Determination of Sun Protection Factor in Herbal Extracts and Oils

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ABSTRACT

The present study aims to evaluate UV radiation absorption potential of Natural extracts and volatile and non-volatile herbal oils used in sunscreen and show them in terms of SPF values. Skin shielding from cancer like melanoma, discoloration, wrinkles are most common nowadays. As said that protection should start from earlier childhood to prevent cancer later. The most important cause of skin cancer is UV rays from the sun. A number of sunscreens are available that is physical or chemical but they have many disadvantages, therefore it becomes necessary to look out for sunscreens with natural extracts and are conventional. Herbal extracts can be great for evaluations of ultraviolet absorption for SPF. Vegetables, potatoes, tomatoes and cucumbers were soaked in water to get aqueous extract. The soaked samples were filtered and absorbance was recorded at varying wavelength using UV- visible spectrophotometer. The sun protection factor (SPF) was calculated using the Mansur equation. The highest SPF was found in aqueous extract of potato followed by tomato and cucumber. These vegetables can be used as anti-solar agents when applied on skin or consumed orally. This will be a more economical and secure option to prevent skin damage from harmful UV radiations.

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