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Herbal Jasmine Facial Toner: A Review on Formulation, Phytochemistry, and Cosmeceutical Applications

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Abstract: Herbal cosmetics have gained significant importance in modern skincare as people become more aware of the dangers of synthetic chemicals.
Facial toners are popular cosmetic products that help keep skin pH balanced, remove impurities, tighten pores, and refresh the skin. Jasmine (Jasminum sambac and Jasminum officinale) has antioxidant, antimicrobial, anti-inflammatory, soothing, moisturizing, and aromatherapeutic properties, making it an ideal ingredient for herbal cosmetic formulations. Hydration, skin rejuvenation, reduction of acne-causing microorganisms, and skin texture enhancement are among the many benefits of herbal jasmine facial toner.(2,3)
The current review focuses on the botanical profile, phytochemistry, pharmacological activities, cosmetic applications, extraction methods, formulation techniques, mechanism of action, evaluation parameters, stability studies, benefits, limitations, and future perspectives of herbal jasmine facial toner.(1)
Keywords: Jasmine, Herbal toner, Facial toner, Cosmetic formulation, Herbal cosmetics, Antioxidant, Skin care, Jasminum sambac.

I. INTRODUCTION

The largest organ in the human body, the skin serves as a defense against chemical irritants, microbes, UV light, and environmental contaminants. Skin issues like dryness, irritation, early aging, pigmentation, acne, and inflammation are brought on by prolonged exposure to outside factors.
Cosmetics are used to protect and preserve skin health in addition to improving attractiveness. Among these cosmetic preparations, facial toners are commonly used after cleansing to remove residual dirt and oil, restore skin pH, tighten pores, and prepare the skin for moisturization. Alcohol and artificial ingredients found in traditional face toners frequently resulted in dryness and discomfort.(3)
Jasmine is one of the most prized medicinal and aromatic plants used in perfumes, aromatherapy, traditional medicine, and cosmetics; its flowers contain essential oils, flavonoids, alkaloids, tannins, phenolic compounds, and aromatic constituents responsible for therapeutic and cosmetic activities.
As consumers become more conscious of the negative effects of synthetic cosmetics, they are turning to herbal skincare products. Herbal toners made from medicinal plants are thought to be safer, more environmentally friendly, and beneficial because they contain natural bioactive compounds.(4,5)
Jasmine's skin-beneficial qualities and attractive scent make it a good component for herbal face toners. Antioxidant, anti-inflammatory, antibacterial, cooling, moisturizing, and calming benefits are all provided by jasmine-based products. The importance of herbal jasmine facial toner in herbal cosmetic research is highlighted in this review, which offers a thorough overview.(4)

II. SKIN AND ITS IMPORTANCE IN COSMETIC SCIENCE

A. Skin's Structure

Three main layers make up human skin:
1.Epidermis
The skin's outermost layer of defense is called the epidermis. It has melanocytes and keratinocytes that shield the body from UV rays and external harm.

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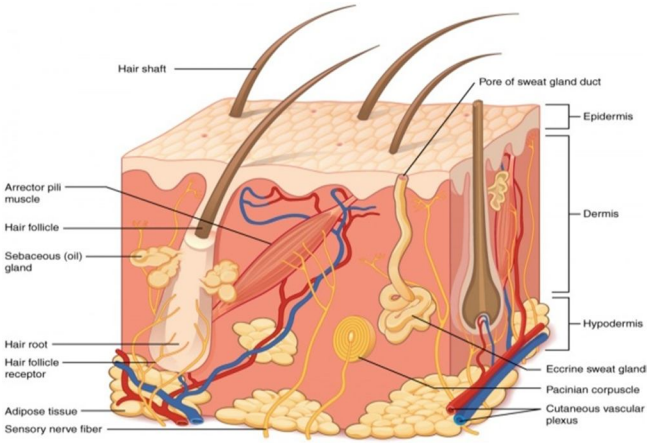


Fig no.1: Layers of skin

2. Dermal
Collagen fibers, elastin, sebaceous glands, sweat glands, nerves, and blood arteries are all found in the dermis. It gives the skin flexibility, strength, and nourishment.

3. Hypodermal
Fat and connective tissue make up the majority of the hypodermis or subcutaneous tissue. It provides protection and insulation.

