

SINERGIC EFFECT OF A PROTEINASE INHIBITOR FROM *ADENANTHERA PAVONINA* (APTI) AND *DOLICHOS LABLAB* LECTIN (DLL) AGAINST *ANAGASTA KUEHNIELLA*

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The control against insects` attack, done by several applications of chemical insecticides, is a dangerous prevention that may injure human health and nature. Thus, it's necessary to find different ways to control these pests, using proteinase inhibitors and lectins, for instance. This study intends to verify the synergic effect of proteinase inhibitor (APTI) and lectin (DLL) against *A. kuehniella*. The proteins were purified through classic chromatography methods and tested against *A. kuehniella* neonate larvae, using artificial diets at 0.25–2% concentrations. Controlled meal without proteins was also prepared. Each treatment was repeated fifteen times with five larvae (n= 75). The experiment was analyzed for fourth-instar larvae. DLL, separately, didn't show effects neither on larval development nor on survival. APTI at 2%, isolated, caused a decrease of 65.7% and 0% on larval weight and survival, respectively. DLL at 0.5% plus 0.25% APTI presented a decrease of 71.4% and 76.2% on larval weight and survival, respectively. The experiments showed a synergic effect of these proteins, suggesting new perspectives for their biological use. Support: CNPq, FUNDECT and FINEP.