Preface

Oil palm is the world’s highest oil crops’ producer with potential yield capacity 10–15 times higher compared to other oil crops planted on the same size of land. Increases in global demand for edible oil and biofuel, driven by the increasing population, remain the main factors driving up the expansion of oil palm cultivation in South East Asia (SEA) and other regions of the world. Currently, Malaysia and Indonesia are the two countries that contribute up to 90% of world’s palm oil export. Unfortunately, the oil palm industry in SEA is under threat of a devastating disease. This disease is known as basal stem rot (BSR) which is caused by a fungus known as Ganoderma boninense. With no known remedy at present, BSR disease continues to erode the profitability of the oil palm industry and created a significant concern globally.

This book is a joint effort by the authors who are currently working actively on finding suitable detection and management methods for BSR disease in oil palm. With immense experience in the field, this book provides good information with backup data covering both detection and management strategies of Ganoderma. The six chapters in this book address many current issues in tackling the pathogen and the development of sustainable disease management programs of BSR. There are including; an introduction to the oil palm industry in global perspective and its future potential (Chap. 1), The pathogenic nature of Ganoderma (Chap. 2), Some of the current detection methods of G. boninense (Chap. 3), Control methods of the pathogen, which cover cultural practices, chemical control, development of disease resistance and biological control (Chap. 4) and more in-depth review of latter subject in control of G. boninense using combination of biocontrol agents (Chap. 5). This chapter gives an in-depth information on the use of biological approaches in controlling G. boninense to meet the current oil palm–environmental dilemmas and demands for more eco-friendly practices in the field. The last chapter (Chap. 6) concludes the contents of this book and summarizes the discussed matters as well as suggests several recommendations for future research or further improvements.

This book serves as an exclusive source of information on BSR caused by G. boninense. This book will make an essential contribution to the oil palm industry and will be a valuable reference and guide for planters, agricultural students,
agronomists, and all those working in the oil palm industry. The authors believe that this book will complement the existing books on different approaches in the similar field as it discussed in-depth details and guidance on controlling the BSR disease using biological means, which is the unique feature of the book itself.

Kota Kinabalu, Malaysia

Khim Phin Chong
Jedol Dayou
Arnnyitte Alexander
Detection and Control of Ganoderma boninense in Oil Palm Crop
Chong, K.P.; Dayou, J.; Alexander, A.
2017, VIII, 50 p. 15 illus., Softcover
ISBN: 978-3-319-54968-2