B. Skin's Purposes
•Protection from infections
• Body temperature regulation
• The sense of touch • Avoiding water loss
• Vitamin D production
• Immune response

C. Frequent Skin Issues
• Vulgarized skin
• Wet skin Overpigmentation
• Aging too quickly
• Sunburn
• Itching and redness
• An excess of oil output
The need for herbal skincare products has grown as certain skin conditions become more common.(6,7)

III. COSMETIC HERBALS

Herbal cosmetics are formulas made with substances obtained from plants that are meant to cleanse, beautify, and shield the skin without having negative side effects.(8)

A. Herbal Cosmetics' Benefits
• Safe and organic
• Few adverse effects
• Decomposable
• Ecologically sustainable
• Rich in minerals and antioxidants
• Increased customer acceptance(10)

B. Growing Interest in Herbal Skincare

Herbal and natural products are becoming more and more popular in the global cosmetics market because of:

- A greater understanding of chemical toxicity
- A preference for eco-friendly goods
- An increase in delicate skin problems
- Clean beauty products' popularity

IV. FACIAL TONERS

After cleansing, facial toners water-based skincare products are used to eliminate remaining pollutants, rebalance pH, tighten pores, and revitalize the skin.(9)

The purposes of facial toners

- Get rid of extra dirt and grease. Restore the pH of the skin.

Hydrate your skin.

Pores should be tightened.

- Prevent the development of acne
- Get skin ready for serums and moisturizers.

A. Facial Toner Types

a)One Alcohol-Based Toner

These toners are mostly used for oily skin and contain alcohol. They might, however, irritate and dry you out.

b)Two Toners Based on Water

These are mild formulas that are appropriate for skin that is sensitive.

c)Three Herbal Toners

These toners, which are made from flower waters and herbal extracts, offer both medicinal and cosmetic advantages.(12)



Fig no.2:Toners for different skin types

The ideal qualities of a herbal toner

- A pleasant scent
- pH is skin-friendly
- Non-aggravating • A stable formula
- Devoid of dangerous substances
- Its calming and hydrating qualities(14)

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V. BOTANICAL OVERVIEW OF JASMINE

Botanical Classification

Parameter	Description
Kingdom	Plantae
Family	Oleaceae
Genus	*Jasminum*
Species	*Jasminum sambac*, *Jasminum officinale*
Common Name	Jasmine, Mogra

A. Morphology

A fragrant white blossom, jasmine is an evergreen plant or vine. The blooms are prized for their fragrant oil and bloom mostly in the warm seasons.(15)

India, China, Egypt, Thailand, Indonesia, and Mediterranean nations are among those that grow jasmine.

The use of aromatherapy

• Rituals of faith



Fig no.3: Jasmine flower

• The scent industry

• The use of herbs

• Skin care arrangements

Hair oils and makeup

B. Jasmine's Phytochemical Components

Many bioactive substances found in jasmine blossoms have medicinal and cosmetic properties.

1. Principal Participants

Flavonoids

• Phenolic substances

Alkaloids
Saponins
Tannins
Glycosides
• Essential oils
Linalool
Benzyl acetate
• Farnesol
• Indole
Jasmone

2. Components of Essential Oils
Jasmine's fragrant oil includes: Benzyl alcohol
Benzyl acetate
Linalool
• Geraniol
• Nerolidol
Eugenol
These components support antioxidant properties, antibacterial activities, and aroma.

3. Phytochemicals' Significance in Skin Care
Phytochemicals shield the skin from environmental damage, microbial infections, oxidative stress, and inflammation.(13)

C. Jasmine's Pharmacological Activities
1. Activity of Antioxidants
Free radicals hasten the aging process and harm skin cells. Free radicals are neutralized and oxidative damage is avoided by the flavonoids and phenolic chemicals found in jasmine.
Mechanism
Scavenging free radicals
Mitigating oxidative stress
• Keeping collagen fibers safe
• Postponing the development of wrinkles

2. Antimicrobial Properties
When it comes to skin infections, jasmine extract has antifungal and antibacterial qualities.
Benefits
• A decrease in germs that cause acne
• Avoiding skin infections
• Keeping one's skin clean

3. Anti-inflammatory Properties
Jasmine lessens irritation and acne-related redness and inflammation.

4. The Moisturizing Impact
Jasmine hydrosol keeps the skin hydrated and supple.

5. The Effect of Aromatherapy
The fragrance jasmine produces relaxation, stress reduction, and mood enhancement.

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D. Jasmine's Cosmetic Uses

Jasmine's smell and medicinal properties make it a popular ingredient in cosmetics.

