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# Influence of anthropization on gastrointestinal parasites of chacma baboons (*Papio ursinus*)

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## Résumé

Anthropogenic processes, defined as the transformation of natural landscapes by human activities, are increasing worldwide and are significantly affecting living organisms. These transformed landscapes not only decrease natural areas used by wildlife, but also create new ecological niches, food resources and environmental stressors. Consequently, these changes may have profound consequences on behavior, physiology and morphology of wildlife inhabiting anthropized areas. While there is a recent growing interest in understanding how urbanization impacts the gut microbiome, which plays a key role in wildlife health, there remains a lack of knowledge, especially in wild non-human primates. In the present study, we determined the composition of the gut microbiome of chacma baboons (*Papio ursinus*) from 500 fecal samples of 30 wild troops across a gradient of anthropization in Western Cape province of South Africa. By sequencing the amplicons of the V4 region of the 16S rRNA gene, we compared the diversity and abundance of gut bacterial communities at population level. In addition, we investigated how the gut microbiome of chacma baboons can vary along this gradient, determined by landscape analysis. Our findings shed light on how anthropogenic landscapes may alter the gut microbial composition and diversity in chacma baboons, which may influence their health directly or indirectly through different cascading effects (e.g. parasite infections, ...). From a global perspective, this study contributes to a better understanding of the consequences of anthropogenic activities on wildlife health and ecosystem dynamics.

**Mots-Clés:** Gut microbiome, anthropization, baboons, metabarcoding, landscape.

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