



“FORMULATION AND EVALUATION OF HERBAL EYESHADOW”

¹Ms. Megha S. Patel, ²Ayushi Makwan, ³Diya Patel

¹Associate Professor, ²Student Researcher, ³Student Researcher

¹B. Pharmacy College, Rampura-Kakanpur, Godhra, India.

ABSTRACT

The demand for herbal based products has arisen due to the safety and dependability of natural products. The usage of herbal cosmetics by modern ladies has grown in popularity. It has been discovered that synthetic coloring compounds used in cosmetics have carcinogenic properties. The prepared herbaleye makeup underwent many evaluation procedures, comprising testing for color, pH, and flow qualities. Powder, density of the powder combination in bulk, the pH parameter, the powder mixture's compressibility, resistance to water, Transfer resistance, pigment dispersion, uniformity of color, strength of application.

Eye shadow and cream displayed analytical adherence property and proper color dissipation with melting point of 480 degrees Celsius. Patch essay on the levies displayed no signals of skin aggravation. The results of the study verified that the color prized from piper betel and Acacia catechu may document to exist a glamorous attachment and routine as a cover artificial pigments colorful ornamental phrasings.

KEY WORDS: Eye shadow, Herbal cosmetic, Rose, Aparajita, Natural source, Evaluation.

CHEPATER:1: INTRODUCTION

1.1 DEFINITION OF EYES:

The eye is the delicate organ in human body, with a several parts in a near spherical structure. Each part of eye is responsible for a certain action. The external structure of eye is given in fig. 1. The external structures of the eye include:

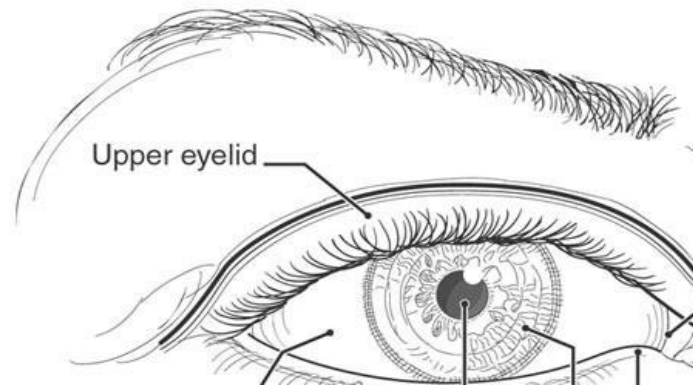


FIG:1.1 EYE

1.2 EYE LID:

Thin layer of the skin on outer surface to protect surface of eyes from injury. Protect eye from blinking if foreign matters (dust, dirt or debris) come closed to eyes and bright light harmful to eyes, helps to moisten the eyes, eye lashes, give additional protection to eyes. Filter foreign particle like dirt, dust, debris or dandruff and prevent them from falling the eye surface.

1.3 EYE MAKEUP:

During all dynasties and periods, the eye makeup remained a daily pre- requisite for women. Eyes are not only the windows to the human soul, but also a powerful tool for communication. A brace of dazzling eyes is a sign of good looks and beauty. Since centuries, eye makeup has played an important role in highlighting the eyes. In historical eras and time periods, different types of colors, styles and trends were used to decorate the eyes. Black pigments/color in the form of kohl was used for centuries to accentuating eyelashes, eyebrows and eyelids.

1.4 EYE SHADOW:

Eye shadow are available in the market to add dimension and depth to the eyes , make eyes bigger and attractive there by drawing attention to the eye color or eye appearance. They are designed to apply to eyelids and below eyebrows. Eye shadows are formulated in the form of cream/gel, stick and powders either pressed or loose.



FIG 1.2 EYE SHADOW PELLETE

1.5 TYPES OF EYE SHADOW:

Eye shadow are available in the form of cream/gel, powders, and sticks either pressed or loose.

