



A review of *Bridelia ferruginea*, *Combretum glutinosum* and *Mitragyna inermis* plants used in zootherapeutic remedies in West Africa: historical origins, current uses and implications for conservation

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ABSTRACT

Context and objectives: West Africa has a very rich ethnozoological heritage due to its rich biodiversity, history and culture. Due to its location in a biodiversity hotspot, its agro-pastoralist traditions and its role during the maritime discoveries of the Renaissance, West Africa has a long list of animals and animal parts that have been used in its folk medicine. These uses can still be found in many historical documents and pharmacopeias. *Bridelia ferruginea*, *Combretum glutinosum* and *Mitragyna inermis* are tropical and subtropical medicinal plants widely used in general traditional African medicine and in West Africa in particularly, including Benin, Nigeria, Burkina Faso and Ivory Coast to treat many diseases such as bladder troubles, diabetes, dysentery, arterial hypertension, rheumatism pain. This study aims to do a literature review of these three tropical plants on their biological and pharmacological properties on veterinary medicine

Methodology and Results: A thorough literature search was done and plants little studied *Bridelia ferruginea*, *Mitragyna inermis* and *Combretum glutinosum* were chosen in the search for their anthelmintic activity against gastrointestinal parasitic nematodes of small ruminants in Djallonké. Also to confirm their use in traditional veterinary medicine in west Africa.

Conclusion and application of results: This literature review of their extracts properties showed that the plants possessed wide-reaching pharmacological actions, including anti-diabetic, cardiovascular disease antibacterial, anti-inflammatory, antispasmodic and antiplasmodial and justifies their use in traditional medicine for treating various diseases. This manuscript intends to be a starting point to these future investigations.

Key words: *Bridelia ferruginea*, *Combretum glutinosum*, *Mitragyna inermis*, anthelmintic, Traditional folk medicine, Pharmacological action.