PARTIAL CARACTERIZATION OF ATPase FROM *Acanthoscelides* sp. (COLEOPTERA: BRUCHIDAE) LARVAE

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The Bruchidae beetles are important predators of plants seeds of economic interest. We have characterized recently an ATPase fraction from *Pachymerus nucleorum* (Fabricius) (Coleoptera: Chrysomelidae: Bruchinae) larvae, that present high Ca-ATPase activity, but doesn't present Mg-ATPase activity. The objective of this study was identify a similar ATPase in *Acanthoscelides* sp. larvae. The larvaes were homogeneized on 50 mM imidazol pH 7,5 buffer containing protease inhibitors, centrifuged and the precipitate was washed with 20 mM imidazol buffer containing 0,2% (v/v) triton X-100 and subsequently with this buffer but with 50 mM pyrophosphate. The precipitate (P3) showed in SDS-PAGE similar polypeptide profile to same fraction obtained to *P. nucleorum*. Similarly, the *Acanthoscelides* sp. fraction showed Ca-ATPase activity that were inhibited in the presence of 1 mM copper or zinc ion. However, distinctly of *P. nucleorum* fraction, the *Acanthoscelides* sp. fraction have Mg-ATPase activity and its Ca-ATPase activity was inhibited by vanadate. A P3 fraction from *Acanthoscelides* sp. pupae does not present Mg or Ca-ATPase activity. Similar to the *P. nucleorum*, larvae but not pupae, from *Acanthoscelides* sp. also possess a Ca-ATPase not solubilizated for 0,2% triton X-100 or 50 mM pyrophosphate.

KEYWORDS: ATPase, Acanthoscelides, larvae.