# **Titre d’article**: Sero-epidemiological Investigation of the Major Abortive Bacterial Agents in Ewes of M’Sila Governorate, Algeria

**Abstract :**

The aim ofthis study was to evaluate the seroprevalence, risk factors and zoonotic threats ofthe major abortive bacterial agents in sheep of M’Sila Governorate. A total of 184 serum samples were collected from ewes among 16 sheep flocks and tested for Coxiella burnetti, Chlamydia abortus, Brucella spp. and Salmonella abortusovis via ELISA. Simultaneously, a questionnaire was used to collect breeding management data. Seropositive results were as follows : Coxiella burnetti (27.9%), Salmonella abortusovis(15.9%), Chlamydia abortus(10.9%) and Brucella spp. (3.8%).The use of univariate analysis and multivariate logistic regression showed a highly significant correlation between Coxiella burnetti seropositivity and presence of cats in farms (OR = 5.75; 95% CI = 1.86-19.9; p= 0.001), while promiscuity with newly introduced animals was associated to Chlamydia abortusseropositivity (OR=3.37; 95%CI=1.01-14.9; p= 0.04). Additionally to the economic losses, the dissemination of Coxiella burnetti and Brucella spp. presentsuncontrollable zoonotic hazards.