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OF MYXOMYCETES**

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## PART II Taxonomy and Systematics

### Myxomycetes of Mahe Island in the Seychelles

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**Abstract:** The first study of the myxomycete biota of Mahe Island in the Seychelles was carried out in October 2011. Twenty-eight species of myxomycetes were identified from field collections, and 21 species were recovered from moist chambers cultures prepared with the bark of living lianas. In total, 43 species were recorded.

The first study of the myxomycete biota was carried during six days (9 to 14 October 2011) in nine different localities on Mahe Island, the largest island of the Seychelles archipelago, located in the western Indian Ocean. From 100 specimens collected in the field, 28 species of myxomycetes were collected and identified by Alain Michaud and Tetyana Kryvomaz. In addition, samples of the bark from living lianas were collected for preparation of moist chamber cultures. Steve Stephenson recorded 21 species from 97 specimens of myxomycetes recovered from these moist chambers cultures. In total, 43 species were recorded, and seven of these (*Arcyria cinerea*, *Physarum compressum*, *Ph. crateriforme*, *Ph. lakhanpalii*, *Ph. melleum*, *Fuligo cinereum*, and *Didymium nigripes*) were recorded as both field collections and collections from moist chamber cultures. The highest frequency of occurrence in the field was noted for *Physarum lakhanpalii* (10 specimens), whereas the most common species in moist chambers were *Physarum compressum* (21), *Collaria arcyronema* and *Perichaena dictyonema* (both represented by 14 specimens). The vegetation of the Seychelles archipelago is marked by nearly 2000 species of tropical plants and some myxomycetes were found on dead leaves. These were *Diachea bulbilosa*, *D. leucopodia*, *Diderma effusum*, *Physarum bogoriense*, *Ph. compressum*, *Ph. hongkongense*, *Ph. melleum*, and *Ph. mutabile*. The most common substrata for *Diderma effusum*, *D. chondrioderma*, *Perichaena corticalis* and *Physarum lakhanpalii* were the wood and bark of living coconut palm trees, and *Perichaena quadrata* was found on decayed palm wood. *Arcyria cinerea*, *A. insignis*, *Cribraria intricata*, *Lycogala epidendrum*, *Physarum bogoriense*, and *Ph. crateriforme* were collected from the dead wood of various kinds of trees, whereas *Diderma chondrioderma* was associated with mosses.

**Key words:** Myxomycetes; tropics; island biogeography