
REVIEW ARTICLE

Review of Herbal Drugs Used in Skin Diseases

Pandurang Chavan*, Sonia Singh, Prof Pallavi Kaple, Savitri Mali, Rushikesh Khemnar, Avadhut Kulkarni

Department Of Pharmaceutics, Alard College of Pharmacy, Marunji, Pune

Corresponding Author: Pandurang Chavan

Email: Chavanpandu777@gmail.com

ABSTRACT

Healthy skin care is important for a healthy body. Many people suffer from dermatoses that affect the skin, there are many types of dermatoses, a health problem that affects people of all ages, from newborns to the elderly, causing damage in many ways. Eczema, psoriasis, vitiligo, cellulite, herpes, cancer, etc. Many medicinal plants are used in the treatment of diseases. Some wild plants and their parts are often used in the treatment of these diseases. India is rich in health folklore of medicinal plants. Many preparations are used in India to treat cuts, wounds, burns and various skin conditions. The use of plants is as old as humans. Medicinal herbs are cheap and safe.

Keywords: Anatomy of skin, herbal medicine, skin treatment, skin problems, healthy skin, herbs in India. Chinese medicines.

Received 24.06.2024

Revised 01.09.2024

Accepted 21.11.2024

How to cite this article:

Pandurang C, Sonia S, Pallavi K, Savitri M, Rushikesh K, Avadhut K. Review of Herbal Drugs Used in Skin Diseases. Adv. Biores., Vol 15 (6) November 2024: 289-296.

INTRODUCTION

Herbs have been used to treat skin conditions for thousands of years. Influenced by local plants and ethnophytotherapy exchange through trade, special medicinal plants and their use in skin treatment have been developed in many regions. More and more patients are turning to herbs, especially to treat skin conditions, and herbs are becoming increasingly popular among patients and, to a lesser extent, doctors.

The herbal medicine system was developed in India, Africa, the Middle East, Europe, China, Japan, Australia and many parts of the Americas. It is worth noting that the two systems currently in use are Ayurvedic herbal medicine in India and herbal combination developed in Chinese medicine. Herbal remedies with a long history of use in Asia, especially in India and China, have been utilized for generations. (1) In the United States, herbal products are regulated as dietary supplements. About 200 years ago, our pharmacopoeia consisted of natural medicines. (2)

Anatomy of skin

Skin is the largest organ of the human body and covers an area of 20 square meters. It is the human body's first line of defense. The skin contains special cells that react to foreign substances. Skin regulates the body temperature and permit the sensations of touch, heat, and cold

Skin has three layers

The epidermis is the outer layer of the skin that creates moisture and determines our skin tone. Under the epidermis are connective tissue, sweat glands and hair follicles.

Subcutaneous tissue (hypodermis) consists of fat and connective tissue. (3)

Common Skin Problems: -

Bacterial infections

These infections can be caused by various diseases and can spread to the outer layer of the skin, its roots or the outer layers of the skin. Corrective action is essential to prevent the problem.

The most common types of bacteria causing skin infections are staphylococci and streptococci.

Diseases such as impetigo, folliculitis, cellulitis and Lyme disease can spread throughout the body. Antibiotics are generally better at treating bacterial infections.

Rashes

A rash is a group of red, painful spots or bumps on the skin. Causes include irritation, allergies, infections, underlying disease, and structural defects such as clogged pores or abnormal growths. Examples of rashes include acne, dermatitis, eczema, urticaria, pityriasis rosea and psoriasis.

Parasitic Infections

These infections occur after exposure to parasites such as lice and scabies. (4)

Acne

The word "acne" comes from the Greek word "acme" meaning "end of life". Acne is a skin infection that causes papules or "pimples" to form. Propionibacterium acnes and Staphylococcus epidermidis are common bacterial pathogens associated with the development of various types of acne. Propionibacterium acnes and Staphylococcus epidermidis are bacteria that affect acne development.

