

**ANALYSIS OF rDNA 16S DIVERSITY BETWEEN AMBIENT AND A CLINICAL ISOLATED STRAINS OF Chromobacterium violaceum**

COSTA, G.N.O.<sup>1</sup>, TALBOT, J.<sup>1</sup>, SANTOS, A.C.F.<sup>1</sup>, ARGÔLO FILHO, R. C.<sup>1</sup>,  
MAGALHÃES, J. T.<sup>1</sup>, DIAS, J. C. T.<sup>1</sup>, REZENDE, R. P.<sup>1</sup>  
ALEXANDER BIRBRAIR<sup>1</sup>

<sup>1</sup>DCB, Universidade Estadual de Santa Cruz, Ilhéus, Bahia, BRASIL  
alexbirb@usa.com

*Chromobacterium violaceum* is a saprophytic Gram negative rod found in soil and water, that normally produces violacein. Sporadically cases of infection in human have been described. There is little information concerning the molecular bases of the virulence of the microorganism and studies of the genetic diversity in this species practically do not exist. The aim of this work was study the genetic diversity between ambient and clinical strains, through DGGE (Denaturing Gradient Gel Electrophoresis). The work was proceeded with nine strains; the extraction of DNA was made through thermal shock and the DNA was visualized in 0.7% agarose gel; the amplification was done with primers from V6 up V8 regions of rDNA 16S of eubacteria with a GC clamp. It was verified that two strains from soil are different of the others in DGGE. These findings imply that the difference between these strains have relation with the presence or absence of some gene. The others strains have genetic similarity to the clinical strain. This work showed genetic diversity of the rDNA 16S, subsidizing the environmental management; contributing on the knowledge of this specie, giving subsidies for the development of diagnostic kits.

**Supported by:** FAPESP and CNPq

**Key words:** Chromobacterium violaceum, genetic diversity, DGGE