

## ISOLATION AND IDENTIFICATION OF THERMOPHILIC *CAMPYLOBACTER* SPP. BY PCR-RFLP IN BROILER FLOCKS

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**Summary.** The aim of the present work was to isolate and identify thermophilic *Campylobacter* spp. in broiler flocks using Polymerase Chain Reaction based Restriction Fragment Length Polymorphism (PCR- RFLP) method. Forty cloacal samples were taken and examined from four randomly selected poultry flocks in different poultry farms in Lithuania. Thermophilic *Campylobacter* spp. were isolated by both direct inoculation on mCCDA selective medium and by selective enrichment in Bolton enrichment broth. The results of our study showed that all four examined poultry flocks were contaminated with *Campylobacter* spp. Using PCR assay amplification of 491 bp amplicon of a highly polymorphic part of the 23S rRNA gene out of 40 broiler cloacal samples examined *Campylobacter* spp. were detected and confirmed in 37 samples (92.5 %). After subsequent digestion of the PCR products with restriction enzymes *AluI* and *TspEI*, *C. jejuni* was identified in 32 (86.5 %) and *C. coli* in 5 (13.5 %) out of 37 isolates. Three broiler flocks of four examined were contaminated only with *C. jejuni* and one flock carried out mixed infection with *C. jejuni* and *C. coli*. To our knowledge, this is the first report of thermophilic *Campylobacter* isolation and identification from broilers in Lithuania. The results obtained in present study could serve for future surveillance on *Campylobacter* bacteria.

**Key words:** *Campylobacter* spp., broilers, PCR-RFLP, identification.