

## **Ganoderma boninense: general characteristics of pathogenicity and methods of control**

### **ABSTRACT**

*Ganoderma boninense* (*G. boninense*) is a soil-borne fungus threatening oil palm at the present. It causes basal stem rot disease on oil palm. Within six months, this fungus can cause an oil palm plantation to suffer a significant 43% economic loss. The high persistence and nature of spread of *G. boninense* in soil make control of the disease challenging. Therefore, controlling the pathogen requires a thorough understanding of the mechanisms that underlie pathogenicity as well as its interactions with host plants. In this paper, we present the general characteristics, the pathogenic mechanisms, and the host's defensive system of *G. boninense*. We also review upcoming and most promising techniques for disease management that will have the least negative effects on the environment and natural resources.