Research paper
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Evaluation of Wound Healing Properties of Bioactive Fractions from the Extract of
*Butea monosperma* (Lam) Stem Bark

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**ABSTRACT**

The study aims to evaluate the wound healing properties of bioactive fractions from the extract of *Butea monosperma* (Lam) stem bark. In this study the stem bark powder was extracted with ethanol, further the ethanolic extract was fractionated with different solvents (petroleum ether, benzene, chloroform and acetone) in increasing order of polarity. Thus prepared extracts were subjected to preliminary phytochemical analysis. The wound healing activity of the ethanolic extract and the fractions isolated from the stem bark of *Butea monosperma* were evaluated in excision, incision and dead space wound healing models using Albino wistar rats. The wound healing activity was assessed by the breaking strength in case of incision wounds, epithelialization and wound contraction in case of excision wound and granulation tissue dry weight, breaking strength and hydroxyproline content in case of dead space wound. The ethanolic extract and the acetone fraction showed the significant wound healing activity on all three wound models. The phytochemical investigations revealed the presence of alkaloids, tannins, flavonoids, phenolic compounds and steroids. The increased rate of wound contraction and hydroxyproline content in the ethanolic extract and the acetone fraction treated animals provides a scientific base to the ethno medicinal use of *Butea monosperma*, which is largely attributable to the additive or synergistic effect of their constituents.

**Keywords:** *Butea monosperma*, Dead space wound, Excision wound, Incision wound.

Dear A. Muralidhar,

We are pleased to inform you that your manuscript "Evaluation of Wound Healing Properties of Bioactive Fractions from the Extract of Butea monosperma (Lam) Stem Bark" (AR-PM-2011-3-418) has been accepted for publication in International Journal of Phytomedicine.

With warm regards

Editorial Manager
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