

Differences in Chromatographic Profiles of *Bothrops moojeni* Snake Venom Collected from Different Brazilian Regions

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INTRODUCTION: The snakebite is widely considered a public health problem with significant social and economic damage and it is listed by the World Health Organization as a neglected tropical disease. Brazil has shown approximately 29,000 annual cases of snakebite caused by snakes belonging to the Viperidae families. Currently, treatment most often used to counter the effects caused by snake bites is the application of antiophidic serum, however since 1911, exist reports describing that neutralization pharmacological effects caused by *Bothrops jararacussu* is not fully effective only with administration of antiophidic serum, justifying the need for studies aimed at producing more effective and specific antiophidic sera.

OBJECTIVE: The present study describes the comparison between venom constituents from *B. moojeni*, collected from three Brazilian regions: Southeast (Bmoo_SE), Northeast (Bmoo_NE) and Midwest (Bmoo_CO). **MATERIAL AND**

METHODS: For Reverse-Phase HPLC separations, the three lyophilized samples of the crude venoms were dissolved in 0.05% TFA and 5% acetonitrile, and the insoluble material were removed by centrifugation at 13,000×g for 10min at 4°C. Proteins in the soluble fraction were separated using a Shimadzu Shim-Pack C18 Column and eluted at 1 mL/min with a linear gradient of 0.1% TFA (solution A) and 66,5% acetonitrile, in 0,1% of TFA (solution B).

RESULTS AND DISCUSSION: The linear elution of the proteins resulted in 14 fractions of Bmoo_NE, 13 fractions of Bmoo_CO and 13 fractions of Bmoo_SE collected above 25mAu. All the chromatograms obtained from the three samples of *B. moojeni* snake venom from different Brazilian regions by Reverse-Phase Chromatography were alike and the proteins composition of the venoms showed similar when analyzed by SDS-PAGE electrophoresis. **CONCLUSIONS:** All chromatograms showed the presence of toxins responsible for myotoxic action of *B. moojeni* snake venom, such as phospholipase A₂ and phospholipase A₂ myotoxic (14 kDa), and metalloproteinase classes I to IV (20-100 kDa) in agreement with data previously published in the literature.

key words: *Bothrops moojeni*, snake venom; liquid chromatography.

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