**Titre d’article**: in vivo evaluation of wound healing and anti-inflammatory activity of methanolic extract of roots of centaurea africana (l.) In topical formulation

**Résumé :**

Objective: The present study was to evaluate the anti-inflammatory and wound healing activities of methanolic extract of Centaurea africana roots

in albino Wistar rats.

Methods: Following extraction of the C. africana roots with 80% methanol, the extract was formulated as an ointment (5% and 10%w/w). The ointment

was then evaluated for wound healing activity using excision and incision wound models. Parameters, including wound contraction, epithelization

time, histopathologically, and hydroxyproline content, were determined using the excision model, whereas tensile strength was measured from the

incision model. In parallel, edema of the ear, locally induced by croton oil, was studied for the assessment of anti-inflammatory activity.

Results: Wound treated with 5% and 10% methanolic extract ointment exhibited a significant wound healing activity in both models as evidenced

by increased wound contraction, shorter epithelization time, higher tissue breaking strength, and increased hydroxyproline content. The methanolic

extract also produced dose-related significant reduction (p<0.001) of inflammation.

Conclusion: Results of the present study revealed that C. africana displays remarkable wound healing and anti-inflammatory activities