Isolation and identification of fungi associated with diseased freshwater fishes in Terengganu, Malaysia

ABSTRACT

Fish health problem presents an ongoing challenge for aquaculture as disease outbreaks cause fish mortalities and financial losses. This study investigated the fungal infections in common freshwater ornamental and food fish species in Terengganu, Malaysia. Diseased gold gourami (*Trichopodus trichopterus*), snakeskin gourami (*Trichogaster pectoralis*), angelfish (*Pterophyllum scalare*), African sharptooth catfish (*Clarias gariepinus*), and red hybrid tilapia (*Oreochromis spp.*) with dermal lesions were sampled for fungal isolation. A total of 12 fungal isolates were isolated, and characterized by macro- and micro-morphologies of colonies. Isolates were identified by sequence analysis of ribosomal internal transcribed spacer (ITS) region. Genera *Aspergillus*, *Geotrichum* and *Pestalotiopsis* were more prevalent than *Flavodon*, *Pseudopestalotiopsis*, *Trichoderma* and *Apiotrichum* (*Trichosporon*). This study indicated the advantage of good hatchery settings and management practices in reducing fungal infections.