

**ZOONOTIC SPECIES OF ARCOBACTER ISOLATED FROM ALLIGATORS (*Caiman yacare*)  
GROWN FOR CONSUMPTION**

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The agricultural scenario of Brazil stands out for its high production and exports of beef, pork and poultry meat. Aimed at environmental conservation and creation of other species for human consumption, the captive *Caiman yacare* production for human consumption was developed recently in Pantanal (Mato Grosso – BR). However, little is known about the pathogenic microorganisms may contaminate the products intended for marketing. *Arcobacter* spp. is a bacterial belonging to the Campylobacteracea family, and that is a serious problems related to public health, due to contamination of animal products. The aim of this work was to search for the presence of pathogenic species of *Arcobacter* spp. in feces of alligators intended for slaughter. Forty fecal swabs were collected from yacare (*Caiman yacare*). The material was homogenized in 2 mL of peptone water and 1 mL of this broth was inoculated in 9 mL of Johnson and Murano broth (JM). The tubes were incubated in aerobic conditions for 48h to 30°C. After incubation, an aliquot of 10 µL of broth was deposited on a sterile membrane (0.45 µm) placed on the surface of JM selective agar. After one hour, the filter was removed and the plate was stroked and incubated in aerobic conditions for 72h at 30°C. The colonies with *Arcobacter* characteristics were submitted to the identification by the polymerase chain reaction (PCR) and stored at -80° C. The species *A. butzleri* and *A. cryaerophilus* were identified by PCR and confirmed by MALDI-TOF MS. The results showed 37.5 (15/40) of samples were positive to *A. butzleri* and 50%. (20/40) of samples were positive to *A. cryaerophilus*. In 22.5% (9/40) of tested samples were isolated both *Arcobacter* species. This paper reports, for the first time, the isolation of *Arcobacter* pathogenic species in captive alligators. New studies are needed to determine the risk factors of this productive chain, once contamination may be related to the characteristics of enclosure and semiaquatic habitat, or the feeding of animals with bovine guts. Studies on the microbiota of vertebrates are concentrated in mammals which complicate the distinction of pathogenic and commensal agents in reptiles. The future perspectives is intended to search the virulence of the isolates and the zoonotic risk assessment from the commercial creation of alligators.

Keywords: *Arcobacter*, *Caiman yacare*, meat hygiene.

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