

***In Vitro* antibacterial activity of lactic acid bacteria isolated from goat's raw milk of Mostaganem (West Algeria) against Gram-negative bacteria responsible for urinary tract infections**

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Abstract

Urinary tract infections (UTI) are a serious bacterial pathological challenges all over the world, leading to respiratory infections, that's why new strategies don't cease to develop. Lactic acid bacteria having shown beneficial effects for years in various areas, may prove to be excellent candidates in medical field. The current research focused on the selection of lactic acid bacteria having the potential of an antibacterial activity against Gram-negative bacteria responsible for UTI, for an eventual use as a therapeutic agent. A total of 40 isolates were isolated from goat's raw milk of Mostaganem (West Algeria). In vitro tests were conducted in order to determine the efficiency of the isolates to produce antibacterial agents in interaction with uropathogens. Among 40 isolates, only 10 isolates identified as Lactobacilli and Lactococci were performant. The Screening showed that the inhibitor agent was proteinaceous substance. Therefore, it is noted that a treatment with presence of LAB is very encouraging as a result of the production of bacteriocin-like substance. On the other hand, LAB can be considered as a good alter-native to the large extent to the antibiotics in the treatment of UTI.

Keywords: goat's raw milk, UTI, Lactic acid bacteria, antibacterial activity, Lactobacilli,