

***Cylindrospermum Alatosporum*: New Model Organism for the Production of Natural Bioactive Compounds**

Nabil El Jaber Vazdekis

Laboratory of Cell Cycles, Centre Algatech, Institute of Microbiology CAS, TŘEBOŇ

Cylindrospermum alatosporum CCALA 988 is a cyanobacterium that has the ability to produce puwainaphycin, a secondary metabolite that generates necrosis in mammalian cells. Our interest is focused on both the understanding of how the puwainaphycin gene cluster is regulated at genetic level under different growing conditions and also the genetic manipulation of this bacterium to generate new strains that could produce other puwainaphycin-relative active secondary metabolites.