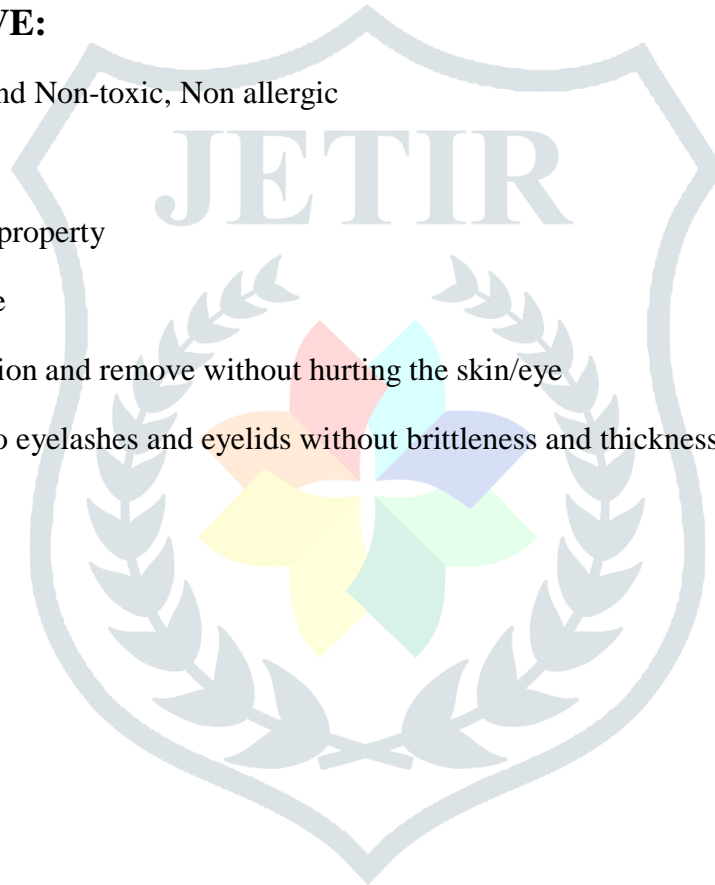
- 1.4.1 Cream / gel eye shadow
- 1.4.2 Powder eye shadow
- 1.4.3 Stick eye shadow
- 1.4.4 Liquid eye shadow

CHAPTER:2 AIM AND OBJECTIVE HERBAL EYESHADOW

2.1 AIM: Formulation and evaluation of Herbal Eye Shadow.

2.2 OBJECTIVE:

1. Non-irritating and Non-toxic, Non allergic
2. Long lasting
3. Good coverage property
4. Water resistance
5. Ease in application and remove without hurting the skin/eye
6. Adhere firmly to eyelashes and eyelids without brittleness and thickness.



CHAPTER:3 MATERIAL AND METHODS

3.1: Collection of material:

TABLE 3.1 MATERIAL

No	Material used	source
1	Rose	Garden of B.Pharmacy college rampura
2	Aparajita	Garden of B.Pharmacy college rampura
3	Mulethi	Local Market
4	Coconut oil	Local Market
5	Corn starch	Local Market

3.2: Material and its role:

TABLE 3.2 MATERIAL AND ITS PROPERTIES

No	Ingredients	Properties
1	Rose	Anti-wrinkle
2	Aparajita	Anti-inflammatory
3	Mulethi	Skin brightening & lightening properties
4	Coconut oil	Moisturizing, protective and nutritional properties
5	Corn starch	As absorbent

3.3: Formulation of Herbal Eye shadow:

TABLE 3.3 FORMULATION

No	Ingredients	Formulation		
		F1	F2	F3
		Dusty pink	Blue ocean	Spell book
1	Rose	2.5gm	-	3gm
2	Aparajita	-	2.5gm	3gm
3	Mulethi	0.5gm	0.5gm	0.5gm
4	Coconut oil	4-5 drops	4-5 drops	5-6 drops
5	Corn starch	5gm	5gm	5gm

3.4: METHOD OF PREPARATION:

All the ingredients are collected from the market.

Flowers are collected from the nursery and authenticate by the botanist.

Properly dried the flower petals and after dried to make powder through mixture

Accurately weight all the ingredients individually

Firstly, cornstarch is mixed with rose powder in porcelain dish.



Then, both the powder passed through the sieve.



Mix coconut oil and mulethi powder in it respectively



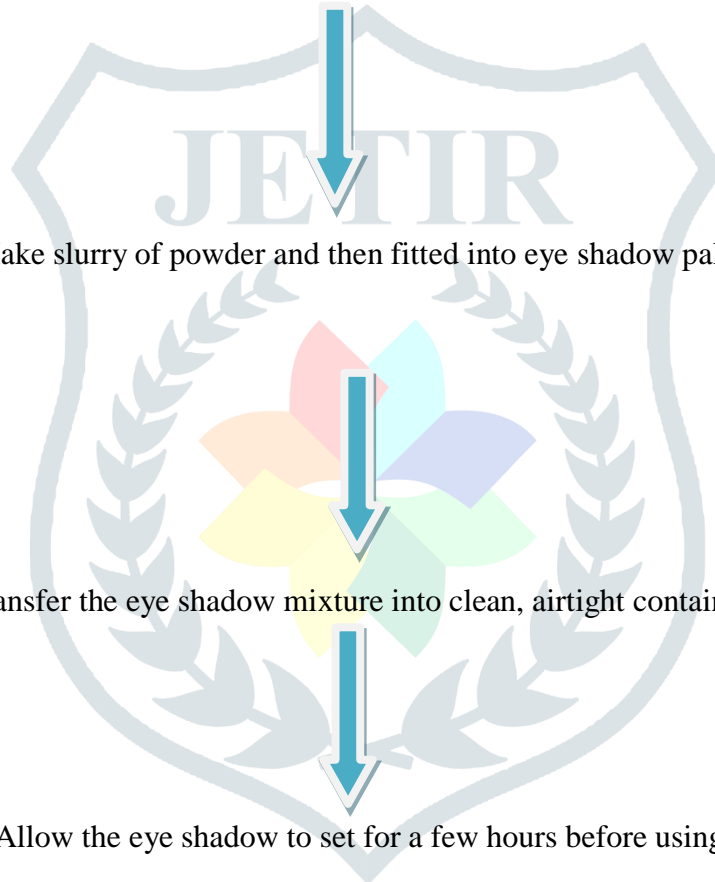
Make slurry of powder and then fitted into eye shadow pallet



