Abstract:

The Nettle is a herbaceous and vivace plant of Asian origin. It is integrated in several areas especially alimentary, agricultural, industrial and medicinal. The aim of this work is to demonstrate through pharmacological tests a possible antioxidant and wound healing effect of crude saponins of the leaves of Urtica dioica L. The extraction method is based on the degree of solubility of saponins in organic solvents. The antioxidant activity of the leaves extracts was evaluated by the diphenyl-picryl-hydrazyl test (DPPH). The wound healing effect is interpreted on the basis of the healing time and the evaluation of the surface of wounds. It appears from this study that the Nettle is rich in saponins, either 4.08% to 30 g of plant powder. The results also showed significant antioxidant effect similar to that of ascorbic acid (p> 0.05) with an IC $_{50}$ of 0.159mg/ml. As regards the healing power, treatment of rats with the product based on crude saponins is achieved after 15 days, either 100% of wound reduction. This value is much higher than that obtained by the reference product (Madécassol®) on the same duration of treatment with 93.73% of wound reduction. The achievement of pharmacological tests has thus shown that crude saponins extracted from the leaves of Urtica dioica L. can be integrated into the pharmaceutical field or even in cosmetic.