

Euro Biotechnology 2021: Effects of N-Acyl homoserine lactones in real life - Omur Acet, Tarsus University, Turkey

Omur Acet

Abstract

Introduction and Aim: Bacteria benefit small signal molecules to observe population intensities. They adjust gene regulation in a way named Quorum Sensing (QS). The most common signalling molecules are N-Acyl Homoserine Lactones (AHLs) for Gram-negative bacteria groups. QS has a key role in the promoting of the bacterial gene that adapts to tough environmental situations for bacteria. It is involved in the arrangement of duties such as biofilm formation occurrence, virulence activity of bacteria, production of antibiotics, plasmid conjugal transfer incident, pigmentation phenomenon and production of exopolysaccharide (EPS). QS Clearly affects on health, agriculture and environment. AHL-mediated QS researches have been comprehensively studied and understood in depth for cell to cell intercommunication channel in Gram- negative bacteria. Hence, a extensive study of AHLs, which are bacterial signal molecules, is required. The recent studies have offered that knowing the density of the QS could offer much superiority. The purpose of this section is to examine the effects of QS-mediated AHLs in many areas by looking at them from different perspectives, such as clinic samples, food industry, aquatic life and wastewater treatment system. Having knowledge of QS-mediated AHL systems are extremely critical for future studies in many areas, such as health, food, agriculture and industry. The author is thankful for grants of the Scientific and Technological Research Council of Turkey (Grant Number: 119Z184) and Aksaray University Scientific Research Projects Coordination (Grant Number: 2018/060). Because the information obtained for preparation of this paper was gathered during these projects studies. Conclusion: It appears, MSC, G-CSF and Dihexa are promising candidates for adjunct therapies to promote limb transplant functional recovery.

Biography

Omur Acet received a bachelor's degree in Chemistry from Aksaray University, a master's degree and and doctorate in Chemistry from Aksaray University. He is currently working as an Assist. Prof. at Tarsus University. His research interests focus on detection some important molecules with chromatographic methods, molecularly imprinted polymers, biosensor studies.

Bottom Note: This work is partly presented at 25th European Biotechnology Congress at September 27-28, 2021 | Webinar

Omur Acet

Assistant Professor, Tarsus University, Turkey