

An Integrated Management Response to the spread of Fusarium wilt of Banana in South-East Asia



Key details

Location

Indonesia, Lao PDR, Philippines

Duration

Start Jan 2020

End Dec 2024

Budget

AUD 2,850,885

Commissioned organisation

Queensland Department of Agriculture and Fisheries

Partners

Australian Banana Growers Council; Horticulture Research Centre, Laos; Plant Protection Center, Department of Agriculture, Laos; Provincial Agricultural Office-Rigion XI, Davao Del Norte, Philippines; Queensland Department of Agriculture and Fisheries; University of Queensland, Australia; University of Southeastern Philippines

Project Leader

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ACIAR Research Program Manager

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Program

Horticulture

Project code

HORT/2018/192



Overview

This project aims to characterise how management practices shape the microbiome and affect the susceptibility of bananas to Fusarium wilt by increasing the understanding of host-pathogen-microbiome interactions.

Fusarium wilt of bananas has become widespread throughout South-East Asia. The disease is threatening smallholder banana production in countries like Indonesia, the Philippines, and more recently Laos.

This project builds on current and previous ACIAR projects which have been developing management systems for banana production to suppress the disease. The research has identified that increasing diversity in cropping systems leads to an increase in soil biological diversity, which can suppress development of Fusarium wilt.

Therefore, the project is focusing on the banana microbiome, banana farm management and social networks for banana growers.

Expected project outcomes

- Determining the microbiome differences existing in current banana production systems.
- Developing farm management options for banana growers to reduce Fusarium wilt.
- Understanding grower networks, decision making and provide decision support tools to manage Fusarium wilt of bananas.



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