UNIVERSITAT ROVIRA i VIRGILI

IDENTIFICATION AND ANTIMICROBIAL SUSCEPTIBILITY STUDY OF COLISTIN-, CEFTIOFUR-, AND CEFQUINOME-RESISTANT BACTERIA FROM RODENTS AND BIRDS IN CONTACT WITH PIG FARMS

TREBALL DE FI DE GRAU

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ABSTRACT

Rodents and birds in contact with both farms and hospitals can act as transmission vectors of resistance mechanisms to certain antimicrobials. Therefore, our objective is to identify resistance to three antimicrobials from European Medicines Agency category B in these animals. To achieve it, techniques like matrix-assisted laser desorption ionization-time of flight, Kirby-Bauer and microdilution antibiogram methods have been carried out. Finally, no strains resistant to colistin have been identified, but a 57.69% of strains were resistant to cephalosporins and four strains were resistant to other antimicrobials. Although the results obtained were not as expected, we must continue investigating this issue.

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