Transfer the eye shadow mixture into clean, airtight containers



Allow the eye shadow to set for a few hours before using.





CHAPTER :4 EVALUATION PARAMETER

Evaluation of Herbal Eye Shadow: - Various evaluation test include Flow properties, bulk and tapped density, compressibility of powder, dispersion of pigment and color uniformity, skin irritation, water resistance, transfer resistance.

4.1 Flow properties of powder:

The flow properties of powder type of eye makeup products should be determined especially during filling process of loose powder to the final container or before the compression of pressed cake in case of compressed powder. Control of the powder flow and density of final products is important to achieve high quality of finished eye makeup products. Flow properties are measured in terms of angle of repose. Smaller the angle of repose better will be the flow and vice versa. The angle of repose determined by fixed funnel method.



FIG 4.1: ANGLE OF REPOSE

TABLE 4.1 STANDARD RANGE FOR ANGLE OF REPOSE

Flow Properties	Angle of Repose (degree)
Excellent	25-30
Good	31-35
Fair- aid not needed	36-40
Passable – may hang up	41-45
Poor – must agitate, vibrant	46-55
Very poor	56-65
Very, very poor	>66

4.2 Bulk density and tapped density:

The bulk density and tapped density are measured for determining the trapped air in the powder and to ensure free flowability. The bulk density of a powder is the ratio of Mass of powder sample and its total volume including void spaces/volume. It is expressed as gram permilliliter.

Tapped density is obtained after tapping and is measured as the ratio of the known mass of the powder and its total volume occupied without void volume. Tapping of powder is done in a apparatus that lifts and drops the volumetric cylinder containing powder at a fixed distance. Tapped density is always higher than bulk density. Both the densities provide information about the followability of the powder.



FIG 4.2 BULK AND TAPPED DENSITY

4.3 Dispersion of pigments and color uniformity:

Homogenous dispersion of pearls and pigments is a critical parameter for quality eye makeup products. Pigments are used in higher concentrations for powder eye shadows and if any undispered pigments is present that appears as streaks on application to the skin. Streakiness and color uniformity are evaluated either visually or by spectrophotometric and colorimetric techniques or by image analysis.



FIG 4.3 DESPERION OF PIGMENTS & COLOR UNIFORMITY

4.4 Skin irritation test:

Apply the eye shadow on the skin for 24 hours and observe.



FIG 4.4 SKIN IRRITATION TEST

4.5 Water resistance:

The water resistance or waterproof properties of eye shadow can be evaluated by applying a known concentration of the eye make up product on the back side of the hand and is allowed to set for a minutes. The hand is the immersed into water or hold it under running water againfor a minute. Remaining amount left on the hand after removing the eye makeup product by water, is analyzevisually or using a soft ware made for such analysis.



FIG 4.5 WATER RESISTANCE

4.6 Transfer resistance:

Transfer resistance of a cosmetics refers to the ability of a product to resist abrasive removal. It is defined as a resistance against transferring of product from skin to other surfaces like clothes, etc. The test transfer resistance is performed by applying a known concentration of eye makeup product onto the backside of the hand and is allowed to set for a minutes. Then, a tissue paper is touched with slight pressure over the area for a minute without rubbing. The amount of makeup product transferred to tissue paper is analyzed visusally or by software used for such analysis.



FIG 4.6 Transfer resistance

4.7 Compressibility of powder mixture:

Present compressibility (Carr's index) and Hausner's ration is calculated using bulk and tapped densities. Inter-particle interactions significantly influence the powder flow, which are based on these parameters. Lower the values of compressibility index and hausner's ration, better will be the flow. These interaction are less significant in free-flowing powder samples, and both the densities will be closer in values. Greater inter-particle interactions are there in poor flowing powder samples, and more difference will be observed between bulk se is determined by powder pile method.

