# **Titre d’article**: Serotyping and antibiotic sensitivity of Listeria monocytogenes isolated from cheeses produced in the region of Algiers (Algeria)

**Abstract :**

Listeria monocytogenes causes invasive syndromes with the high mortality rates in specific population groups. Cheeses have been frequently involved in epidemics around the world. The objective of this study was to assess the prevalence of L. monocytogenes, study its serotyping and antibiotic resistance in the samples collected at different stages of cow milk cheese production in three production units located in the Algiers region. A total of 385 samples of dairy products were analyzed using the standard procedure EN ISO 11290-1, and the L. monocytogenes isolates were serotyped by polymerase chain reaction. The overall prevalence was 5.2% (20/385). The highest prevalence was in the hard cheese processing unit (3.12%) followed by the pressed cheese production unit (1.82%) and the soft cheese production unit (0.26%). Among these isolates, four serotypes identified, serotypes 4b (50%) and 1/2b (35%) are the most dominant followed successively by serotypes 1/2a (10%) and 4c (5%). Depending on the step of production, 11 strains of L. monocytogenes are isolated from packaged grated cheese, seven strains from the raw milk, one strain during refining and 1/2 b strain has been isolated bya surface swabbing. The study of the antimicrobial sensitivity of the isolates of L. monocytogenes showed significant sensitivity to antibiotics commonly used in animal and human listeriosis. In conclusion, the presence of serotypes 4b, 1/2b and 1/2a of L. monocytogenes in the samples is of great concern to public health as these serotypes can cause listeriosis in humans.