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UV RADIATION SCREENING POTENTIAL OF SUNSCREEN FORMULATIONS PREPARED FROM *Atalantia ceylanica* (Yaki-narang) EXTRACT

C.E. Liyanaarachchi[1], M.T. Napagoda[1*], S. Witharana[2], L. Jayasinghe[3]

[1]Department of Biochemistry, Faculty of Medicine, University of Ruhuna, Galle, Sri Lanka, [2]Department of Mechanical Engineering, Faculty of Engineering, University of Moratuwa, Moratuwa, Sri Lanka, [3]National Institute of Fundamental Studies, Kandy, Sri Lanka

**Corresponding author (email: mayurinapagoda@yahoo.com)*

Introduction

The ultraviolet (UV) radiation that is emitted from natural and artificial sources can cause various detrimental effects on human skin. These can be either acute or chronic. The acute effects are erythema, immediate pigment darkening (IPD), and free radical formation. The chronic effects are more disastrous, and they include premature photoaging and photo-carcinogenesis. The primary precaution to avoid these conditions relies on not letting the skin to get exposed to UV radiation from any source. However, in everyday settings, it is very hard to achieve this, especially, to avoid sunlight which is a major source of UV radiation. Therefore, various strategies have been introduced to overcome the detrimental effects caused by UV radiation. This includes approaches such as reducing the amount of UV radiation penetrating the skin. Sunscreens that contain UV filtering organic or inorganic molecules play a major role in this context [1]. After applying on the skin, the sunscreens can filter out UV radiation by reflection, scattering, and absorption [2,3]. These sunscreens are categorized into two groups as herbal sunscreens and synthetic sunscreens. However, synthetic sunscreens have been identified with causing potential side effects on human skin after application. Therefore, sunscreens that have an herbal origin are more prominent these days. The reason is that their side effects are less than synthetic sunscreens and display high UV absorption values in experimental settings. In the quest of finding new herbal-based sunscreen products, the knowledge from Sri Lankan indigenous medicine plays a vital role. Traditional medicine of Sri Lanka uses various herbs as therapeutics to cure various skin diseases. *Atalantia ceylanica* is a native Sri Lankan plant that uses to cure skin conditions and respiratory complaints [1]. Therefore, it is worth trying to develop herbal sunscreen products from this plant, and subsequently, assess their UV attenuating capability.