# **Titre d’article**: Research and molecular characteristic of Shiga toxinproducing Escherichia coli isolated from sheep carcasses

**Abstract :**

Domestic ruminants are regarded as the major reservoir of Shiga toxinproducing Escherichia coli (STEC) closely related to human infection. A total of 363 ovine carcasses were swabbed in an Algiers city slaughterhouse for research on STEC. First of all, screening of the STECs was carried out by a multiplex PCR searching for the genes coding for the virulence factors stx1, stx2 and eae. This step was followed by STEC isolation and serotyping. The presence of stx+ / stx+ eae+ genes was shown in 116 sheep carcasses (3195%). From the 116 positive samples, 20 bacterial strains (1724%) were isolated. Nineteen strains belonged to the species E. coli (STEC), and 1 belonged to Citrobacter braakii (eae+ stx1 + ). During this study, the presence of potentially pathogenic STEC for humans on the surface of sheep carcasses was confirmed. Corrective measures should be considered at the slaughterhouse level to avoid outbreaks of STEC in Algeria.