

## ABSTRACT

### Factors Affecting the Adoption of the Black Pod Control Technology Among Cocoa Farmers in Trinidad and Tobago

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Black pod disease caused by the fungus, *Phytophthora Palmivora*, accounts for considerable losses in cocoa production in Trinidad and Tobago. A package of control practices has long been recommended for its control. Evidence has shown that many farmers have not adopted the package, although still experiencing severe losses.

The study aimed to investigate the theory that farmers rationally adopt components of a package, at various levels, based mainly on the technological characteristics: perceived riskiness, profitability and complexity, divisibility, and availability of inputs; rather than the farming system characteristics, such as the socio-economic characteristics.

The sample of 140 was drawn from a population of farmers by stratified random sampling. Data was collected by personal interviews.

Multiple linear regression analysis was used to determine the significance of the technological and farming system variables in determining the levels of adoption of each component and the overall package.

Results of the analysis showed that no farmer adopted the complete package and only the frequent harvesting and pruning practices attained a 'high level' adoption score. The technological characteristics were the most important explanatory variables of adoption levels for all components. "Perceived riskiness" was the most important explanatory variable for all but one component, explaining over 60% of the variance in adoption levels in most cases. "Perceived profitability" was the second most important explanatory variable.

The farming system characteristics were not very important explanatory variables. Several of them however showed significant interaction effects with the technological variables in determining adoption levels.

The study therefore supports the theory of rational adoption of components of a technological package based on their characteristics and suggests the need for designing recommendations based on the farmers' perception of risk and profitability. The overwhelming importance of "perceived riskiness" suggests the need for further research in this area.