

10th International Conference on

AGRICULTURE & HORTICULTURE

October 02-04, 2017 London, UK

Integrated management of pod rot disease of cocoa

Gurudatt M Hegde

University of Agricultural Sciences, India

Cocoa is an important commercial plantation crop of the world. Cocoa is a crop of humid tropics and so it was introduced as a mixed crop in India in areas where the environments suit the crop. It is cultivated in coconut and areca nut plantations in large scale from 1970 onwards. It is grown as an under storey intercrop with sufficient shade in southern states of India. In India, the current production is about 12,000 Metric Tons. Diseases are major risk to productivity and quality of harvest which in turn affects the returns to the farmers. This crop suffers heavily due to pod rot disease caused by *Phytophthora palmivora* causing yield loss up to 60 per cent. To overcome the pod rot disease, menace the experiment was conducted during 2012-13 and 2013-14 in the farmer's field of Sirsi taluk of Uttara Kannada district. The results revealed that, sequential spray of Metalaxyl MZ 68WP at 0.2% followed by *Pseudomonas fluorescens* at 1% at 15 days interval has significantly reduced the pod rot disease severity in Cocoa (20.07%). This is followed by Mancozeb at 0.25% *Pseudomonas fluorescens* at 1%, and Bordeaux mixture (1%) - *Pseudomonas fluorescens* at 1%. The reduction in disease severity has reflected in increase in yields of cocoa. The plots sprayed with Metalaxyl MZ 68WP - *Pseudomonas fluorescens* has recorded highest yields of 518.21 kg of dry beans/ha followed by 436.17 and 433.63 kg/ha respectively in Mancozeb - *Pseudomonas fluorescens* and Bordeaux mixture- *Pseudomonas fluorescens*. The maximum disease severity was recorded in untreated control plots (46.15%) with the yields of 337.27 kg/ha. The highest net returns of Rs. 62,007 (approx. 1000USD) were recorded in Metalaxyl MZ 68WP-*Pseudomonas fluorescens* sprayed plots. Thus, integration of chemicals with biological control agents was found promising in management of pod rot disease of cocoa.

Biography

Gurudatt M Hegde has completed his PhD in Plant Pathology from the University of Agricultural Sciences, Dharwad, and Karnataka, India. He is a recipient of gold medals for the Academic performance during his MSc Agri. and PhD. He has sizeable number of national and international publications to his credit. Currently, he is working as Assistant Professor of Plant Pathology in the Institute of Organic Farming, University of Agricultural Sciences, Dharwad, India with focused research on use of biofungicides for the management of plant diseases under laboratory, polyhouse and field conditions. He is also involved in mass production of biofungicides to cater the needs of farming community. He has visited Kazakhstan, Israel, USA (Nebraska State) and Srilanka for presentation of research information and trainings on Integrated Pest and Disease Management.

iofdwad@uasd.in
hegdegm@uasd.in
gurudatthegde@gmail.com

Notes: