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Autores	Pedro Luiz Mailho-Fontana, Marta Maria Antoniazzi, Juliana Mozer Sciani, Daniel Carvalho Pimenta, Katia Cristina Barbaro, Carlos Jared
Autor (es) USF	Juliana Mozer Sciani
Autores Internacionais	
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Resumo	<p>Background: Amphibian defence against predators and microorganisms is directly related to cutaneous glands that produce a huge number of different toxins. These glands are distributed throughout the body but can form accumulations in specific regions. When grouped in low numbers, poison glands form structures similar to warts, quite common in the dorsal skin of bufonids (toads). When accumulated in large numbers, the glands constitute protuberant structures known as macroglans, among which the parotoids are the most common ones. This work aimed at the morphological and biochemical characterization of the poison glands composing different glandular accumulations in four species of toads belonging to group <i>Rhinella marina</i> (<i>R. icterica</i>, <i>R. marina</i>, <i>R. schneideri</i> and <i>R. jimi</i>). These species constitute a good model since they possess other glandular accumulations together with the dorsal warts and the parotoids and inhabit environments with different degrees of water availability.</p> <p>Results: We have observed that the toads skin has three types of poison glands that can be differentiated from each other through the morphology and the chemical content of their secretion product. The distribution of these different glands throughout the body is peculiar to each toad species, except for the parotoids and the other macroglans, which are composed of an exclusive gland type that is usually different from that composing the dorsal warts. Each type of poison gland presents histochemical and biochemical peculiarities, mainly regarding protein components.</p> <p>Conclusions: The distribution, morphology and chemical composition of the different types of poison glands, indicate that they may have different defensive functions in each toad species.</p>
Fomento	