

A KUNITZ-TYPE INHIBITOR ISOLATED FROM *INGA LAURINA* (SW.) SEEDS
AND ITS EFFECT ON *HOMALINOTUS CORIACEUS* (GYLLENHAL)
(COLEOPTERA: CURCULIONIDAE)

Oliveira, C. F. R.¹; Durigan, R. A.¹;
Guarini N. R.¹; Canevari, G. C.¹; Freire, M. G. M.²; Macedo, M. L. R.³

¹DCN, UFMS, Três Lagoas-MS

²ISECENSA; Campos de Goytacazes-RJ

³DTA, UFMS, Campo Grande-MS (bioplant@terra.com.br)

The use of insecticides has been the main form of pest control. The indiscriminate use provokes insect adaptation process and proves to be inadequate and inefficient. A proposal alternative would be the use of proteases inhibitors, defense mechanism used for many species of plants. *Homalinotus coriaceus* is the main pest of the culture of coconut in Brazil, known as the black coconut bunch weevil, causing immature fall of the flowers and fruits. The objective of this work was to evaluate the effect of an inhibitor isolated from *Inga laurina* seeds (ILIT) on *H. coriaceus* larval development. ILIT was purified through classic chromatography methods. To examine the protein effects on *H. coriaceus*, neonate larvae, they were fed an artificial diet-containing ILIT at concentration of 0 -1% (w/v). Each treatment was repeated 3 times with 10 larvae (n= 30). When 0.05% ILIT was fed to *H. coriaceus* larvae, caused a significant reduction in mean larval weight (ca. 60% reduction) and a slight effect on larval survival 3%. Additional studies with this inhibitor are necessary to better understanding this protein in relation to *H. coriaceus* development.

Word Keys: *Homalinotus coriaceus*, Pest Control, Kunitz inhibitor

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