

Genetic characterization of populations of *Bruchidius atrolineatus* Pic. (Coleoptera-Chrysomelidae-Bruchinae) from the different agroclimatic area of Niger

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Key words: Bruchidius atrolineatus; genetic characterization; cowpea; agro-climatic zone; Niger

1 ABSTRACT

Bruchidius atrolineatus Pic is one of the two main insect pests of cowpea seeds in the Sahelian zone. Attacks begin in the field and continue during storage where the damage can be considerable if no control measures are taken. During this study several aspects concerning the genetics of *B.atrolineatus* were examined. Sampling was done in Niger and genetic analysis at the BIOPASS laboratory of IRD Bel Air of Dakar. The mitochondrial marker (cytochrome b) was used. Based on the comparison of the genetic differentiation by pair (Fst by pair), the results showed that all the populations of the pest are close to each other. About 90% of the genetic variation observed is due to the variation within the constituted groups (agroclimatic zones). There is therefore no significant difference between the climatic zones of Niger. The consequence is that the population of *B. atrolineatus* appears to form a homogenous genetic unit.