

WIDE VARIETY OF FUNGI IN THE PTEROCARPUS FOREST IN PALMAS DEL MAR

Eight graduate students from Turabo University, under the guidance of Professor Sharon Cantrell-Rodriguez, an expert in Mycology and Professor in Turabo's School of Natural Science and Technology, identified a total of 103 species of fungi in the Pterocarpus Forest in Palmas del Mar, Humacao, as part of a three-month study.

Graduate students conducted 6 fungi collection campaigns during the months of September, October, and November 2015, photographically documenting their findings and listing the characteristics of each of the specimens. Subsequently their microscopic characteristics were observed, and, through the use of taxonomic keys, each species was identified.

This discovery is remarkable in view of the fact that the Pterocarpus Forest is considered a freshwater swamp, yet it has accumulated large amounts of plant material in the water and in the roots of trees, thus causing the growth of multiple and diverse communities of fungi. At the same time, this research becomes one of the first accomplishments resulting from a collaborative agreement with Turabo University's main campus at Gurabo. The goal of the agreement is to integrate the university community into Palmas' efforts to preserve the Forest, making it available as an educational resource and laboratory for scientific research.



The 103 identified species are grouped as follows: 51 basidiomycetes, 32 ascomycetes, 15 lichens and 5 mixomicetos. The most abundant species in the forest are *Auricularia fuscusuccinea*, *Tremella fuciformis*, *Oudemansiella canarii*, *Marasmius guyanensis*, *Mycobonia flava*, *Marasmiellus nigripes*, and *Leucoagaricus fragilissimus*. Among the ascomycetes *Xylaria multiplex*, *Xylaria polymorpha*, *Kretzchmaria clavus*, *Hysterium vermiforme* and *Rhytidhysterium rufulum* were found. Several species of lichens observed such as *Diorygma poteiai*, *Ramalina complanata* and *Pyxine berteriana*. The less plentiful species was the mixomicetos: *Stemonitis axifera*, *Arcyria mayor* and *Diderma effusum*.

Fungi serve a variety of purposes, such as decomposers and recyclers of plant material, producers of medicines and indicators of quality, among others. These organisms, which grow on wood, leaves and soil, are saprophytes, feeding on decomposing organic materials.

