

DATAMINING OF CELL CYCLE GENES IN *LITOPENAEUS VANNAMEI*.

R.C.B. Silva¹; J.C.M.Tavares¹; D.M.Duarte¹; S.R. Batistuzzo de Medeiros¹;
L.F.Agnez-Lima¹.

¹ Departamento de Biologia Celular e Genética, Centro de Biociências,
Laboratório de Biologia Molecular e Genômica – UFRN.

The regulation of the cell cycle is an important mechanism for the maintenance of the genomics integrity. Studies about this mechanism have been developed in a variety of organisms, showing that these genes present homology such for the nucleotidics sequences as in the function. The aim of this work was to generate information about the genes involved in the cell cycle in *Litopenaeus vannamei*. Sequences of main proteins involved in the cell cycle in humans, yeast, *Drosophila* and *Danio rerio*, were gotten in the GenBank (<http://www.ncbi.nlm.nih.gov>), and were used to identify homologous nucleotidics sequences in the data base ShEST (<http://www.shrimp.ufscar.br>) using the program Tblastn. Diverse nucleotidics sequences from different cDNA libraries (Egg, Nauplius, Mysis and Muscle) with similarity to proteins involved in the cell cycle had been found. For the group of the ciclyns, the "e-values" were found between $3e^{-24}$ and $8e^{-13}$. For Kinases dependent of ciclyns the "e-values" values were between $4e^{-76}$ and $6e^{-34}$. These results suggest that the identified homologous sequences in the ShEST are possibly involved in the cell cycle in *L.vannamei*

Key words: cell cycle , shrimp , cyclin