

A NEW SPECIES OF *PHYLLOLLOGLOEA*By *B. Lowy* \*

Since the publication of Lowy's (1965) paper which summarized and described the species of tremellaceous fungi occurring in Mexico, numerous additional collections have been made from that country and these were recorded in the author's monograph on Neotropical Tremellales (1971) and in the paper of Mendiola and Guzmán (1973). Of two recent collections, both made by Dr. Gastón Guzmán (in connection with his research supported by CONACYT), one proved to be a new species of *Tremella* and was published in MYCOTAXON (1977), and the other, a new species of *Phyllogloea*, is the subject of this paper.

*Phyllogloea crassa* Lowy, sp. nov.

Figs. 1, 2

*Fructificatio in humido elasticо-gelatinosa, lobata, badio-brunnea; lobuli solida ca 5 cm latā, 2.5 cm alta, 1 mm crassa, cum medulla albida, sterile et pseudoparenchymate; in sicco cornea, atrofusca; hymenio amphigeneo, crasse convoluta; hyphae enodosae; probasidia aseptata, late cylindracea vel subclavata; metabasidia in zona paliforme ca 45 μm lata, subclavata, tarde 2(-3) transverse sepatata (22-) 26-34 (-38) × 3.4(-5) μm; sterigmata peranguste cylindraceae, ad 1.5-2 μm diam; basidiospore fusiforme-ellipticae, hyalinae, aseptate, 7.9 (-10) × 3.4 μm; germinatio invisa. In ligno emortuo crescit.*

Studied material: Mexico. 3 km south of Montepío, environs of Los Tuxtlas, State of Veracruz. On unidentified wood in tropical rain forest. Leg. G. Guzmán 7241, 22-VI-1969. Holotype (LSU); Isotype (ENCB).

Fructification tough rubbery gelatinous when wet, chestnut brown, with thick, convolute, solid lobes about 5 cm broad, 2.5 cm in height, 1 mm thick; lobes composed of a sterile, whitish, fleshy-fibrous pseudoparenchymatous medulla; drying horny, dark brown; firmly attached to a woody substrate on a broad base; hymenium amphigenous, coarsely convolute; hyphae without clamp connections; probasidia broadly cylindrical to subclavate, aseptate; metabasidia in a palisade layer about 45 μm wide, subclavate; becoming tardily 2 (-3) septate, (22-) 26-34 (-38) × 3.4(5) μm, transversely septate; sterigmata

\* Botany Department, Baton Rouge, Louisiana 70808, U.S.A.

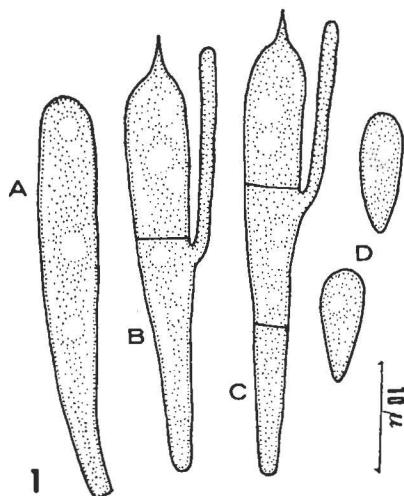


FIG. 1. *Phyllogloea crassa* Lowy. A: Probasidium. B: 2-celled metabasidium wth 1 sterigma. C: 3-celled metabasidium with 1 sterigma. D: 2 basidiospores.

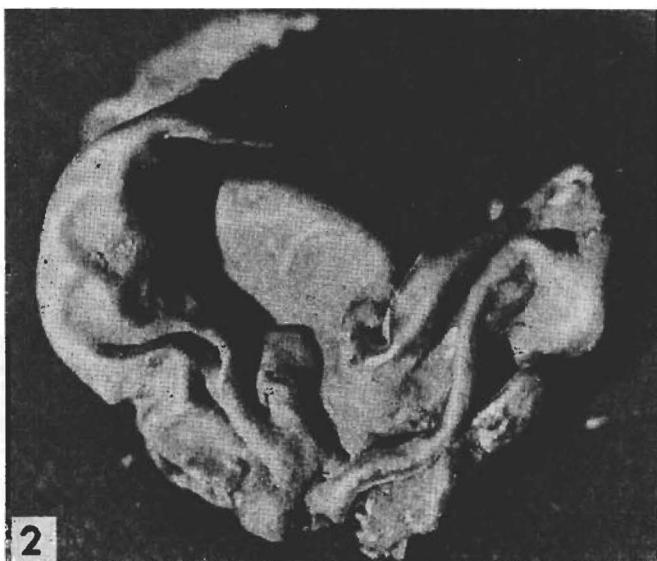


FIG. 2. Fruiting body of *Phyllogloea crassa* Lowy, aprox. X 2 (expanded).

narrowly cylindrical, up to  $15 \times 1.5\text{-}2$  (-2.5)  $\mu\text{m}$ ; basidiospores fusiform-elliptical, hyaline, aseptate,  $7\text{-}9$  (-10)  $\times 3\text{-}4$   $\mu\text{m}$ ; germination not observed.

This is the third species of the genus to have been found, the other two occurring in Bolivia (Lowy, 1959) and Brasil (Lowy, 1971). The relatively thick lobes of the new species superficially resemble (except for color) those of a small *Tremella aurantia* Schw. and the internal, whitish medullary zone of the lobes is also similar. The following key summarizes the principal differences among the three species now known.

- |  |                        |
|--|------------------------|
| 1-Fructification brownish when fresh, thin lobed (0.5 mm or less), drying black; basidiospores subglobose .....  | <i>P. tremelloidea</i> |
| 1-Fructification brownish or carrot colored when fresh; basidiospores not subglobose .....   | 2                      |
| 2-Fructification carrot red (Maerz & Paul) when fresh, thin lobed, drying yellowish-orange; basidiospores ovoid, $9.5\text{-}12 \times 5.6$ $\mu\text{m}$ .....                  | <i>P. singeri</i>      |
| 2-Fructification brownish when fresh, thick lobed ( $\pm 1$ mm), drying dark brown; basidiospores fusiform-ellipsoid, $7\text{-}9$ (-10) $\times 3\text{-}4$ $\mu\text{m}$ ..... | <i>P. crassa</i>       |

#### LITERATURE CITED

- Lowy, B., 1959. New or noteworthy Tremellales from Bolivia. *Mycologia* 51: 840-850.  
 ———, 1965. Estudio sobre algunos Tremellales de México. *Bol. Soc. Bot. Méx.* 29: 19-33.  
 ———, 1971. *Tremellales*. Monograph No. 6. Flora Neotropica, Hafner Publ. Co. Inc., New York, 153 pp.  
 ———, 1977. A new *Tremella* with deciduous basidia. *Mycotaxon* 6: 371-374.  
 Mendiola, G. y G. Guzmán, 1973. Las especies de Tremellales conocidas en México. *Bol. Soc. Mex. Mic.* 7: 89-97.

#### RESUMEN

Se describe una especie nueva, *Phyllogloea crassa* Lowy, del bosque tropical perennifolio de México en la región de Veracruz. Es la primera especie del género (que pertenece a la Familia Auriculariaceae) conocida de México. Las otras dos especies, las únicas conocidas hasta ahora, fueron descritas de Bolivia y de Brasil.

#### SUMMARY

A new species, *Phyllogloea crassa* Lowy, is described from the tropical rain forest of Mexico in the region of Veracruz. This is the first species of the genus (a member of the Auriculariaceae) known from Mexico. The only other two species known were described from Bolivia and Brasil.