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Resumo	Amphibians display a toxic secretion that works as chemical defenses against predators and/or microorganisms that is stored in specialized glands located in the tegument. For some animals, such glands have accumulated in specific regions of the body and formed prominent structures known as macroglands. The Bufonidae family displays conspicuous macroglands in a post-orbital position, termed parotoids, which secretions are known to be extremely viscous and rich in alkaloids and steroids. Few proteins have been described in this material, though. Mainly, because of the difficulties to handle such biological matrix. In this context, we have performed a proteomic study on the parotoid macrogland secretion of the Asian bufonid Duttaphrynus melanostictus. By employing the Ion-Exchange (IEx)-batch chromatography (anionic, cationic and both) we obtained six fractions - bound and unbound – that were submitted to an in solution-trypsin digestion followed by LC-MS/MS. Proteins related to: antioxidant activity, binding processes (carbohydrate/lipid/protein), energy metabolism, hydrolases, lipid metabolism and membrane traffic were identified. Moreover, IEx was able to preserve the biological activity of the retrieved proteins (peptidasic). The current study increases the knowledge on the proteins present in the bufonids parotoid macrogland secretion, providing a better understanding of the physiological role played by such molecules.
Fomento	