Patients experience psychological burdens like depression, anxiety, and low self-esteem because of acne and low self-esteem because of acne. (5)

Types Of Acne

Acne Vulgaris

Acne vulgaris is the most common type of acne. It usually starts in adolescence, but it can also happen in your twenties, thirties or later, according to a study in the Journal of the American Academy of Dermatology. It can occur anywhere on the body, but is most common on the face, neck and back. such as papules, whiteheads, blackheads, pustules and nodules. (6)

Acne Conglobata

Acne thrush is a serious form of acne vulgaris that is usually caused by large, interconnected lesions. Black dots may also be visible. This condition usually occurs in men between the ages of 18 and 30 and can cause skin damage. Acne can appear on many parts of the body, including the face, back, chest, arms and thighs. People with this condition, which is often treated with strong medications such as isotretinoin, are recommended to see a dermatologist. (7)

Fungal infection

Harmless fungi are naturally present on the skin's surface. Infections occur when these fungi penetrate the body.

Ringworm

Ringworm is a fungal infection that usually affects the arms and legs but can affect almost any part of the body. It turns into a ring-shaped red rash or silvery and scaly. Although ringworm can affect people of all ages, it is more common in children.

Viral infection

When the virus penetrates the outer layer of the skin, called the stratum corneum, it can cause a deeper infection. Examples of skin infections include herpes simplex, herpes zoster (shingles), and warts. Some infectious diseases that affect the whole body, such as measles and mumps, may also show symptoms on the skin. It is important to know that antibiotics cannot cure the infection. (8)

Trauma

Trauma is damage to the skin caused by blows, cuts or burns. When skin is injured, it can become infected with bacteria and viruses.

Other skin disorders

Conditions such as wrinkles, rosacea, spider veins, and varicose veins do not fall into the pure category. Wrinkles occur when the collagen and elastin in the dermis of the skin break down, causing the skin to sag. Rosacea is a chronic condition that causes facial redness, acne, sores, and sometimes nose swelling. (9)

Atopic eczema

Eczema is a skin condition that causes areas of the skin to become red, itchy, cracked and rough. Some types can cause blisters. The most common type of disease is atopic dermatitis, a chronic condition that affects people who are genetically predisposed to react positively to other things. It mostly occurs with conditions such as allergic rhinitis or asthma. In children, this is a skin condition that presents with very dry, itchy, red, scaly patches of skin and thickened areas called lichenified plaques along with scratches.

Rosacea

Rosacea is a chronic skin condition that affects people with Fitzpatrick type I and type II skin. It is usually diagnosed when patients develop red, visible veins, swollen papules, pustules, and thick sebaceous glands, especially on the face, neck, chest, or ears. Despite ongoing research, the exact cause of rosacea is still unknown and there is currently no cure.

Psoriasis

Psoriasis is a chronic skin disease that affects the immune system. Symptoms include redness, peeling, flaking, itching, tightness, pain and bleeding. These symptoms can affect the patient physically and psychologically. Psoriasis is also associated with reduced quality of life, mental health, and functioning of affected individuals. (10)

Vitiligo

It causes light-colored spots on the skin that vary in size and can be seen anywhere on the body. They are more visible on sun-exposed areas such as the face and hands, especially on dark or tanned skin. Involvement of the scalp may cause graying of the hair. In the long term, no disease should be discussed with your doctor in order to receive the correct diagnosis. Treatment focuses on improving the appearance of the skin and may include using colorants to hide patches, using steroids, and undergoing treatment (phototherapy). (11)

HERBAL DRUG USE FOR SKIN DISORDERS

Herbs are increasingly used to treat skin problems because they generally have fewer side effects, are well tolerated, are less expensive, and have a history of use. Herbs have an effective way to treat stubborn and untreatable skin conditions. Many plant species have been shown to be beneficial for different skin conditions, from itching to acne.