Jasmine in Cosmetics

- Face toners
- Mist your face
- Sweets
- The lots
- Masks for faces
- Hair Care Cleansers Jasmine
- Hair grease
- Shampooing
- Conditioning
- Perfumes for hair

Jasmine in Fragrance

Essential jasmine oil is used in aromatherapy to promote emotional health and relaxation.

E. Facial toner with herbal jasmine

A water-based cosmetic preparation with jasmine extract or jasmine hydrosol, herbal jasmine facial toner is said to revitalize, moisturize, cleanse, and calm the skin.



Fig no.4: Jasmine facial toner

F. Jasmine Toner's objectives

- Preserve skin pH • Restore skin
- Get rid of leftover contaminants

Minimize acne

- Hydrate the skin
- Offer antioxidant defense

G. The advantages of herbal jasmine toner

- Natural composition
- A pleasant aroma

Appropriate for delicate skin

- Greasy-free
- Enhances the texture of skin(16,17)

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VI. JASMINE EXTRACTION TECHNIQUES

A. Distillation of steam

Essential oil and jasmine hydrosol are frequently obtained using steam distillation.

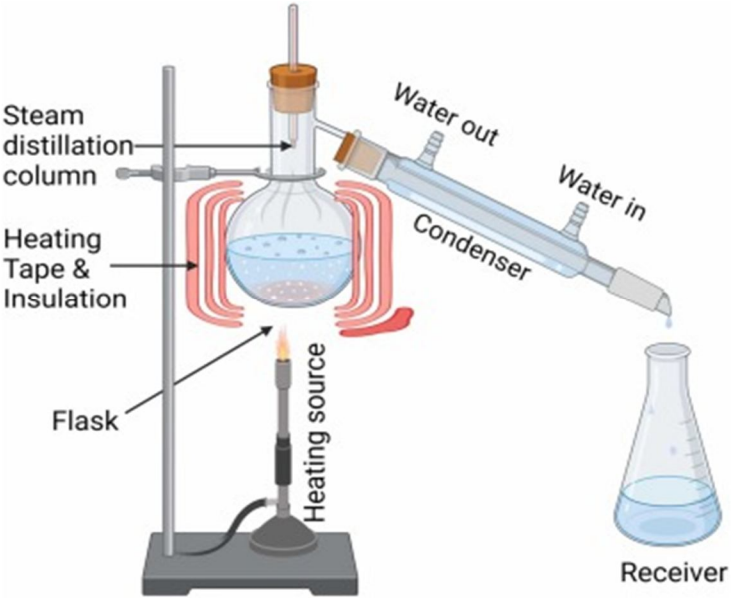


Fig no.5: Steam Distillation

Positives

- Maintains
- Generates pure hydrosol
- Appropriate for cosmetics

B. Extracting Solvents

Concentrated extracts are obtained using organic solvents.

Regular Solvents Ethanol, methanol , Hexane.



Fig no.6: Solvent extraction

C. The maceration process

To extract phytochemicals, dried flowers are immersed in a solvent.

D. Enfleurage

Fats are used in the conventional extraction process to absorb aroma.



Fig no.7:Enfleurage process

E. The Soxhlet Method

In lab research, the continuous extraction approach is employed.

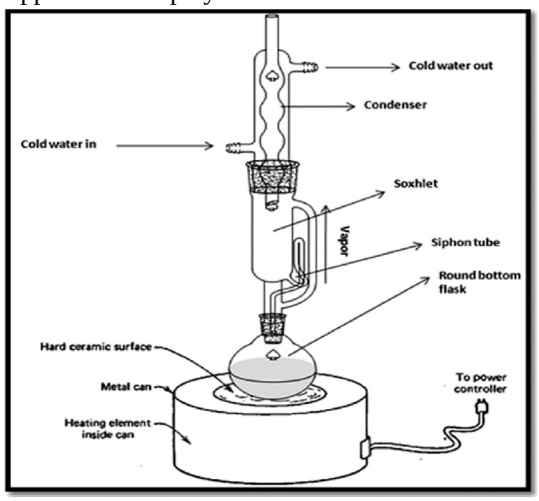


Fig no.8: Soxhlet method

VII. FORMULATION OF HERBAL JASMINE FACIAL TONER

A. Ingredients

Ingredient	Function
Jasmine extract	Active ingredient
Rose water	Hydration
Aloe vera	Soothing agent
Glycerin	Humectant
Distilled water	Vehicle
Preservative	Stability
Essential oil	Fragrance

