

**Article**

<https://doi.org/10.61900/SPJVS.2023.03.03>

**RESEARCH REGARDING THE RESISTANCE PHENOTYPES OF  
BACTERIA ISOLATED FROM DOGS WITH RESPIRATORY TRACT  
INFECTIONS**

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**Abstract**

The resistance phenotypes to animal pathogenic bacteria (both Gram-positive and Gram-negative bacteria) are increasing in frequency due to the use of antibiotic-based veterinary medicinal products in both in farm animals and pets. The research aimed to establish phenotypically the antibiotic resistance in bacterial strains isolated from dogs with various respiratory tract infections. Both susceptible Gram-positive and Gram-negative isolated strains had the highest frequency to enrofloxacin (82.45% and 81.81%). Gram-positive resistant strains had the highest frequency to penicillin G (70.18%), while Gram-negative strains had the highest frequency of resistance to lincomycin. The results confirm the marked increase of resistance phenotypes in both Gram-positive and Gram-negative strains to a wide range of antimicrobial substances, frequently used in the therapy of infectious diseases in dogs.

**Key words:** bacteria, dogs, resistance phenotypes, respiratory tract

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