Aloevera

(Common name :-musabar, grithkumari, Family:-Liliaceae)

Aloe vera has shown good results in treating many skin conditions and is often used as a beverage. It effectively solves problems such as wrinkles, stretch marks and pigmentation. It also appears to promote wound healing by improving blood circulation and preventing cell death around the wound. In a study on mice with atopic dermatitis-like skin, oral administration of a specific aloe vera gel extract reduced interleukin (IL)-5 and IL-10, thus reducing symptoms. (12)

Aloe vera gel contains properties that are harmful to some bacteria and fungi. For psoriasis, using a cream containing 0.5% aloe vera for 4 weeks may reduce skin lesions. Application of gel has been shown to heal second-degree burns and help skin survive after frostbite. It may also delay skin damage during and after radiation therapy. (13,14,15)

Curcuma longa

(Common name: turmeric, Family: Zingiberaceae)

Turmeric is an ancient spice from Southeast Asia. People there have been using it for color and flavor for a long time. It is good for digestion, has a pleasant smell, stimulates and helps gases. The main medicinal component of turmeric is called curcumin. Turmeric is used to make antiseptic cream in India. In Asia, turmeric juice is used to give a yellow color to the skin. Curcumin prevents *Staphylococcus aureus*, which causes bacterial infections. Historically, turmeric has been used as an herbal remedy for skin and stomach problems, weight control, and digestion. Curcumin is a special part of turmeric known for its medicinal properties.

Turmeric is also effective in treating eczema and may be recommended to reduce rosacea symptoms. Animal studies show that daily use of 1% curcumin gel can reduce skin conditions such as psoriasis. Daily application of turmeric improved skin symptoms and quality of life in patients with scalp psoriasis compared to placebo in clinical studies.

Azadirachta indica

(Common name: Neem ,Family: Meliaceae)

Neem (*Azadirachta indica*) is highly valued as a traditional medicinal plant in India, known as Indian neem or Indian lilac.

Neem does not cure these diseases but helps prevent them. Neem is effective against skin diseases such as worms and lice. Applying neem to your hair is a common practice to get rid of lice. Neem is widely used to treat various skin conditions such as dermatitis, eczema, acne, bacterial and fungal infections.

Its antibacterial properties make it effective in treating various skin problems. Neem has been shown to have antibacterial, antifungal, and antiviral properties, boosting immunity and helping heal skin infections.

Its antibacterial properties make it beneficial for conditions such as acne, psoriasis and eczema. Topical application of neem is generally safe and has no side effects, making it a natural treatment for the skin. It is also thought to be used in the antiviral treatment of smallpox, measles and warts when applied directly to the skin. Neem preparation is known to be effective in treating various skin conditions, purulent ulcers, burns, boils, ulcers and eczema. The oil extracted from neem can be used to treat conditions such as scrofula, scrofulous ulcers, and ringworm. (16,17)

Bauhinia variegata

(Common name: Kachanar, Orchid tree, Camel's Foot Tree, Mountain Ebony; Family: Fabaceae]

The bark is used to treat skin diseases, asthma, sore throat, diarrhea and stomach upset. Use externally to treat skin diseases. Significant protection was observed in studies when treating cutaneous papillomas using DMBA and a combination of croton oil and Kachanar extract. It was observed that life expectancy increased and tumor size decreased in mice receiving the extract. Additionally, Kachanar extract exhibited protective properties by preventing micronucleus formation and chromosomal abnormalities in rat bone marrow when taken before cyclophosphamide. (18)

Lawsonia inermis

(common name :-Henna or Mehndi, family:- Lythraceae)

These small trees usually grow along the coasts of India, Iran and Mediterranean Africa. It is a deciduous, branched shrub or small tree with grey-brown bark, sometimes thorny. Height can reach 2.4-5 m. It is widely grown as a hedge plant in India and is also a commercial crop in some states for its dye and is often used in fine body art, painting and hair dye.

