

**THE EFFECT OF SALINITY ON SUGAR COMPOSITION AND
ANTICOAGULANT ACTIVITY OF SULFATED POLYSACCHARIDES FROM
*CAULERPA CUPRESSOIDES***

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Seaweeds are source of several biopolymers as sulfated polysaccharides (SP). These polymers have many pharmacological applications, including anticoagulant activity. In the present study, we verified the influence of the salinity at the structure of the SP from the green alga *Caulerpa cupressoides* of Búzios (CCB), salinity 34,71‰, and Macau (CCM), salinity 39,50‰, Rio Grande do Norte, Brazil. The SP from CCB and CCM were extracted by proteolytic digestion, followed by separation into four fractions (F0.3, F0.5, F1.0 and F2.0) by sequential acetone precipitation. Electrophoretic and infra red analyses showed that similar fractions from algae of different salinity had not differences. However, aPTT anticoagulant test indicated that F1.0 from CCM was three time more potent than F1.0 from CCB. In addition, F1.0 from CCM had glucose as manly monosaccharide, whereas F1.0 from CCB had galactose. The results indicated that the salinity provokes alteration in the proportion of the monosaccharides of F1.0 fractions and that this modification was reflected in their anticoagulant activity.

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