Integrated Pest Management strategy against Coffee Berry borers based on their dispersion capacity in North Sumatra, Indonesia

OBJECTIFS

Crop losses induced by CBB are under the influence of multiple factors that act mainly at plot scale. These damages depend on the interactions at plot level between the host plant, the pest, the biophysical environment and the farm management. In this thesis, we propose to better understand how the CBB population dynamics in equatorial region interact with producers' practices (post-harvest practices, agronomic management of plots) and with local biodiversity in order to propose CBB IPM strategies adapted to local context. In particular, we will study the mechanisms of dispersal of migratory forms of the CBB from existing infestation sites within the production systems in North Sumatra. We will also expect to set up an effective and economical control program compatible with sustainable coffee production in this region. To achieve this general objective, our approach and methods will be based on farmers' inclusion throughout the work using Companion Modelling approach.

Responsable :

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