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Identification of major insect pest associated to taro leaf blight disease transmission

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ABSTRACT

Objective: This study aimed to identify potential entomopathogenic pest associated with taro damage and transmission of taro late blight disease.

Methodology and Results: Insect pest in taro infected fields were collected from infected crops and soil for identification using an insect identification guide. The percentage abundance of each insect phylum was calculated, and insect photographs taken. Pathogenicity Assessment was done to isolate spores of P. colocasiae from insect samples and the isolated spores used in inoculating taro cultivars growing in a screen house. The average lesion diameter P.colocasiae infected area was recorded for 14 days.

Conclusion and Application of Results: The Phylum Arthropoda had the highest abundance (100 %) in Bambui and Yaounde, while Phylum Annelida had the lowest abundance (7.69 %) in Ekona. No lesions developed on inoculated cultivars in the screen house, indicating that taro leaf blight is not vectored by insect pests. However, these insect pests created wounds on leaves for rapid growth and proliferation of the pathogen.

Key words: Identification, insect pest, Taro leaf blight disease, transmission.