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Poster (Painel)

1772-1 **MOLECULAR CHARACTERIZATION OF Corynebacterium pseudotuberculosis ISOLATED FROM GOATS USING ERIC-PCR**

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Resumo

Corynebacterium pseudotuberculosis is a relevant animal pathogen responsible for caseous lymphadenitis in goats and sheep. The disease is associated worldwide to significant losses to animal production. The molecular characterization of the *C. pseudotuberculosis*, achieved through RAPD, Ribotype, RFLP and PFGE, has shown high genetic homogeneity within the species. The aims of this study were (i) to evaluate the genetic diversity of *C. pseudotuberculosis* isolates in the Sertão region of Pernambuco State PE, Brazil, and (ii) to investigate the potential of ERIC-PCR as a tool for molecular typing of strains of *C. pseudotuberculosis* isolated from goats. Thirty four *C. pseudotuberculosis* strains - 32 field isolates from goats in the municipalities of Floresta e Ibimirim – PE, the 1002 vaccine strain, and the reference ATCC 19410 strain – and one *Rhodococcus equi* field isolate were fingerprinted using the primers ERIC-1R, ERIC-2, and ERIC-1R+ERIC-2 primer pair. Using 100% of similarity as a breakpoint, 8 genotypes were obtained for ERIC 1-PCR, 10 genotypes for ERIC 2-PCR and 7 genotypes for ERIC 1+2-PCR. The Hunter-Gaston Discriminatory Index (HGDI) calculated for the ERIC 1-PCR was 0.75, for the ERIC 2-PCR was 0.88, and for the ERIC 1+2-PCR was 0.79. For ERIC 1-PCR, ERIC 2-PCR, and ERIC 1+2-PCR, three, two and four genotypes found among *C. pseudotuberculosis* goat isolates have been previously described for strains isolated from sheep in the state of Minas Gerais by our research group, respectively. Those common profiles represent 62.85%, 8.57% and 54.28% of genotypes observed among goat isolates for ERIC 1-PCR, ERIC 2-PCR and ERIC 1+2-PCR, respectively. The results show that ERIC-PCR has good discriminatory power and advantages over other DNA-based typing methods, making it a useful tool to discriminate *C. pseudotuberculosis* isolates from goats. Acknowledgements: Fapemig, CNPq, Capes and FEP-MVZ for financial support.