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Healing of Donkeys´ wounds and complement fixing properties of *Cassia nigricans* and *Leptadenia lancifolia*

Introduction: *Cassia nigricans* and *Leptadenia lancifolia* are the most cited animal wound healing plants in Malian traditional medicine.

Objective: This study was conducted to verify the wound healing property of these plants and to evaluate the complement fixing ability of their water soluble polysaccharides.

Methods: Donkeys naturally wounded during work were recruited by SPANA Mali (Animal care NGO), classified in three groups, each treated with either the powder of the areal part of *Cassia nigricans*, *Leptadenia lancifolia*, or a conventional wound spray. The closure speed, the wound condition and the treatment duration were monitored. Water soluble polysaccharides were extracted from defatted plant powder and tested for their complement fixing ability using a test based on inhibition of haemolysis of sheep red blood cells by human complement.

Results: The wound healing activity of *C. nigicans* and *L. lancifolia* was equivalent to the control. The mean treatment duration was 27 days for *C. nigricans*, 36 days for *L. lancifolia* and 37 days for the control. Water 50° and 100^{o}C extracts of both plants had complement fixing ability; the concentrations inhibiting 50% of haemolysis of the most active extracts were 3.2µg/ml for *L. lancifolia* water 100°C and 5.5µg/ml for *C. nigricans* water 100°C extract.

Conclusion: The powdered areal part of *Cassia nigricans* and *Leptadenia lancifolia* can be used as a good alternative to conventional animal wound healing drugs.