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Formulation and Evaluation of Polyherbal Anti-Aging Cream of Clitoria Ternatea, Mangifera Indica and Annona Squamosa

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Abstract: The main objective of the present study is to formulate the polyherbal antiaging cream and evaluation of various parameters of the cream. The evaluation parameters consist of phytochemical evaluation, physiological evaluation, stability studies, homogeneity, appearance, ph, etc. The polyherbal cream was formulated on basis of antioxidant activity of selected plant extracts. The cream was formulated by using natural herbal ingredients like Clitoria Ternatea (Butterfly pea), Mangifera indica (mango), and Annona squamosa (Custard Apple). Extraction of Mangifera indica and Annona Squamosa was carried out by cold maceration where Ethanol and distilled water used as solvent (Hydroalcoholic extraction). Extraction of Clitoria Ternatea was carried out by hot water extraction by using distilled water as a solvent. Phytochemical screening all the three extracts shows presence of flavonoids, tannins, alkaloids, and phenols. Formulated cream was evaluated by using different parameters such as pH, Appearance, Spreadability, Washability, Irritancy test, Stability Studies, etc. There is no evidence of phase separation and final formulation do not show rashes or redness, edema on skin. These study was suggest that different composition of all three extracts and base used in the cream are more stable and safe. It can be concluded from present study that herbal cream having an antioxidant activity without any side effect and can be used as a provision to barrier of skin and to avoid skin aging.

Keywords: Polyherbal Anti-aging cream, Skin aging, Clitoria Ternatea, Mangifera indica, Annona Squamosa, Antioxidant, Free radical.

REFERENCES

- [1]. Patil AP, Patil RV (2011) Clitoria Ternatea Linn: An overview Int. J. Pharm. Sci:3:20-23
- [2]. G.M. Masud Parvez, Pharmacological activities of Mango (Mangifera Indica): A Review, January 2016
- [3]. Reena Nair and Vijay Agrawal, A Review on the Nutritional Quality and Medicinal Value of Custard Apple-An Under Utilised Crop of Madhy Pradesh, India,Int.J.Curr.Microbiol.App.Sci (2017) 6(9): 1126-1132
- [4]. Anila L, Vijayalakshmi.NR, Antioxidant action of flavonoids from Mangifera indica and Emblica officinalis in hypercholesterolemic rats. Food Chem., 2003; 83: 569–574.
- **[5].** Meran Keshawa Ediriweera, Kamani Hemamala Tennekoon, and Sameera Ranganath Samarakoon, A Review on Ethnopharmacological Applications, Pharmacological Activities, and Bioactive Compounds of Mangifera indica (Mango)
- [6]. Cristina Giuliani, Paolo Garagnani, Claudio Franceschi, Genetic Theories of Aging, Encyclopedia of Gerontology and Population Aging, pp 1–9
- [7]. Manoj Kumar, Sushil Changan, et.al, Custard Apple (Annona squamosa L.) Leaves: Nutritional Composition, Phytochemical Profile, and Health-Promoting Biological Activities
- [8]. Nugraha A.S, Damayanti Y.D, Wangchuk P, Keller P.A, Anti-Infective and Anti-Cancer Properties of the Annona Species: Their Ethnomedicinal Uses, Alkaloid Diversity, and Pharmacological Activities
- [9]. M.B. Patel, R. J. Patel, and P. K. Parmar, Mangifera Indica (Mango), Pharmacognosy Review, 2010 Jan-Jun; 4(7): 42–48

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- [10]. Gyanranjan Mahalik,et.al, Ethnomedicinal, phytochemical and pharmacological properties of Mangifera indica L: A review, international Journal of Botany Studies, Volume 5; Issue 2; 2020; Page No.01-05
- [11]. Rahman Gul, Syed Umer Jan, Syed Faridullah, et.al, Preliminary Phytochemical Screening, Quantitative Analysis of Alkaloids, and Antioxidant Activity of Crude Plant Extracts from Ephedra Intermedia Indigenous to Balochistan, Volume 2017
- [12]. Dipali O. Somkuwar, Vilas a. Kamble, Phytochemical Screening of ethanolic extracts of stem, leaves, flower and Seed Kernel of Mangifera Indica L., int j pharm bio sci 2013 apr; 4(2): (p) 383 389.
- [13]. Aswani Kumar Sethi, Sangram Keshari Panda and Suchismita Pani, Formulation and Evaluation of poly herbal anti-aging cream, An International Peer Reviewed Journal for Pharmaceutical and Medical Research and Technology. Formulation and evaluation of herbal antibacterial, antifungal cream, World journal of pharmaceutical research, Volume 6, Issue 6, 994-1000
- [14]. Sai Lakshmi Jyothirmai Kala and Supriya Palaparthi, Formulation and in vitro evaluation of poly herbal antiaging face cream, International Journal of Current Pharmaceutical Research 9(4):75
- [15]. Aimi Muneerah Shamsuddin, Mahendran Sekar, Ahmad Zawawi Musa, Formulation and Evaluation of antiaging cream containing mangiferin, International Research Journal of Pharmacy 9(6):55-59
- [16]. Georgianna K. Oguis, et.al, Butterfly Pea (Clitoria ternatea), a Cyclotide-Bearing Plant WithApplications in Agriculture and Medicine, Frontiers in Plant Science.
- [17]. Neda G.D, Rabeta M.S, Ong M.T, Chemical composition and anti-proliferative properties of flowers of Clitoria Ternatea, International Food Research Journal 20(3): 1229-1234 (2013).
- [18]. Manoj Kumar, Sushil Changan, Maharishi Tomar, et.al, Custard Apple (Annona squamosa L.) Leaves: Nutritional Composition, Phytochemical Profile, and Health-Promoting Biological Activities.
- [19]. Garrido G, González D, Lemus Y, García D, Lodeiro L, Quintero G, Delporte C, Núñez-Sellés AJ, Delgado R. In vivo and in vitro anti-inflammatory activity of Mangifera indica L. extract (VIMANG). Pharmacol Res., 2004b; 50: 143–149.
- [20]. Gayan Chandrajith Anthocyanins Vidana Gamage, et.al, Anthocyanins from Clitoria ternatea Flower: Biosynthesis, Extraction, Stability, Antioxidant Activity, and Applications, Frontiers in Plant Science, 17 December 2021.
- [21]. Vandana mahawar, kalpana patidar, neelam joshi,et.al. Development and evaluation of herbal antiaging cream formulation containing annona squamosa leaf extract, Asian journal of pharmaceutical and clinical research. Vol 12, issue 2, 2019.