4 apically enlarged sterigmata, each terminating in a spiculum; E, septate hypha.

Cruciate septate; mature sterigmata narrow cylindrical ± 2 mm diam, apically expanded to form a bulbous to elongate extremity up to 5 µm diam and producing a short spicule; basidiospores ovoid, (7.5-_ 8.0-9.0 (-10) X 5-6 µm germinating by germ tube or by repetition.

Of the 16 species of *Tremella* reported from the neotropics (Lowy, 1971), four are characterized by having reddish to orange or yellow pigments variously distributed in the basidiocarp. These are *T. aurantia* Schw. ex Fries,

Fig. 2. Superior surface of *Tremella aurantiolutea* Lowy. Apx. X 2.

T. brasiliensis (Möller) Lloyd, *T. lutescens* Fries, and *T. rubromaculata* Lowy. *T. subrubiginosa* Lowy (1976) was recently described as sharing this macroscopic characteristic, and a sixth species is now added to the list. These brightly pigmented species may easily be separated into two groups, those having solid lobes and those with hollow lobes. *T. aurantia* and *T. subrubiginosa* are solid lobed, as is the new species here described, but in gross morphology, it is the prominently lobed *T. aurantia* that resembles the new species much more closely. The similarity, however, is superficial, since a section through a lobe of *T. aurantia* reveals that it is heterogeneous in composition, consisting of a conspicuous whitish, fleshy fibrous core which can be clearly differentiated upon inspection from the pigmented, amphigenous hymenial layers. By contrast, the lobes of the new species are homogeneous in section, having a tough gelatinous composition throughout. The clamped hyphae and subspherical basidiospores of *T. aurantia* further separate it from the new species, which has clampless hyphae and ovoid basidiospores.

REFERENCES CITED

Lowy, B. 1971. Tremellales. Monograph No. 6. *Flora Neotropica*. Hafner Publ. Co., Inc., New York. 153 p.

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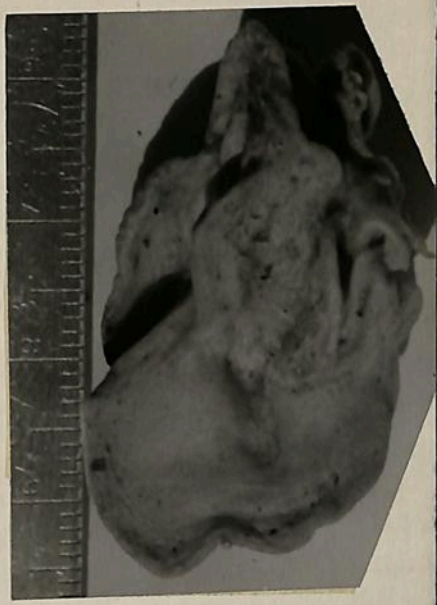
Phototype

Tremella aurantiolutea sp. nov.

Mycotaxon 1978.



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