Review on Herbal Plants Used In Cosmetics

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Abstract

The face is a sensitive part of our body, so facial care is one of the most important tasks of a person. There are several preparations available for facial care, of which facial wash plays an important role in improving the appearance and treating several facial skin diseases. Face washes made with herbal ingredients are better than synthetic ingredients to avoid skin irritation and other side effects. This work attempted to formulate and evaluate a face wash with antioxidant, antibacterial and antiseptic properties that are necessary to keep the skin smooth and attractive. The herbal face wash is made of aloe vera leaves, Tulsi extract, neem extract for anti-acne and skin healing and beauty. Face wash improves blood circulation and cleanses the entire face. Formulated face wash rated for color, fragrance, texture, pH, spreadability, washability, roughness, lather.

Keywords: Herbal Cosmetics; Herbs; Herbal Extract Skin Cosmetics; Antioxidant; Anti Inflammatory; Anti -Aging

INTRODUCTION

1) Skin care products

The use of skin care products has grown phenomenally over the years. People use various skin care products from lipstick to skin creams, mouth to foot creams and so on, hoping to develop a charming personality, protect their body and avoid bad odor. Skin care products are described as articles intended to be rubbed, poured, sprayed or sprinkled on the human body or part of it, worn or otherwise cleaned, beautified, attractive or changed in appearance. Ayurveda describes the role of various herbs like amla, Haldi in cosmetics. Women in 18th century Europe bleached their faces with lead carbonate, unaware of the harm they were doing to themselves - many of them died of lead poisoning1.

- 2) Classification of skin care products
- 1. Skin lotions and creams
- Cleansing creams and emulsions
- Night and massage creams
- Concealers and foundations
- Hand creams and emulsions
- General creams
- Moisturizing creams and emulsions
- Gels
- Oil gels

- 2. Sun and sunburn prevention products
- 3. Skin whitening creams
- 4. Astringent and skin strengthening agents
- 5. Antiperspirants and deodorants
- 6. Face powders Compact powders red ones
- 7. Body powders
- 8. Face packs and masks
- 9. Bath products
- 10. Lipsticks

FACE WASH

(a) **Definition**

A cleanser is a facial care product used to remove makeup, dead skin cells, sebum, dirt and other impurities from the facial skin. It helps unclog pores and prevent skin conditions like acne. The cleanser can be used as part of a skin care program with a face and moisturizer. b) Benefits of face wash

- It helps remove dead skin cells, which helps new skin cells replace the old ones. It helps to keep the skin fresh and healthy. It makes the skin shine
- The combination of dead skin cells and excess oil clogs pores, which can lead to acne whiteheads, blackheads and an overall tired look. Exfoliating your skin pores regularly will prevent all the skin problems mentioned above. Removal of dead skin cells, which means your skin will wrinkle more slowly b) **Benefits of face wash**
- It helps remove dead skin cells, which helps new skin cells replace the old ones. It helps to keep the skin fresh and healthy.
- It brightens the skin
- The combination of dead skin cells and excess oil clogs pores, which can lead to acne whiteheads, blackheads and an overall tired look. Exfoliating your skin pores regularly will prevent all the skin problems mentioned above.
- Removal of dead skin cells, which means your skin will wrinkle more slowly

c) Properties of facial water:

• It should be stable and good looking. • It should soften when applied to the skin. • It should spread easily without pulling. • It should not feel oily or greasy during application. • After the water evaporates, the cream residue should not become viscous. • Its physical effect should be to wash the skin and open the pores instead of being absorbed.

d) Formulation of face wash

Classes of medicinal substances used in face wash

Antibacterial

In the broadest sense, an antibacterial agent is a substance that inhibits the growth and reproduction of bacteria. Although both antibiotics and antibacterial drugs attack bacteria, the terms have evolved over the years to mean two different things.

