Species diversity and collection of yeasts at Khanom-Mu Ko Thale Tai National Park

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The diversity of yeast in Khanom-Mu Ko Thale Tai National Park, Nakhon Si Thammarat Province, was investigated. One hundred and fifty-six yeast strains were isolated from sea water (63), plant materials in sea water (61), seaweeds (50), and water and soils of mangrove forest (15). The membrane filtration technique and the direct streaking and enrichment technique were used for isolation. Fifty-three strains were identified by using morphological characteristics and molecular techniques; 42 strains were ascomycetous yeasts and 8 strains were basidiomycetous yeasts. Based on D1/D2 domain of 26S rDNA sequence similarity and phylogeny, 35 strains were identified as 22 known species (13 genera), 17 strains were found to represent 13 new species (5 genera) and the remaining strain could not be identified by D1/D2 sequences. The ITS gene is required for identification of the Morphological, physiological latter strain. characteristics. chemotaxonomy and molecular taxonomy are required for describing the new species.

