

***Botryocladia occidentalis* SULFATED GALACTAN INHIBITS HAEMOSTATIC ABNORMALITIES INDUCED BY DIFFERENT VENOMS**

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B. jararaca venom and *L. obliqua* caterpillar bristles extract contains proteins that to interfere blood clotting, leading to an important coagulopathy after accidental contact. In this study, we evaluate the potential inhibitory effects of the galactan isolated from *B. occidentalis*, red alga with anticoagulant action, on pro-hemostatic activities of *B. jararaca* and *L. obliqua* venoms including fibrinogen clotting, coagulation of human plasma and platelet aggregation. *B. occidentalis* (0.6 µg/mL) inhibited 66% of the *B. jararaca* (40 µg/mL)-induced plasma clotting. Four mg/mL of galactan was also effective in counteracting the *B. jararaca* venom (10 µg/mL)-induced fibrinogen clotting. According to fibrinogen clotting assay, we observed a protection upon venom (5 µg)-induced degradation of fibrinogen (SDS-PAGE 12%) by 2 mg of galactan. Interestingly, we observed that *B.occidentalis* (1 mg/mL) also was able to interfere with the human platelet aggregation induced by this venom (0.1 mg/mL). Additionally, the galactan (60 µg/mL) inhibited 60.9% of the *L.obliqua* bristle extract (70 µg/mL)-induced plasma clotting. This compound (1 mg/mL) interfered with the human platelet aggregation induced by 0.15 mg/mL of *L. oblique* extract . This approach indicates that this glactan has potential activity against snake and caterpillar venoms and also may contribute be useful for the development of compounds with antiophidic effect.

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