Antibacterial agents are most commonly prescribed today to disinfect surfaces and remove potentially harmful bacterial

Examples; alcohols, chlorine, peroxides and aldehydes.

Anti-acne

Different types of acne medications are used for different purposes depending on the severity of the condition. For example, creams, soaps, gels and creams that contain substances called benzoyl peroxide or tretinoin can be used. **Advantages of herbal face wash**

suitable for all skin types no any side effects budget friendly it helps to keep skin fresh a nd healthy it helps to remove dead skin cells

removes excess of oil without removing nutrients from the skin Various herbs used in

cosmetics

- ➤ Aloe (aloe vera) Aloe (aloe vera) pulp is an exceptional skin cleanser. The juice of the plant prevents infections and promotes healing. Divide some Aloevera leaf and rub the mass directly on the skin.
- ➤ Neem (Azadirachtaindica)

Neem (Azadirachtaindica) is valued in Ayurvedic medicine for its versatile medicinal properties due to its antibacterial, antifungal and antiviral properties. For acne treatment, 5 fresh leaves in the morning every day will help clear stubborn acne

Additives used in face wash

Antioxidants

Antioxidants are man-made or natural substances that can prevent or delay certain types of cell damage. Antioxidants are found in many foods, including fruits and vegetables. They are also available as a dietary supplement. Examples; Lycopene, vitamin A, vitamin C, vitamin E **Gelling agent**

Gelling agents are ingredients that turn your water or oil phase into a gel, which is thickened but without rigidity. Emulsions thickened with gelling agents are more mobile and liquid than rigid. Some of these gels thin when force is applied (thixotropic) and regain viscosity when force is removed. These gels can be used to create thick products that can be shaken or mixed at high shear to make bottling or spraying easier. Examples; carbopol940, carbopol934.8

A preservative

The main reason for using preservatives is to make food safer by removing the influence of biological factors. The greatest risk to consumers is food spoilage or toxicity caused by microorganisms (eg bacteria,

yeast, molds) found in them. Some of these organisms can excrete toxic substances ("toxins") that are dangerous to human health and can even be lifethreatening. Examples; methylparaben, propylparaben.9

Humectants

Humectants are hygroscopic substances used to keep things moist; it is the opposite of a dryer. It is often a molecule that has several hydrophilic groups, mostly hydroxyl groups; however, there are also amines and carboxyl groups, which are sometimes esterified (its affinity for forming hydrogen bonds with water molecules is a crucial property). They are used in many products, including food, cosmetics, medicines and pesticides. The humectants attract and retains the moisture in the air nearby via absorption, drawing the water vapor into and/or beneath the organism/object's surface. Examples; Propylene glycol, hexylene glycol, and butylene glycol. 10

Foaming agent

A foaming agent is a material that facilitates formation of foam such as a surfactant or a blowing agent. A surfactant, when present in small amounts, reduces surface tension of a liquid (reduces the work needed to create the foam) or increases its colloidal stability by inhibiting coalescence of bubbles. A blowing agent is a gas that forms the gaseous part of the foam

Examples; Sodium laureth sulfate, azodicarbonamide, titanium hydride

Use of face wash

- Removes all makeup residue daily.
- To clean the skin.
- Anti-aging.
- Bathing and renewal keeps the skin clean and shiny.
- Stimulates the formation and renewal of skin cells.
- Help unclog pores.

Types of acne lesions:

- Blackhead (open comedone): oil and dead cells leave a black spot on the surface of the skin.
- Whitehead (closed comedo): Sebum and dead skin cells leave behind a plug skin surface Papules (red papules) and white pustules: In a clogged hair follicle, material penetrates the follicle walls, causing redness and tenderness. Cyst: a very deep, ruptured, inflamed follicle.

