Bothrops jararaca VENOM PROTEOME UPDATE

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Approximately 85% of reported snake envenomations in Brazil are caused by bothropic species and most of these specifically by *Bothrops jararaca*. The determination of *B. jararaca* venom proteome could shed some light on its mechanism of action by unraveling previously unknown proteic components. The elucidation of the proteome followed the use of 2D-PAGE to separate proteins and mass spectrometry analyses of tryptic hydrolysates of gel spots to identify these proteins. Venom separation in the first dimension of 2D-PAGE was performed in linear 3-10 and 4-7 pH ranges yielding 337 and 357 spots, respectively, as well as non-linear 3-7 range yielding 349 spots. *B. jararaca* venom was also submitted to size-exclusion chromatography and the three pools obtained were submitted to 2D-PAGE (pH 4-7, best resolving range). Results indicate enrichment in different regions of the gel (as compared to whole venom gel) as well as the appearance of unexpected low molecular weight components in the first eluting fractions (pool I), indicating that these components might exist as oligomers and/or possibly interact with high molecular weight venom components in their native state. Several spots have been already identified, representing toxins already known to be present in this snake venom, and several others are currently being analyzed.

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