Pharmacological activities of *Moringa oleifera* in topical formulations

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*Moringa* (*Moringa oleifera*) is a widely adapted plant that is used as a medicinal herb, is already recorded since 2000 years B.C. The *Moringa oleifera* is a natural plant of the Indian northwest, widely distributed not only in India but in the Philippines, Egypt, Thailand, Ceylon, Burma, Malaysia, Singapore, Pakistan, Nigeria and Jamaica. *Moringa* is a plant having potential for producing various products for topical application. This species has antimicrobial activity against several human pathogens, including Gram-negative: *Shigella shinga*, *Pseudomonas aeruginosa*, *S. sonnei* and *Pseudomonas* spp. and also against Gram-positive: *Staphylococcus aureus*, *Bacillus cereus*, B-hemolytic *Streptococcus*, *Bacillus subtilis*, *Sarcina lutea* and *Bacillus megaterium*. This effect can be observed in different parts of the plant such as leaves, flowers, seeds, roots and fruit peel. In addition to the bactericidal effect, the aqueous extract of leaves of *Moringa oleifera* has anti-inflammatory, analgesic, rejuvenating and antioxidant activity. The extract of pulp and seeds of *Moringa* has healing action, activity attributed to the high content of protein, zinc and anti-microbial components present in *Moringa*. The healing activity of *Moringa oleifera* is able to overcome the healing suppression action of dexamethasone. *Moringa* seeds also have photoprotective activity, being considered an active sunscreen that can be incorporated into other formulations to provide an increase in photoprotection. The presence of flavonoids in *Moringa oleifera* is reason to encourage researchers to evaluate their potential sunscreen. Thus, several topical formulations can be prepared from the *Moringa oleifera* as ointments and creams with anti-inflammatory, healing, antimicrobial and even cosmetics with sunscreen and rejuvenating action.

Biography

Thalles Yuri Loiola Vasconcelos has completed his Bachelor of Pharmacy from the Applied Theology Institute (INTA) in 2015. He is the member of the Academic League of Pharmacology (LACFAR) of INTA Colleges. His experience in research areas includes pharmacotechnique, pharmaceutical technology and quality control for cosmetics and pharmaceuticals. Currently, he is a member of Research Group on Nutrition, Chemical Elements and Molecules (NELMOL), and Post-graduate student in the course of ‘Clinical Pharmacy and Pharmaceutical Care’ in Superior School of Amazon.

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