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Título	Biological characterization of bristle extract of <i>Lonomia descimoni</i> caterpillar (Lepidoptera, Saturniidae) and effectiveness of <i>Lonomia</i> antivenom to neutralize experimental envenomation in rats
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Resumo	Contact with <i>Lonomia</i> caterpillars can cause severe envenomation with hemorrhagic syndrome, consumptive coagulopathy, acute renal failure, and death. In Brazil, an antivenom was produced using extracts from <i>L. obliqua</i> caterpillar bristles as antigen and has been used in other countries in South America to treat envenomation caused by distinct species of <i>Lonomia</i> . This study aimed to characterize the activities of toxins from <i>Lonomia descimoni</i> caterpillars found in Colombia and the neutralization of these toxins by the Brazilian <i>Lonomia</i> antivenom. The protein composition and coagulant, phospholipase A2, hyaluronidase, and defibrinogenating activities were evaluated and compared with the same parameters of the <i>L. obliqua</i> bristle extract. Immune recognition and the neutralizing ability of <i>Lonomia</i> antivenom were also determined. The results showed that the <i>L. descimoni</i> bristle extract presented marked differences in electrophoretic and mass spectrometry profiles and had coagulant, phospholipase A2, and hyaluronidase activities significantly less intense than those of the <i>L. obliqua</i> extract. In rats, <i>L. descimoni</i> extract induced coagulopathy and hemoglobinuria when injected by intravenous or intraperitoneal routes. The <i>Lonomia</i> antivenom recognized the toxins in the extract of <i>L. descimoni</i> and reversed the experimental envenomation in rats. Our results indicate that <i>L. descimoni</i> caterpillars possess toxins with weaker activities than those of <i>L. obliqua</i> but with the potential to cause envenomation. Moreover, the <i>Lonomia</i> antivenom recognized and neutralized the toxins in the <i>L. descimoni</i> bristle extract.
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