Anthelmintic screening of five palmatiobae species used in traditional medicine in Katanga Province (DR Congo)

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Introduction
Background: Resistance to known anthelmintics has become a growing concern1. Based on 2017–2019 ethnomedical and ethnoveterinary surveys carried out in Katanga Province, several species of shrub locally identified as Vitex species (Lamiaceae) are used to treat animal helminthias.

Aim of the study: In this study, 4 Vitex species (including different morphotypes) and Oldfieldia dactylophylla (Welw. ex. Oliv.) (Picrodendraceae; locally misidentified as Vitex congolensis De Wild and T. Durand) were selected for in vitro screening in order to search for new anthelmintic lead compounds.

Conclusion and perspectives
We provide scientific support for the traditional use of 4 Vitex species and Oldfieldia dactylophylla in traditional medicine in Katanga province for treating intestinal parasites in veterinary practice. Anthelmintic screening study showed that 9/84 tested extracts are significantly active on Caenorhabditis elegans. The motility inhibition measured on the N2 wild-type C. elegans model call for further studies to develop compounds or standardized extracts as possible treatments for parasitic worm infections.

References

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