B. The Preparation Method

1. Gather fresh blossoms of jasmine.
2. Dry the flowers and powder them.
3. Use the appropriate extraction technique to prepare the extract.
4. Sort the extract.
5. Add distilled water and mix.
6. Glycerin and aloe vera should be added.
7. Bring pH down to 5–6.
8. Put some preservative in.
9. Fill spray bottles that have been sterilized(18)

C. The Packing

Spray bottles with an amber hue are ideal for shielding the formulation from light.

D. Jasmine Toner's Action Mechanism

a) Skin Washing

After washing your face, the toner gets rid of any remaining oil and grime.

b) Hydration: Floral water and humectants keep the moisture equilibrium.

c) Defense Against Oxidants

Antioxidants stop pollutants and UV radiation from causing oxidative damage.

d) Diminished Inflammation

Compounds that suppress inflammation lessen redness and discomfort.

f) Action Against Microbes

Bioactive substances stop acne-causing bacteria from growing.(20)

E. Herbal Jasmine Toner Evaluation Parameters

a)Organoleptic Assessment

• Colour
• Odor
•Visual appeal
• Consistency

b) Determination of pH

The pH range that is good for skin is 5 to 6.

Viscosity

(c)Application and spreadability are impacted by viscosity.

d) Stability Analysis

Studies on stability are carried out in various humidity and temperature ranges.

e) Test of Irritation

To assess skin compatibility, patch testing is done.

f) Microbial testing guarantees that there is no microbial contamination and that the product is safe.

g)Test of Antioxidant Activity

Antioxidant activity is frequently measured using the DPPH test. (18,17)

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F. Studies on Stability

Significance

Shelf life and product quality are determined by stability studies.

Parameters Assessed Changes in pH

- Changes in color
- Odor shifts
- Phase division
- Growth of microbes

Storage Requirements

- Temperature of room
- The state of refrigeration
- Conditions of accelerated stability(14)

G. The Benefits Of Herbal Jasmine Facial Toner

- Herbal and organic
- Eco-compatible
- A lovely scent
- Skin hydration
- Decreases acne
- Appropriate for delicate skin
- Defense against antioxidants

Minimal adverse effects

- Improves the radiance of the skin

H. Limitations and Disadvantages

- Limited longevity

Microbial contamination potential

- Phytochemical content variation
- Potential adverse reactions
- Stability problems when preservatives are not used

I. Considerations for toxicology and safety

Skin Sensitivity

(a) Essential oil sensitivity may occur in certain people.

Patch Test

(b) Patch testing ought to be done prior to frequent use.

c) Maintenance microbial development should be stopped by using the right preservatives.(22)

VIII. COMPARISON OF HERBAL AND SYNTHETIC TONERS

Parameter	Herbal Toner	Synthetic Toner
Source	Natural	Chemical
Side Effects	Minimal	More likely
Fragrance	Natural	Artificial
Skin Compatibility	Better	May irritate
Environmental Impact	Eco-friendly	Less eco-friendly

A. Current Studies on Jasmine

i. Study 1

Research used the DPPH assay to show the antioxidant activity of Jasminum sambac extracts.

ii. Analysis 2

Jasmine extract-containing anti-acne toner formulations shown antimicrobial efficacy against Staphylococcus epidermidis.

iii. Research 3 showed that jasmine flower extracts have calming and anti-inflammatory qualities that might be used in cosmetic products.(23,25)

B. Commercial Toners with Herbal Jasmine

Due to consumer demand for herbal products, a number of skincare businesses sell toners with a jasmine base.

