FORMULATION AND ANTIOXIDANT ACTIVITY OF A CREAM CONTAINING VITIS VINIFERA.L LEAF EXTRACT

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ABSTRACT

Red vine (Vitis vinifera L.) is a plant easily procurable in Algeria, rich in various polyphenols (flavonoid, anthocyanin...) at various parts, yet it is still poorly exploited. These polyphenols have numerous properties including antioxidant property.

As a part of the valuation of the Algerian flora, the aim of this study was to formulate a cream containing an extract of red vine leaves and evaluate its antioxidant potential.

The extract was obtained by hydro-alcoholic extraction of Vitis vinifera.L leaves. Two creams “O/W” were prepared (base-formulation). The stability of these creams was studied at two different temperatures 25 °C and 40 °C for 60 days.

Creams were physicochemically stable. The study of antioxidant activity by the method of free radical scavenging using DPPH (2,2'-diphenyl-1 - picrylhydrazyl ) and the comparison with the two antioxidants of reference ( ascorbic acid and Butylhydroxytoluene ) revealed a moderate antioxidant potential for the extracts as well as the creams but with a minor potential.

In vivo studies are recommended to confirm the antioxidant action of such creams as well as the study of its long-term stability.

Keywords— antioxidant potential, emulsion, stability, Vitis vinifera L.

Themes: Sciences