Proposition of phytochemistry monograph for Terminalia nigrovenulosa Pierre (Combretaceae).

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Résumé

Terminalia nigrovenulosa Pierre (Combretaceae) is a popular medicinal plant used in the treatment of diarrhea and dysentery in Southeast Asian countries, in particular in Cambodia (Kham, 2004). Tannins are described in stem bark of Terminalia nigrovenulosa and considered as responsible for the anti-diarrheal activity. The chemical components mostly found are gallic acid and 3,4,5-trihydroxybenzoic acid (Dang-Minh, et al, 2013).

The quality control of Terminalia nigrovenulosa has not been done until now. Thus, the objective of our study is to propose a new phytochemistry monograph of Terminalia nigrovenulosa for Cambodian Pharmacopeia. The methods for identification and quantification controls consist of macro and microscopic studies, thin layer chromatography (TLC), colored reaction and UV/Visible spectrophotometry quantification.

Colored reactions showed that the stem bark of this species contains gallic as well as catechic tannins. The best TLC conditions for the identification use the eluent water: formic acid: ethyl acetate8:8:80 (v/v/v) and is revealed with Blue B salt. Total polyphenols in stem bark are quantified by the Folin Ciocalteu method.

In conclusion, a simple method for quality control of Terminalia nigrovenulosa stem bark is proposed, allowing the development of a certified traditional antidiarrheal phytomedicine.

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