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Review on Natural Colorants Used in Cosmetic

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Abstract: This review offers an examination of the properties and recent advancements in research concerning the utilization of plant-derived colorants across the domains of food, cosmetics, and textile materials. The comprehensive analysis encompasses various types of colorants, including polyphenols such as anthocyanins, flavonol-quercetin, and curcumin, as well as isoprenoids like iridoids, carotenoids, and quinones. Additionally, N-heterocyclic compounds such as betalains and indigoids, along with melanins and tetrapyrroles, are scrutinized for their potential industrial applications. The review also delves into future perspectives, exploring the evolving landscape of applying plant-derived colorants in the coloration of diverse materials.

Keywords: Plant-based Colorants, Anthocyanins, Isoprenoids, Betalains, Cosmetic Industry, Textile Applications, Food Coloration

REFERENCES

- [1]. Vigneshwaran, L. V., et al. "A Review on Natural Colourants Used in Cosmetics." Current Research in Pharmaceutical Sciences (2023): 83-92.
- [2]. Andriamanantena, Mahery, et al. "Malagasy dye plant species: A promising source of novel natural colorants with potential applications–A review." Chemistry & Biodiversity 16.12 (2019): e1900442.
- [3]. Brudzyńska, Patrycja, Alina Sionkowska, and Michel Grisel. "Plant-derived colorants for food, cosmetic and textile industries: A review." Materials 14.13 (2021): 3484.
- [4]. Affat, Sajda S. "Classifications, advantages, disadvantages, toxicity effects of natural and synthetic dyes: A review." University of Thi-Qar Journal of Science 8.1 (2021): 130-135.
- [5]. Novais, Cláudia, et al. "Natural food colorants and preservatives: A review, a demand, and a challenge." Journal of agricultural and food chemistry 70.9 (2022): 2789-2805.
- [6]. Rymbai, Heiplanmi, Ram Roshan Sharma, and Manish Srivastav. "Bio-colorants and its implications in health and food industry-a review." International Journal of Pharmacological Research 3.4 (2011): 2228-2244.
- [7]. Benucci, Ilaria, et al. "Natural colorants from vegetable food waste: Recovery, regulatory aspects, and stability—A review." Comprehensive Reviews in Food Science and Food Safety 21.3 (2022): 2715-2737.
- [8]. Náthia-Neves, Grazielle, and M. Angela A. Meireles. "Genipap: A new perspective on natural colorants for the food industry." Food and Public Health 8.1 (2018): 21-33.
- [9]. Guerra, Eugenia, Maria Llompart, and Carmen Garcia-Jares. "Analysis of dyes in cosmetics: challenges and recent developments." Cosmetics 5.3 (2018): 47.
- [10]. Rajagopal, P. L., K. R. Sreejith, and K. Premaletha. "Natural colorants as safe additives: A review." World Wide J Multidiscipl Res Dev 2 (2016): 28-32.
- [11]. Wathoni, N. A. S. R. U. L., et al. "A review on herbal cosmetics in Indonesia." International Journal of Applied Pharmaceutics 10.5 (2018): 13-16.
- [12]. Wrolstad, Ronald E., and Catherine A. Culver. "Alternatives to those artificial FD&C food colorants." Annual review of food science and technology 3 (2012): 59-77.
- [13]. De Mejia, Elvira Gonzalez, et al. "The colors of health: Chemistry, bioactivity, and market demand for colorful foods and natural food sources of colorants." Annual Review of Food Science and Technology 11 (2020): 145-182.

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- [14]. Guerra, Eugenia, Maria Llompart, and Carmen Garcia-Jares. "Analysis of dyes in cosmetics: challenges and recent developments." Cosmetics 5.3 (2018): 47.
- [15]. Brudzyńska, Patrycja, et al. "Antioxidant Activity of Plant-Derived Colorants for Potential Cosmetic Application." Cosmetics 9.4 (2022): 81.
- [16]. Chaudhari, Nileshwari P., et al. "A review on herbal lipstick from different natural colouring pigment." Indian Journal of Drugs 6.3 (2018): 174-179.
- [17]. Prabhu, K. H., and Aniket S. Bhute. "Plant based natural dyes and mordants: A Review." J. Nat. Prod. Plant Resour 2.6 (2012): 649-664.
- [18]. Pimenta, Lúcia PS, et al. "Recent findings in azaphilone pigments." Journal of Fungi 7.7 (2021): 541.
- [19]. Simon, James E., et al. "Establishing standards on colors from natural sources." Journal of food science 82.11 (2017): 2539-2553.
- [20]. Pandey, Anjali, Poonam Singh, and LeelaIyengar. "Bacterial decolorization and degradation of azo dyes." International biodeterioration& biodegradation 59.2 (2007): 73-84.