CHAPTER:5 RESULT

TABLE 5.1 RESULT

Sr.no	Evaluation parameter	Inference
1	Color	Dusty Pink, Blue ocean, spell book
2	Flow properties	passable
3	Bulk density	Fair
4	Tapped density	Fair
5	Skin irritation	Pass

6	Water resistance	Water resistance
7	Transfer resistance	Transfer resistance
8	Compressibility of powdermixture	Good
9	Dispersion of pigments	Good
10	Color uniformity	Uniform color

CHAPTER:6 CONCLUSION

This review concludes that the operation of commonplace colouring in Eye shadow expression having no or minimal side effects. Accordingly, we might move towards the operation of the commonplace coloring to preparing Eye Shadow.

This review concludes that the application of commonplace colorants in Eye Shadow formulation having no or minimum side effects.

The use of natural color is step towards healthy cosmetics and which can be widely utilized by the women with great pleasure.

This formulated herbal Eye shadow has better option to women with minimal side effects though a detailed clinical trials may be done to assess the formulation for better efficacy.

CHAPTER:7 REFERENCES

1. Mr.Pradip D. Dhangar, Mr. Harshala shimoi, Ms. Neha Jaiwal “ Formulation and evaluation of eye shadow” International research journal of modernization in engineering technology and sciences, Edition 2023, Volume-2 issue 5 May 2023, PP 41-43.
2. Ms. Astha Kotnala, Ms. Kajal Verma, Dr. Rajiv Kumar ‘Indian medicinal plant’ Journal of Biomedical & Therapeutic sciences, Edition 2019, PP 78-105.
3. Harshali wadekar Rizwan thara International journal of science of research, Edition 2019, Issue 8 August, PP 489.
4. Priya jungle, P.s Kore, Aditya Kadam “Formulation and antiglycation properties of butterfly pea” SGVU journal of pharmaceutical research & education 2022, PP 456-489.
5. B.M Mithal, “Natural color pigments” (Swetha Kriutika) A handbook of cosmetics, Edition 2015, Volume-1, issue 22 july, PP 265-270.
6. Bender, D.A., and A.E. Bender. 2005. A dictionary of food and nutrition, New York: Oxford University Press. ISBN 01986097612.
7. Shweta A Rathod, Ganesh Nandakishor Bhandare, “Formulation and Evaluation homemade of herbal eye shadow from natural coloring matter”. International Journal of Novel Research and development (IJNRD), Volume 7, Issue 9 september 2022,294-3), PP 04.
8. Prof. Farhan J. Ahmeda jamia Hamdard HDRD, “Gove of india project report by New

Delhi.

9. Hilda Bulter, Poicher's performs, Cosmetics and soaps, Makeup of makeup: "Decoding eye shadow" Kul academies Publishers, edition 2017, Volume-3 PP 44-48.

10.A.R. Oyi, J.A onaolapo and R.C. obi, "Formulation and antimicrobial studies of coconut oil" Research journal of applied science, engineering and technology, Edition 2010, Issue 10 March 2010, PP 133-137.

11.A handbook of cosmetics by B.M Mithal M.Pharm, PH D(Professor of pharmacy and deputy director) and color pigments of Beta vulgaris Taproot(Swetha Krutika), S Sairam, Sheik, Azhar.

12.Formulation and evaluation of a herbal Eye shadow: A new approach Rautela sunil, Tailor Chandra shekhar, Badola Ashutosh (Division of pharmaceutical sciences, Shri guru ram rai institute of technology and science).

13.Formulation and evaluation of Herbal eye shadow from natural edible coloring matter richa Kothari bhavya shukla, Divya gautam, Minisha bagaria 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.

14.Prof Dr Ali-snafi, "Pharmacology importance of clitoria ternatea a review" , IOSR Journal of Pharmacy, 2016 Volme 6.

15.Kapply s, Shirwaikar A and Shirwaikar A. Coconut oil – review of potential application, Hygenia J Drug Med. 2015: 7(2): PP 34-41.

16.Wilma f.berfeid.paul W. synder "Final report of ghe safety assessment of cosmetics ingridentis derived from zea mays(corn)" International journalof toxicology 30. 2011, PP 17-39.

17.Krishna AG, Gaurav R,Singh BA, Kumar PP, Preeti C. Coconut oil: Chemistry production and its application a review. India coconut J. 2010:53(3): PP 15-27.

18.Patel SS, Goyal RK, Emblica Officinalis Geart: A Comprehensive Review on Photochemistry, Pharmacology and Ethno medicinal uses. Res J Med Plant 2012: 6.6-16.1

19.Extraction od natural pigments from Rose, Apparajita (Tanmay sarkar, mrinkal Kantil sen and suman nihar. Edition 2011, PP 235-239.

20.G sudha rani, G Pooja, V harshvardhan, B vamshi madhav, B Pallavi, Formulation and evaluation of herbal eye shadow from rose, Apparajita Edition 2015, PP 135-138.

21.HDRD Gove of india project report by Prof. Farhan J. Ahemad JamiaHAMdard, New Delhi.