Prevalent Claims

• No alcohol
Hydration
• Rejuvenating
• Brightening of skin
• Calming composition

Prospective viewpoints

Future studies on herbal jasmine toners could concentrate on:

• Nanocomposites
•Systems for preserving herbs
• Clinical research
• Ecological methods of extraction
• When combined with other therapeutic plants
• Sophisticated delivery methods(21)

IX. CONCLUSION

An efficient natural cosmetic formulation with antioxidant, antibacterial, anti-inflammatory, hydrating, and calming qualities is herbal jasmine face toner. The significance of jasmine-based formulas in cosmetic science has increased due to the growing demand for herbal skincare products. Jasmine toner has therapeutic advantages that enhance general skin health in addition to revitalizing and hydrating the skin. Developments in herbal cosmetic technology can increase the efficacy and economic potential of herbal jasmine face toners, despite obstacles like stability and preservation. The use of jasmine in skincare formulas is a significant step toward more environmentally responsible, consumer-friendly, and safe cosmetics.(24)

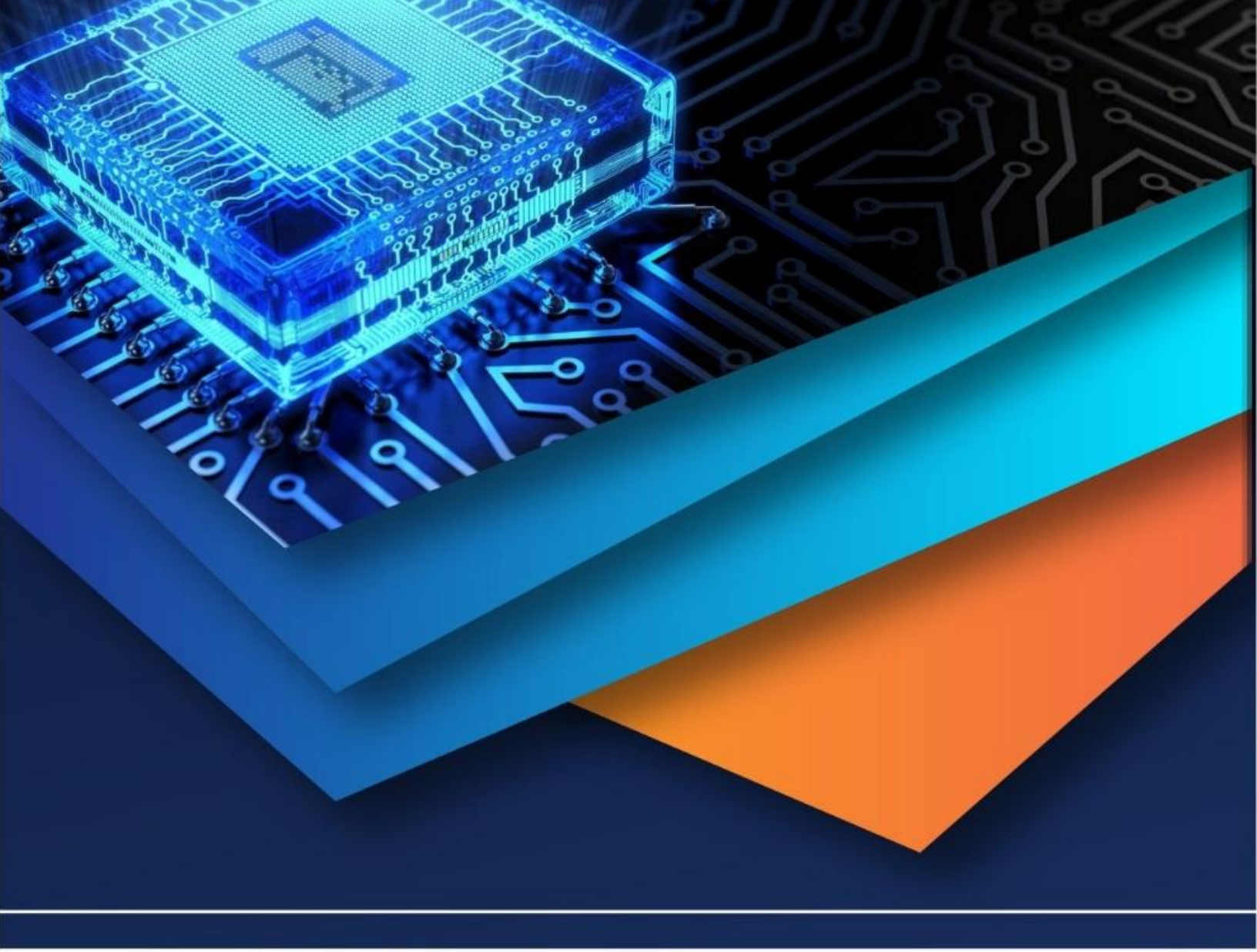
REFERENCES

[1] Sisodia A, Chettupalli AK, Bukke SPN, Rahaman SA, Chaudhary S, Nicholas B. Toning with nature: a review of natural ingredients in cosmetic formulations. J Cosmet Dermatol. 2025;24(2):1-15.
[2] Ardasyifa G, Endah SRN, Agustien GS. Antioxidant activity test of peel-off gel mask containing jasmine leaf ethanolic extract (Jasminum sambac L. Aiton) using DPPH method. J Ilm Farm Farmasyifa. 2025;9(1):1-10.
[3] Maisarah M, Mardhiah A, Faizah N, Sofa C. Formulation and stability test of anti-acne toner preparation with jasmine flower extract (Jasminum sambac L). Proc Int Conf Educ. 2024;1(1):45-52.
[4] Chen CY, Chen YT, Huang YC, et al. Development from Jasminum sambac flower extracts of products with floral fragrance and multiple physiological activities. Molecules. 2021;26(16):1-18.
[5] Kaur R, Sharma A. Herbal cosmetics: an overview. Int J Pharm Sci Res. 2020;11(5):2001-2010.
[6] Kapoor VP. Herbal cosmetics for skin and hair care. Nat Prod Radiance. 2005;4(4):306-314.
