

**Association of copper and zinc to ganoderma spp. spatial distribution in oil palm  
(*elaeis guineensis*) plantations on peat**

**ABSTRACT**

Ganoderma species are a devastating basidiomycete fungus that has been reported to cause basal stem rot (BSR) and upper stem rot (USR) in oil palm (*Elaeis guineensis*) which threatening the sustainability of the plantations throughout the Southeast Asia region, especially in Malaysia and Indonesia (Hasan et al., 2005; Rees et al., 2012; Rakib et al., 2014a). Oil palm cultivation on peat in Malaysia, especially in the state of Sarawak is becoming more important due shortage of the mineral soil in other regions of Malaysia and the abundance of peat lands in the state (Said et al., 2009).