Treatment of Acne:

- Treatment should help relieve the severity of untreated acne and reduce scarring. You may need to try different combinations of medications to determine the combination that works best for you. Most people need 8-12 weeks to see results. Medicines only suppress acne. If you stop treatment, acne is likely to return.
- Topical antibiotics (clindamycin, erythromycin): These help reduce or kill the number of skin bacteria.
- Oral antibiotics (tetracycline, doxycycline, minocycline, erythromycin, etc.): help reduce redness and kill bacteria. They are most useful for red papules and cysts.

- Retinoids (RetinA, Differin, Avita, Tazorac): These unclog pores to get rid of blackheads and whiteheads.
- Benzoyl peroxides (Triaz, Brevoxyl): These open pores and prevent bacterial growth. They help prevent antibiotic resistance.
- Finacea, Azelex: These open pores and can help reduce bacteria.
- Accutane: This is our most effective acne medication. It has many potential side effects and is usually prescribed for severe acne or when other medications do not work well. Skin care
- Wash your face twice a day with a mild soap or soap-free cleanser. (Dove, Oil of Olay Foaming Face Wash, Cetaphil Cleanser, Neutrogena or Purpose Purpose for sensitive skin.)
- DO NOT use harsh soaps or scrub hard.
- Wash gently but thoroughly twice a day with the recommended cleanser

Herbal medicine-aloevera



Fig. aloe vera

The leaves of Aloe vera contain significant amounts of the polysaccharide gel acemannan, which can be used for topical purposes. Aloe skin contains aloin which is toxic. Products made from Aloe vera usually only use the gel.

There are many products containing aloe vera's acemannan, including skin lotions, cosmetics, ointments and gels for minor burns and skin abrasions.

synonyms	aloe
Kingdom	plantae
clade	Tracheophytes
clade	Angiosperms
clade	Monocots
order	Asparagales
family	Asphodelaceae
subfamily	Asphodeloideae
genus	aloe
species	A.vera

Common name-aloe barbadensis miller

Chemical constituents- vitamine, enzyme, minerals, sugars, lignin, salicylic acid, and amino acid

Uses-

- It is used as moisturizing agents.
- It nourishes the skin.
- It is antibacterial and anti inflammaitory.
- Aloe vera deeply hydrate the skin.
- It is an antiseptic that allow protection against bacteria.
- Aloe vera have antioxidant properties

Health benefits-dctoxifies the body

Treats digestive issues

Neem



Fig. neem

The neem tree may be the answer to your health and wellness needs. For centuries, the neem tree has been an essential part of life, health, and culture in both India and Asia. The neem tree

(Azadirachta Indica) is one of nature's most versatile plants, and is best known for its highly effective insecticidal oil. However, as every part of the tree is used in different ways, there's a lot to discover about this fascinating species.

Synonym	margosa
Kingdom	Plantae
clade	Tracheophytes
Clade	Angiosperms
Clade	Eudicots
Clade	Rosids
order	sapindales
family	meliaceae
genus	azadirachta
species	A.indica

Common name- nimba tree, Indian lilac

Chemical constituent- Azadirechtin

Uses-

- It is an anti microbial agent.
- It is also used as insect repellent
- It treets the acne
- It also protect the skin from external aggressors that can damage your skin
- It moisturises the skin
- Neem is rich in anti oxidants and vitamin E that reduce the wrinkle
- All parts of neem tree used as anthelmintic, anti fungal, anti diabetic, anti □bacterial, anti viral, contraceptive and sedative.
- Increases immunity
- Nourishes skin

rose water



Fig. rose water

Rose water is a flavoured water made by steeping rose petals in water. It is the hydrosol portion of the distillate of rose petals, a by-product of the production of rose oil for use in perfume. Rose water is also used to flavour food, as a component in some cosmetic and medical preparations,

Rose water is also known for helping to reduce the appearance of facial redness. With its antibacterial properties, it can balance out your skin's complexion and fight against red and blotchy areas. Rose water for skin care is also highly effective in treating oily, acne-prone skin.

