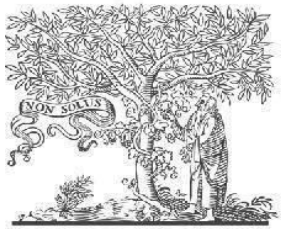
International Journal for Innovative Engineering and Management Research
PEER REVIEWED OPEN ACCESS INTERNATIONAL JOURNAL
www.ijiemr.org

COPY RIGHT



ELSEVIER SSRN

IJIEMR Transactions, online available on 31st December 2023. Link

https://ijiemr.org/downloads.php?vol=Volume-12&issue=issue12

DOI:10.48047/IJIEMR/V12/ISSUE12/77

Title: "DEVELOPMENT AND ASSESSMENT OF HERBAL EYE SHADOW FORMULATION"

Volume 12, ISSUE 12, Pages: 594- 599

Paper Authors
Niranjan Babu Mudduluru

USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper as Per UGC Guidelines We Are Providing A ElectronicBar code

International Journal for Innovative Engineering and Management Research
PEER REVIEWED OPEN ACCESS INTERNATIONAL JOURNAL
www.ijiemr.org

DEVELOPMENT AND ASSESSMENT OF HERBAL EYE SHADOW FORMULATION

Niranjan Babu Mudduluru
Department of Pharmacognosy, Seven Hills College of Pharmacy, Tirupati, A.P., India

Corresponding Author: Dr. M. Niranjan Babu
Professor, Department of Pharmacognosy, Seven Hills College of Pharmacy, Tirupati, A.P., India – 517561
7702484513, principal.cq@jntua.ac.in

Abstract
This study aimed to develop cosmetic formulations using Morus alba L. extract as a natural coloring agent, addressing concerns associated with synthetic colorants known for allergic reactions and carcinogenic potential. The dried and powdered fruit of Morus alba L. provides a pink color, which was utilized as a natural dye in the formulation of cosmetics, specifically eye shadows. Various ingredients including Morus alba L. fruit powder extract, starch, petroleum, and glitter were employed to create these cosmetic preparations, harnessing the natural colorant derived from the fruit extract.

Keyword- Morus alba L, Eye shadow, Carcinogenic

Introduction

The growing preference for herbal products, driven by their safety and reliability, has led to an increased demand for herbal cosmetics, particularly among contemporary women. Synthetic coloring agents used in cosmetics have raised concerns due to their potential carcinogenic effects. This study aims to develop and assess herbal eye shadow formulations using natural colorants such as mulberry fruit powder. The prepared herbal eye shadows were subjected to various evaluation tests including color assessment, pH, flow properties of the powder, bulk density, compressibility, water resistance, transfer resistance, dispersion of pigment, and color uniformity.

Mulberry, belonging to the genus Morus in the family Moraceae, serves as the source of natural colorant for this study.

Anatomy of the Eye

The eye is a delicate organ in the human body, structured as a nearly spherical organ with several distinct parts, each responsible for specific functions. The external structure of the eye is illustrated in Figure X. Key external structures include

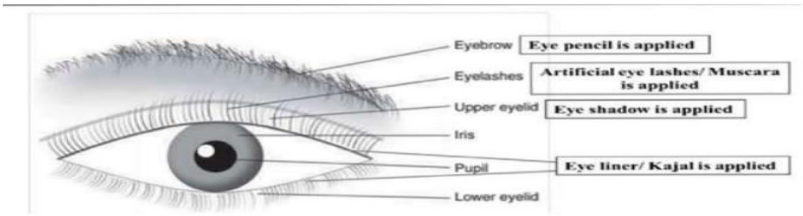


Figure 1: Anatomy of Eye

Eyebrow

Eyebrows are thick and delicate hairs located above the eyes, serving to prevent water, sweat, or other debris from entering the eye socket. They are crucial to facial expression and human communication.

Eyelids

Eyelids are thin layers of skin covering the outer surface of the eyes, protecting them from injuries. They also prevent blinking in response to foreign matter like dust, dirt, or debris, and shield the eyes from harmful bright light. Additionally, eyelids help to keep the eyes moist.

Eyelashes

Eyelashes provide additional protection to the eyes by filtering foreign particles such as dirt, dust, debris, or dandruff, preventing them from reaching the eye surface.

Eye Makeup

Throughout history, eye makeup has been an essential daily requirement for women of all dynasties and periods. Eyes not only serve as windows to the human soul but are also powerful tools for communication. Beautiful eyes are a hallmark of good looks and beauty. For centuries, eye makeup has played a crucial role in enhancing eye appearance. Various colors, styles, and trends have been used to adorn the eyes. Kohl, a black pigment, has been traditionally used to accentuate eyelashes, eyebrows, and eyelids.

History of Eyeshadow

Eyeshadows are cosmetic products designed to add dimension and depth to the eyes, making them appear larger and more attractive, thereby drawing attention to eye color and appearance. They are typically applied to the eyelids and below the eyebrows.

