Purification and Partial Biochemical Characterization of Proteins from *Bothriopsis bilineata* Snake Venom


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*Bothriopsis bilineata* is an arboreal snake present in Brazilian and Colombian Amazon Forest. The aim of this study was the isolation and partially characterization of proteins present in *B. bilineata* snake venom. 5mg of the crude venom was solubilized in 0.1% TFA and submitted to reverse phase chromatography on a *Discovery* C18 (ref.504971) 25 x 4.6 mm (Supelco). The sample was eluted with an increasing acetonitrile gradient at 1mL/min. using an AKTA system (GE Healthcare). 35 peaks were collected and analyzed by SDS-PAGE 12.5% and MALDI-TOF mass spectrometry. Analyses showed five fractions (13, 14, 15, 16 and 18) with high purity degree and mass next to 14 kDa. Two-dimensional electrophoresis was performed with the crude venom showing that next to 80% of the protein content is largely distributed at the acid pH region. The small amount of proteins presented at the basic pH region has molecular mass next to 17 kDa. Further assays in order to identify the N-terminal sequence and the activity characterization are in progress. This research was authorized by CGEN/CNPq (010627/2011-1) and IBAMA (27131-2).

Key words: *Bothriopsis bilineata*, Proteins, Purification, Proteomics.

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