

PURIFICATION AND PARTIAL CHARACTERIZATION OF A HEMORRHAGIC ENZYME FROM *BOTHRUPS ALTERNATUS* SNAKE VENOM

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Introduction: Snake venom glands are rich source of bioactive molecules such as peptides, proteins and enzymes that show important pharmacological activities leading to local and systemic effects as pain, edema, bleeding and muscle necrosis. Many of the components of Bothropic venom are proteolytic enzymes. **Objective:** In this work, a hemorrhagic proteinase (BaH) was purified from *Bothrops alternatus* by snake venom a combination of gel ion exchange, filtration and affinity chromatographies. **Results:** BaH displays a molecular mass of 57 kDa as estimated by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) stained with coomassie blue, in the presence of β -mercaptoethanol. The subcutaneous injection of BaH (50 μ g) into dorsal skin of mice led to a drastic hemorrhage. BaH had fibrinogenolytic activity. The hemorrhagin cleaves the A α -chain of fibrinogen first, followed by the B β -chain, and shows no effects on γ -chain. **Conclusion:** *Bothrops alternatus* snake venom contain proteinases that contribute to the local effects of envenoming.

Keyword: Snake venom, *Bothrops alternatus*, proteinase.