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Cytochemical evaluation the venom gland of the wasp Apoica thoracica, Acre, Brazil.

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The Insecta are the most diverse and most abundant group of arthropods. The venom apparatus of Hymenoptera is directly derived from the oviduct and functions as an effective weapon of defense in the Aculeata. In social wasps the venom gland is formed by two free secretory tubules and a reservoir, which is connected to the stinger, wrapped externally by a muscular layer. The objective of this study was to analyze the contents of the wasp venom gland of *Apoica thoracica*. Twelve adult worker wasps were collected, the venom gland removed, submitted to a process of fixation, dehydration and sectioning before application the three cytochemical techniques: toluidine blue (DNA and RNA), bromophenol blue (total proteins) and PAS+Blue Alcian (polysaccharides). Toluidine blue stained the nuclei and nucleolar regions in the epithelium of the secretory filaments, reservoir and convoluted gland, indicating synthesis of RNAs, and higher levels of secretory cells and filaments in the convoluted gland. Bromophenol blue staining was observed in the nuclei and nucleoli epithelium secretory filaments, reservoir, convoluted gland and cell lumens of the secretory filaments and reservoir. The technique of PAS+Blue Alcian showed the presence of basic polysaccharides in the constitution of the epithelium of the secretory filaments, reservoir and in the cytoplasm secretion in cells of the convoluted gland. By these results we conclude that the secretory cells of the filaments, reservoir and convoluted gland secrete proteins nature and basic polysaccharides, constituents of the venom.