

## Rediscovery of *Rhizopodopsis javensis*, monotypic genus of Indonesian Mucorales with taxonomically ambiguous status

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**Purpose:** Southeast Asia including Indonesia is a biodiversity hotspot of fungi. In 1958, a Dutch mycologist KB Boedijn investigated *Mucorales* in Indonesia and he proposed four monotypic genera *Phascolomyces*, *Rhizopodopsis*, *Sporodiniella*, and *Utharomyces*. Although these monotypic genera were rather rarely recorded, three genera (*Phascolomyces*, *Sporodiniella*, and *Utharomyces*) have been rediscovered. Yet, *R. javensis* has not been rediscovered and the status of this species remained unclear. Therefore, reinventing the specimens and evaluation of taxonomic status of this species were done in this study.

**Methods:** We conducted field surveys at Cibodas Botanical Garden which is the type locality of *R. javensis*. *Rhizopodopsis javensis* grown on fallen fruits were sampled, isolated and characterized on the basis of morphological observation. We also attempted to do a phylogenetic analysis for the first time using these cultures.

**Results and Conclusions:** During field surveys, we found *R. javensis* on fallen fruits of *Elaeagnus* which is the substrate for the original description, and fallen fruits of *Ficus* as an additional substrate. The diagnostic morphological characteristics of *R. javensis* such as umbellate sporangiophores and granulated sporangiospores were found on the living cultures from these substrates. These cultures were phylogenetically assigned to *Rhizopodaceae* (*Mucorales*) and related to *Rhizopus sexualis* and *Rh. stolonifer*. Furthermore, the results of additional investigations such as distributions, growth temperature, detailed morphologies and multi-locus phylogeny of *R. javensis* are discussed.