RHAMNOLIPIDS BIOSURFACTANTS TO CONTROL *Listeria monocytogenes*.

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The emergence of tolerance in food pathogenic bacteria, combined with the increasing demand for “natural” and safety additives stimulates the search for new bio-preservatives to control food pathogens. *Listeria monocytogenes* has become one of the most important foodborne pathogens since several disease outbreaks have been linked to these bacteria. The rhamnolipids (RL) are biosurfactants which exhibit low toxicity, surface activity and antimicrobial properties against some gram-negative and gram-positive bacteria. The aim of this work was to evaluate the susceptibility of 32 *Listeria monocytogenes* cultures to rhamnolipids. Two rhamnolipids preparations were evaluated, the rhamnolipid from *P. aeruginosa* LBI produced and purified in the Microbial Biotechnology Laboratory (RL-MBL) and a commercial rhamnolipid (RL-Com). Susceptibility of cultures was determined by the minimal inhibitory concentration (MIC) using the micro-broth dilution technique. The MIC values varied from 78.1 µg mL⁻¹ to 2500 µg mL⁻¹, and 68.7% of strains were susceptible to RL-MBL whereas 90.6% to RL-Com. Results also showed that the rhamnolipid activity was primarily bacteriostatic. This work demonstrated that rhamnolipids have potential as agents to control the growth of *Listeria monocytogenes*. 