Eye shadows are available in various forms such as cream/gel, sticks, and powders, either pressed or loose, catering to different preferences and makeup techniques across different eras and cultures.

Figure 2: Colours & Shades of Eye shadows

Types of Eye shadows

Eye shadows come in various forms such as creams, sticks, and powders, available either pressed or loose.

Cream and Gel Eye shadows

Cream eye shadows are anhydrous emulsions formulated using oils thickened with waxes or clay-based gelling agents. These anhydrous cream eye shadows are also known as cream-to-powder eye shadows because they apply onto the eyelids in cream form and then transform into a soft powder upon application. They typically have higher viscosity, ensuring pearls and pigments are uniformly dispersed within the cream base. Cream eye shadows are favoured for their ease of application due to their rheological properties.

Figure 3: Cream and Gel Eye shadows

Eye shadow Sticks

Eye shadow sticks are formulated from oils, waxes, texturizing agents, and pigments dispersed within the same blend. They possess a soft, cream-like texture that glides smoothly over the eyelids. The main excipients used in eye shadow sticks are similar to those found in lipsticks, but eye shadow sticks are typically softer in consistency.

To formulate eye shadow sticks, a homogeneous mixture is first prepared by blending and grinding pigmented powders with white or off-white base components like talc. This blending process, known as extension, ensures uniform distribution of pigments. Additional white bases are then incorporated into the mixture, followed by the addition of fragrances if required. Pearls are introduced and mixed in at the final stage. The resulting powder mixture is ready for compression.

Figure 4: Eye shadow Sticks

Powder Eye shadows

Powder eye shadows, available in both loose and pressed forms, are among the most popular types. They are applied to the upper eyelid by gently stroking a fine brush or a soft sponge-tipped applicator across the skin.

Figure 5: Powder Eye shadows

MULBERRY FRUIT

Figure 6: Mulberry Fruit

PH parameter

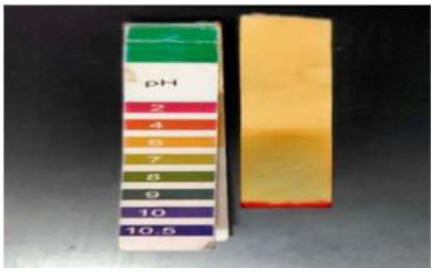


Figure 7: pH Parameter testing

Water resistance

Figure 8: Water Resistance of Eye Shadow

Evaluation Observations

Evaluation parameters	Inference
Color	Pink
PH	6 to 7
Flow properties of powder	Good
Bulk and tapped density of powder	Good
Compressibility of powder mixture	Good
PH parameter	6 to 7
Water resistance	Water resistance

Results

In recent decades, there has been a significant increase in the use of cosmetics among women. However, concerns regarding the hazards posed by synthetic chemicals have only recently gained prominence. The present study aimed to formulate and evaluate a herbal eye shadow using natural ingredients, with the goal of minimizing the side effects associated with synthetic alternatives.

From this investigation, it is concluded that the formulated herbal eye shadow presents a promising alternative for women, offering minimal side effects. Further detailed clinical trials are recommended to assess the formulation for enhanced efficacy.

Conclusion

The utilization of natural colorants in eye shadow formulations demonstrates minimal to no side effects. This encourages a shift towards employing natural colorants in eye shadow production, promoting healthier cosmetics that can be widely embraced by women with satisfaction.

References

1. A handbook of cosmetics by B.M.Mithal (Professor of pharmacyand deputy director) and Colour pigments of Beta Vulgaris Taproot (Swethakrutika), S Sairam, Sheik Azhar.
2. R.N.Sahan Pharm, PH D (Professor of pharmacy and group leader head) Birla Institute of technology and Science.
3. Formulation And Evaluation of Natural, Shaikh Sadiqi , Shraddha deb Malik & T Ramyasree (Hyderabad) 500097

4. Formulation and evaluation of a herbal Eyeshadow: A new approach Rautela Sunil , Tailor Chandra Shekhar,BadolaAshutosh (Division of pharmaceutical sciences, Shri guru ram raiinstitute of technology and Science.
5. Formulation and evaluation of herbal Eyeshadow from natural edible colouring matter richa Kothari Bhavya Shukla ,divyagautam ,minishabagaria and akansha Sharma (department of chemistry, school of Sciences, ITM university, Gwalior,(Madhya Pradesh), India(received 12 November ,2017 accepted 12 December,2017)(published by research trend ,www.resarchtrend.net)
6. Extraction of natural pigment from beet root (tanmay Sarkar, mrinalkantilsen and sumannihar.
7. Rani, G.pooja, V.harshvardhan, B.vamshi Madhav, B.pallavi. Formulation and evaluation of herbal Eye shadow from beetroot (beta vulgaris) extract
8. HDRD Gove of India project report by prof. Farhan J. Ahemad Jamia hamdard , New Delhi