Rose water is an antibacterial. This means that it fights off bacteria that could lead to infections. Using rose water for face and body care can prevent wounds such as burns and cuts becoming infected and it can also be used to reduce the appearance of scars when used in high concentrations

Uses of rose water -

- reduces the pores
- · contains antioxidants
- antibacterial □shrink pores
- acts as classic toner

- to tone your skin
- Soothes irritated skin
- Refreshesh your skin
- Fights free radicals
- Helps to soothe sunburn
- Improves skin texture
- Cleanes and remove impurities
- Reduces the appearance of fine lines and wrinkles

Turmeric



Fig. turmeric

Turmeric has been used for 4,000 years, people have used turmeric, or Curcuma longa, to treat a wide range of ailments. According to studies, turmeric may help heal digestive issues, lessen inflammation, and fight off infections and some types of cancer.

Turmeric may be the first known cosmetic as it has been traditionally smeared on the skin by women. It is believed to reduce facial hair growth, reduce acne and improve complexion. Many women in Tamil Nadu still apply turmeric on their face daily before taking bath

Synonyms	curcuma
kingdom	plantae
clade	tracheophytes
clade	angiosperms
clade	monocots
clade	commelinids
order	zingiberales
Family	zingiberaceae
genus	Curcuma
species	Longa
order	zingiberaceae
division	mangoliophyta
Super division	spermatophyta

Common name- haldi, manjal

Chemical constituent- curcumin, curcuminoid, bisacurone

Turmeric benefits for skin

- eliminate dry skin
- wound healing
- · antiseptic agent
- antibacterial
- Inflammation
- Hyperlipidemia (cholesterol in the blood)
- Anxiety
- Kidney health
- Arthritis

HERBAL PLANT	SOURCE
Aloevera	Leaves
Neem	Leaves
Turmeric	Root
Orange	Fruit

Neem – antibacterial properties treat acne.

Aloevera – moisturizer or sunburn.

Turmeric – antimicrobial agents lightning anti wrinkle wound Heald.

Rose water – cooling agent emollient.

<u>USE OF THE FACE WASH</u> herbal face wash is used to treat acne and pimples it is used to remove impurities ,dirt, oil, regular use helps maintain balanced skin ,reduce acne, blemishes,

treat acne antibacterial properties of neem fight acne causing bacteria which help in the treatment and prevention of acne aloevera shows moisturizr it moisture the skin without giving greasy feel it fights with sunburn

Recent herbal drug:

- Aloevera
- Neem
- Rose water
- turmeric

Recent herbal cosmetic products:

- Himalaya Herbals Revitalizing Night Cream.
- Khadi Mauri Herbal Face Wash.
- Kamdhenu KumkumadiTaila.
- Bella Vita Organic Ubtan Plus Face Pack.
- Keya Seth Aromatherapy Orange Body Oil.

- Bajaj Nomarks Ayurvedic Antimarks Cream.
- Muuchstac Herbal Skin Lightening Oil.
- Moha Herbal Soap.

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REFERENCES-

- [1]. Sanjunanda, arunnanda, roop k. khar.cosmatics technology birla publication first edition2006-2007 Page no. 243.
- [2]. P.P.sharmacosmetics-formulation, manufacturing and quality control by m. pharm. Vandana publication third edition page no. 142.

http://www.tufts.edu/med/apua/about_issue/agents.shtml.

- [3]. McNally, Robert A. Skin Health Information for Teens: health Tips bout Dermatologicac Cancern & Skin
- [4]. Cancer Risk, Detriot (/topic/ Detriot. apex), MI: Omnographics, 2003.
- [5]. Sharma A, Shanker C, Tyagi LK, Singh M, RaoChV (2008) Herbal Medicine for Market Potential in India: An overview. Academic Journal of Plant Sciences 1: 26-36.
- [6]. http://www.greenmedinfo.com/blog/11herbsusedtraditionalacneremedies
- [7]. https://www.nlm.nih.gov/medlineplus/antioxidants.html.
- [8] Reddy, Y. R. R., Kumari, C. K., Lokanatha, O., Mamatha, S., & Reddy, C. D. (2013).