Spinless Lawsonia leaf powder comes in paste form and is used cosmetically and to treat rashes, wounds, and some fungal infections. Applying this medication daily to the affected area helps cure impetigo. Mehndi exhibits strong anti-bacterial activity against *Candida albicans* and other fungi, making it useful in treating skin infections. During the monsoon season, the leaves can be applied to cracked heels to treat soil infections. Henna's antifungal scope extends beyond cosmetics, as it has proven effective in treating conditions such as athlete's foot, and its ability to absorb UV rays makes it effective as a sunscreen. (19)

Matricaria chamomilla

(common name :- Chamomilla,, family Asteraceae)

It has been used for centuries and is known for its healing properties. Chamomile is used in herbal medicine to relieve pain such as stomach aches and irritable bowel syndrome, and as a mild sleep aid. It also acts as a mild laxative and has anti-inflammatory and antiseptic properties. Its application is based on traditional and modern medicine and covers many conditions such as swelling, ulcers, wounds and stomach diseases. (20)

Achyranthes aspera

(Common name: Latjim, Chirchira, Aghedo, Prickly chaff flower, Family: Amaranthaceae)

Achyranthes aspera, belonging to the Amaranthaceae family, is an important plant that spreads as a weed throughout India. Although many parts of the plant are used in traditional medicine, its seeds, roots and shoots are especially important for medicinal purposes.

The *Achyranthes* plant has many uses in indigenous medicine, including its anti-inflammatory, anti-inflammatory, anti-bacterial, anti-fungal and anti-fungal properties. inflammatory, anti-inflammatory, anti-inflammatory, diuretic and anti-inflammatory. It is characterized by being pungent, antiphlegmous, anticyclic, diuretic, laxative and cathartic. This herb has been proven effective in treating rashes, hives, hepatitis, infections and other skin conditions. In addition, ethanol and aqueous extracts of its leaves have wound healing properties. The plant is also used to treat coughs, scrofula, acne, fungal infections, fever, and snake bites. The juice can be used to treat rashes, hives, and rashes. (21)

Sarcoasoca

(Common name: Ashoka; Family: Caesalpinaceae)

A paste made from the roots of this plant has been found to help treat freckles, external bumps, ulcers, and many other skin conditions. Rub the flowers on the skin for itching like eczema, psoriasis, dermatitis and herpes (kushta/visarpa). It is the herb of choice in the treatment of ringworm, ringworm and tinea pedis. One treatment method is to boil 50 grams of dried *S. asoca* flowers and *L. asoca* leaves. Inermis extract obtained from coconut oil is used topically twice daily to treat eczema and scabies. (22)

Thyme vulgaris

(Common name: Thyme; Family: Lamiaceae)

Thyme can reduce the symptoms of cellulite, a skin disease with symptoms such as pain, tenderness, edema, fever, chills and red skin. It may also provide anti-inflammatory and anti-inflammatory properties. But it's worth noting that the University of Maryland Medical Center warns that thyme has not been shown to be particularly effective against cellulite. Additionally, these herbs may increase the risk of bleeding. (23)

Lycopersicon esculentum

(Common name: Tomato, Family: Solanaceae)

A study conducted with healthcare professionals showed that consuming tomato paste (40 g), which contains approximately 16 mg of lycopene per day, together with 10 g of fruit oil, was effective against

UV-induced erythema in 10 weeks. This suggests that a high intake of lycopene may prevent skin redness caused by exposure to UV rays. (24)

Eucalyptus globulus

(Common name: Blue gum, Camphor oil; Family: Myrtaceae)

Research on facial demodicosis in humans showed that treatment with fresh camphor oil with or without 100%, 75%, and 50% glycerol dilutions resulted in complete recovery. Another human study showed that camphor oil with or without a glycerol mixture at 100%, 75%, and 50% concentrations treated zoonotic diseases within 5-10 days. (25)

Cannabis sativus

(Common name: Charas, Ganja; Family: Cannabinaceae)

The powder of hemp leaves can be used as a dressing to treat wounds and sores. Ganja is used topically to relieve the pain of itchy skin conditions. Hemp seed oil has been shown to be effective in treating eczema and a variety of other skin conditions, including dermatitis, seborrheic dermatitis/sled head, varicose eczema, psoriasis, lichen planus, and rosacea. Use hemp seed oil to strengthen the skin and make it resistant to bacteria, viruses and fungi. Also, rub the crushed leaves on the affected area to control the disease. (26)

Crocus sativus

(Common name: Saffron, Family: Iridaceae)

Saffron is obtained from a flowering plant called *Crocus sativus* L., which grows in soil and can live for many years. *Crocus sativus* L. is a perennial plant. Saffron is a plant that has properties that help reduce muscle pain, sweating, digestive problems, pregnancy and rest in women. Studies show that taking bile by mouth can prevent the development and reduce the size of skin papillomas in animals, providing good results in preventing cancer.

