

RESUMO - PROTOZOOLOGIA E PATÓGENOS TRANSMITIDOS POR
VETORES

**IS THERE CIRCULATION OF ANAPLASMATACEAE AGENTS IN WHITE-
LIPPED PECCARIES (TAYASSU PECARI) FROM THE CERRADO BIOME,
MIDWESTERN BRAZIL?**

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Anaplasmatidae comprises obligate intracellular bacteria transmitted by hematophagous arthropods, including the genera *Anaplasma* and *Ehrlichia*,

which are relevant to veterinary medicine and public health. In Brazil, *Anaplasma marginale* causes economic losses in livestock production, while *Anaplasma platys* and *Ehrlichia canis* are mainly associated with infections in dogs. Recent studies have also demonstrated the circulation of Anaplasmataceae agents in wildlife, including cervids, birds, and primates, as well as the occurrence of novel, still uncharacterized genotypes. In suiforms, the molecular detection of *Anaplasma* and *Ehrlichia* has already been described in wild boars (*Sus scrofa*) and *Tayassu pecari*, suggesting the potential participation of these animals in transmission dynamics among wildlife, domestic animals, and humans, particularly in regions with intense anthropogenic-environmental interfaces. Thus, this study aimed to evaluate the prevalence of Anaplasmataceae agents in a population of *T. pecari* from natural and rural areas surrounding Emas National Park, using the 23S rRNA region (~169 bp) as the molecular target. Sampling was performed in 2025 and included animals introduced into captivity until 2022. Animal capture and handling were conducted in partnership with the Tropical Sustainability Institute (TSI) as part of a population management program for *T. pecari*. Whole blood samples were collected in EDTA tubes and stored at -20 °C until processing. DNA extraction was performed using an adapted manual magnetic bead protocol, and molecular analyses were conducted by qPCR using a hydrolysis probe system. Each animal was also inspected for the presence of arthropod vectors, and 20 animals were chemically restrained to allow a more detailed examination of lateral body regions for five minutes. Results were analyzed using confidence intervals and associations with sex, age group (young or adult), and animal origin (captive-born or wild-born). Associations were evaluated using Fisher's exact test and binomial confidence interval estimates. Of the 280 samples analyzed, 195 were positive for 23S rRNA, corresponding to a prevalence of 69.6% (95% CI: 63.9–75.0%). Significant associations were observed between positivity and sex ($p=0.007$), age ($p<0.001$), and origin ($p<0.001$), with higher positivity in males, adults, and wild-born animals. Five samples were sequenced, and preliminary BLAST analysis revealed 99.1% similarity to *Anaplasma* previously detected in xenarthrans (Accession number PX496885.1). No arthropod vectors were found parasitizing the animals. These findings suggest that *Tayassu pecari* may participate in the maintenance of *Anaplasma* in wildlife transmission cycles.

Palavras-chave: qpcr; wildlife reservoirs; one health; enzootic cycles; molecular epidemiology.