In Vitro Inhibitory Effects of Two Bornean Medicinal Wild Gingers Against Pathogenic Lagenidium Thermophilum Infected Mud Crab Scylla Tranquebarica

ABSTRACT

The antifungal activity of two Bornean medicinal wild gingers Plagiostachys megacarpa and Zingiber phillippsiae were examined against Lagenidium thermophilum. The most active extract was P. megacarpa at concentration of 320 μ g/mL inhibiting both hyphal growth and zoospore production of L. thermophilum in 24 h. Toxicity tests were conducted using mud crab (Scylla tranquebarica) larva. Bath treatment of P. megacarpa at concentrations of 320 and 640 μ g/mL for 24 h were highly effective against hyphae and zoospores of the strain and it is non-toxic to mud crab larva. Therefore, crude extracts P. megacarpa may be used as alternative treatment for marine Oomycete infection of mud crab.