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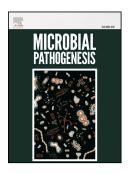
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Detection of virulence genes determining the ability to adhere and invade in *Campylobacter* spp. from cattle and swine in Poland

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Abstract

The aim of the study was to determine the prevalence of virulence genes responsible for the adhesion (flaA, cadF and racR) and invasion (virB11, iam and pldA) in Campylobacter isolates from cattle and swine and determine their adherence and invasion abilities. The studies conducted revealed high prevalence rate of adherence and invasion associated genes irrespective of the isolates origin. All Campylobacter strains of swine and cattle origin adhered to HeLa cells at mean level $0.1099\% \pm SD 0.1341\%$ and $0.0845\% \pm SD 0.1304\%$ of starting viable inoculum, respectively. However swine isolates exhibited higher invasion abilities ($0.0012\% \pm SD 0.0011\%$) compared to bovine isolates ($0.00038\% \pm SD 0.00055\%$). The results obtained revealed significantly positive correlation between invasion and adherence abilities of swine origin isolates (0.4867% in regard to 0.4867% in regard to 0.4867%

Key words: *Campylobacter*, virulence genes, pathogenesis, HeLa cells, adherence, invasiveness, swine, cattle

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