Antimicrobial activity of Azadirachta Indica (neem) leaf, bark and seed extracts. Int. J. Res. Phytochem. Pharmacol, 3(1), 1-4. 2.

- [9] Afsar, Z., Khanam, S., & Aamir, S. (2018) Formulation and comparative evaluation of polyherbal preparations for their disinfectant effects, 1 (1),
- [10] Joshi, M. G., Kamat, D. V., & Kamat, S. D. (2008). Evaluation of herbal handwash formulation.7 (5), 413-15.
- [11] Dhanasekaran, M. (2016) International research journal of pharmacy. 7(2), 31-35.
- [12] Shivanand, P., Nilam, M., & Viral, D. (2010). Herbs play an important role in the field of cosmetics.

International Journal of PharmTech Research, 2(1), 632-639.

- [13] Amit, J., Subodh, D., Alka, G., Pushpendra, K., & Vivek, T. (2010). Potential of herbs as cosmaceuticals. International Journal of Research in Ayurveda and Pharmacy (IJRAP), 1(1), 71-77.
- [14] Kapoor, V. P. (2005). Herbal cosmetics for skin and hair care.4(4). 306-315.
- [15] Niharika, A., Aquicio, J. M., & Anand, A. (2010). Antifungal properties of neem (Azadirachta indica) leaves extract to treat hair dandruff. E-ISRJ, 2, 244-52.

[16] Kumar, K. P., Bhowmik, D., Tripathi, K. K., & Chandira, M. (2010). Traditional Indian Herbal Plants Tulsi and Its Medicinal Importance. Research Journal of Pharmacognosy and Phytochemistry, 2(2),

93-101.

- [17] Panda, H. (2011). Herbal facewash & soaps. NIIR Project Consultancy Services.
- [18] Kareru, P. G., Keriko, J. M., Kenji, G. M., Thiong'o, G. T., Gachanja, A. N., & Mukiira, H. N. (2010).

Antimicrobial activities of skincare preparations from plant extracts. Journal of Traditional,

Complementary and Alternative Medicines, 7(3).

- [19] Bandyopadhyay, U., Biswas, K., Sengupta, A., Moitra, P., Dutta, P., Sarkar, D., ... & Banerjee, R. K.
- (2004). Clinical studies on the effect of Neem (Azadirachta indica) bark extract on gastric secretion and gastroduodenal ulcer. Life sciences, 75(24), 2867-2878.
- [20] Sharma, J., Gairola, S., Sharma, Y. P., & Gaur, R. D. (2014). Ethnomedicinal plants used to treat skin diseases by Tharu community of district Udham Singh Nagar, Uttarakhand, India. Journal of ethnopharmacology, 158, 140-206.
- [19]Sanghi D.K and Tiwle Rakesh Tiwle. Formulation and Characteristics of Herbal Face Wash. European Journal of Pharmaceutical and Medical Research. 2016, 3(11), 274278 2016.

FORMULATION AND CHARACTERIZATION OF HERBAL FACE WASH 1D. K. Sanghi and *Rakesh Tiwle 1Principal of Shri Laxmanrao Mankar Institute of Pharmacy, Amgoan, Gondia, Maharashtra, India-441902.

- [20] https://www.healthline.com/health/glycerin-for-skin-whitening
- [21] https://deepgreenpermaculture.com/2019/04/16/identifying-and-gRawing-edible-aloevera/?amp=1
- [22] https://msplainspoken.com/2017/06/09/how-to-identify-quality-rose-waterkamaayurvedas-pure-rose-water-review/
- [23] Sowmya. K. V, Darsikaet. al, A research article on : formulation and evaluation of a polyherbal facewash gel, world journal of pharmacy and pharmaceutical sciences, 2015; 4: 585-588