

## BIOPRODUCTION OF METABOLITES OF *Canoparmelia texana* (TUCK.) ELIX & HALE FROM CELLULAR IMMOBILIZATION

Silva, N. H.<sup>2</sup>; Pereira, E. C. G.<sup>3</sup>; Eliasaro, S.<sup>4</sup>.; Wessen, C. K.<sup>1</sup>  
Serafim, A. T. N.<sup>1</sup>

<sup>1</sup>Curso de Mestrado em Bioquímica/UFPE; <sup>2</sup>Departamento de Bioquímica/UFPE; <sup>3</sup>Departamento de Ciências Geográficas/UFPE; <sup>4</sup>Departamento de Botânica/UFPR.

Since centuries ago lichens have been used as perfume, fixative and antibiotics, among other utilities. Due to its application in a large scale, huge amounts of lichen are destroyed, and its reposition is very slow. This way the collect should be very criterious for do not extinguish the lichenized micota. This study had as goal produce metabolites of *Canoparmelia texana* through pieces of stem *in natura* in bioreactores with system in repose (traditional), with movement and under continious flux. Bioreactores were mounted using kaolinite as matrix of inclosure and sodium acetate to 0,1mM, 1,0mM and 10,0mM as precursor biosynthetic. The immobilized liquenics cells in the diverse systems had all kept its vitality for the experiment. The three systems and the three concentrations of the precursor if had shown efficient in the bioproduction, with a discrete prominence for the system in movement and the concentration of 1,0mM, observing it presence of liquenics phenolics composts in the same. In agreement the chromatographic results, gotten from chromatography in thin layer, are bioproduced similar phenolics composts to found in the stem *in natura*, special the atronorin and the divaricatic acid.

**Supported by:** CNPq

**Key words:** *Canoparmelia texana*, cellular immobilization, lichenic substances