[7] Pandey S, Meshya N, Viral D. Herbs play an important role in the field of cosmetics. Int J PharmTech Res. 2010;2(1):632-639.
[8] Barel AO, Paye M, Maibach HI. Handbook of Cosmetic Science and Technology. 4th ed. Boca Raton: CRC Press; 2014.
[9] Ali SM, Yosipovitch G. Skin pH: from basic science to basic skin care. Acta Derm Venereol. 2013;93(3):261-267.
[10] Draelos ZD. Cosmetics and dermatologic problems and solutions. 3rd ed. Boca Raton: CRC Press; 2011.
[11] Kapoor S. Jasmine and its therapeutic applications. Asian J Pharm Clin Res. 2018;11(4):12-18.
[12] Sharma PP. Cosmetics: formulation, manufacturing and quality control. 5th ed. New Delhi: Vandana Publications; 2014.
[13] Harry RG. Harry's Cosmeticology. 8th ed. New York: Chemical Publishing Co; 2000.
[14] Mukherjee PK. Quality control of herbal drugs. New Delhi: Business Horizons; 2019.
[15] Evans WC. Trease and Evans Pharmacognosy. 16th ed. London: Elsevier; 2009.
[16] Kokate CK, Purohit AP, Gokhale SB. Pharmacognosy. 54th ed. Pune: Nirali Prakashan; 2017.

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[17] Chanchal D, Swarnlata S. Novel approaches in herbal cosmetics. J Cosmet Dermatol. 2008;7(2):89-95.
[18] Arora P, Nanda A, Karan M. Herbal cosmetics: a review. Int J Pharm Sci Rev Res. 2012;12(1):72-78.
[19] Mishra AP, Saklani S, Milella L, Tiwari P. Formulation and evaluation of herbal cosmetic products. Pharmacogn Commun. 2014;4(2):1-8.
[20] Jain SK, Das A. Herbal cosmetic preparations: current trends and future prospects. Int J Green Pharm. 2017;11(3):S452-S459.
[21] Khandelwal KR. Practical Pharmacognosy. 25th ed. Pune: Nirali Prakashan; 2018.
[22] Harborne JB. Phytochemical methods. 3rd ed. London: Chapman and Hall; 1998.
[23] Pathak K, Mall S. Stability testing of cosmetic formulations. Int J Cosmet Sci. 2016;38(4):315-324.
[24] Bedi MK, Shenefelt PD. Herbal therapy in dermatology. Arch Dermatol. 2002;138(2):232-242.
[25] Baumann L. Cosmetic dermatology: principles and practice. 2nd ed. New York: McGraw-Hill; 2009.

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