

Phytochemical screening and cytotoxicity studies of *Chrysophyllum pruniforme* Pierre ex Engl. barks

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ABSTRACT

Background *Chrysophyllum pruniforme* of family sapotaceae is a plant used in traditional medicine in Gabon. **Materials and Methods** In this study, *C. pruniforme* barks were subjected to phytochemical screening and cytotoxicity investigations. Different concentrations of aqueous and total phenolic extract were tested on mice and on human erythrocytes. **Results** Phytochemical screening of *C. pruniforme* barks revealed the presence of flavonoids, saponins, and tannins, reducing sugars, polyphenols and traces of anthraquinones. When tested in vitro, aqueous and the phenolic extracts showed hemolytic activities on human erythrocytes with phenolic compounds being more cytotoxic than aqueous extracts. In vivo study of toxicity, allowed to determine the LD50 at 90 mg/kg for the doses of 50, 150 and 250 mg/kg of body weight. **Conclusion** These data indicate in one hand that *C. pruniforme* is rich in phenolic compounds and that the aqueous and total phenolic extracts could be considered as toxic for mice and maybe potentially toxic to humans in the other hand.

KEYWORDS

Chrysophyllum . *pruniforme* . cytotoxicity polyphenols . phytochemical screening

REFERENCES