CHAPTER 2
POTENTIAL USE OF FUNGI ISOLATED FROM DEAD ARTHROPOD FOR ANTIFUNGAL AGENT.

Hazimah Hamid and Khomaizon Abdul Kadir Pahirul Zaman

INTRODUCTION

Fungi are eukaryotic, spore-bearing organisms that have absorptive nutrition and lack chlorophyll. Its habitats are quite diverse and widely distributed on earth with enormous environmental and medical importance. Some fungi form a parasitic or symbiotic relationship with plants and animals, with cell walls built of polysaccharides and chitin (Johnson & Raven, 2002). Fungi can be easily distinguished from all other living organisms because of the principle's modes of vegetative growth and nutrient intake. In the past decade, fungal infections have been reported to have dramatically increased, with an alarming number associated with antifungal resistance. These indicate an increasing need to search for a new antifungal agent. Numerous researches were carried out on the isolation and identification of fungal species and strains from arthropod species (Gouli et al., 2013). With many pathogenic insects showing visible fungal outgrowth, fungi frequently are the reason for spectacular epizootics (Bharathi, 2005). The commensalism relationship of pathogenic fungi deriving nutrients within the insects, in which it will obtain nutrients from gut contents without causing harm to the host (Isaka et al., 2005). Numerous arthropods, found in forest soil, were infected by different species of entomopathogenic and enthomophilous fungi (Gouli et al., 2013). *Aspergillus, Penicillium*, yeast, *Cladosporium* and *Fusarium* species were also isolated from houseflies (Zarrin et al., 2007) and 14 genera