The plant is thought to have many medicinal properties and its main components include crocetin, picrocrocin and safranal (the main component of its characteristic aroma). Saffron is derived from picrocrocin, which plays an important role in many of the plant's medicinal properties. Additionally, saffron has been shown to be effective in treating psoriasis. (27)

Brassica oleraceae

(Common name: Red Cabbage; Family: Brassicaceae)

Induction of skin tumors with a dose of 200 nmol of DMBA followed by treatment with TPA for 30 weeks resulted in a reduction in the number of tumors in mice. This reduction was further improved by application of 0.1 g/L aqueous cabbage extract one week after the initial application. (28)

Beta vulgaris

(Common name: Beetroot; Family: Brassicaceae)

Studies have shown that beetroot extract has a strong inhibitory effect on EBVEA induction in Raji cells compared to red pepper, cranberry, red onion peel, short bell pepper, and long red bell pepper. Additionally, in vivo testing in mouse skin and lung bioassays showed significant tumor growth. Overall, these findings suggest that eating beets may be a good way to prevent cancer. (29)

Euphorbia walachii, Euphorbia hirta, Euphorbia tirucalli

(Common name: Wallich spurge, Fam. Euphorbiaceae)

Wallachian eucalyptus can be used to treat acne and skin diseases [22]. Studies on different species of *Euphorbia* *E.hirta* showed the best antioxidant activity. Botanical extracts show greater resistance to Gram-positive bacteria and fungi. *E. tirucalli* showed the best anti-inflammatory properties. This study encourages the public to use *E. hirta* and *E. tirucalli* to treat certain skin conditions caused by oxidative stress or disease. [29]

Plumbago zeylanica

(Common name: Doctor Bush; Family: Plumbaginaceae)

Crush all the herbs, add some salt and prepare a paste for other applications to prevent ringworm. A study on plumbagin (5-hydroxy-2-methyl-1,4naphthoquinone), a botanical naphthoquinone isolated from the roots of *P. zeylanica*, showed that topical application of plumbagin inhibited UV induced growth of squamous cells. Cell carcinoma in mice. (30)

Cassia fistula

(common name: golden bath, Indian laburnum, family: **Fabaceae**)

The semi-wild Indian Labernurm (also known as the Golden Bath) is found in many countries in Asia, including South Africa, Mexico, China, the West Indies, East Africa and Brazil. This is an ornamental tree with beautiful yellow flowers.

This herb is widely used by tribal people to treat many ailments, including ringworm and other fungal skin infections. *Cassia fistula* has been shown to exhibit significant antibacterial properties, encouraging

its public use as a general remedy in the treatment of certain diseases. The pulp of the ripe fruit has a small, pleasant laxative effect and is also used as an antifungal. The whole plant is used to treat diarrhea, and its seeds, flowers, and fruits are used to treat skin conditions. (31)

Mangifera indica

(Common name: Mango; Family: Anacardiaceae)

This gum is used as a dressing for cracked and itchy feet. Latex is used in the treatment of ulcers. (32)

Lavendula officinalis

(Common name: Lavender; Family: Labiatae)

The effects of lavender oil (1:500, 1:100, 1:10, 1:1, 1:0) on mast cell-mediated immediate allergic reactions in rats and mice were investigated. It has been reported to inhibit histamine release from peritoneal mast cells in a concentration-dependent manner. When tested in rats and mice, it also inhibited immediate allergic reaction by inhibiting mast cell degranulation *in vivo* and *in vitro*. (33)

Camellia sinensis

(Common name: Green tea, Chaay; Family: Theaceae)

Green tea comes from the Camellia sinensis plant and may play a big role in treating tumors and cancer. It contains polyphenols that act as antioxidants in the body. A polyphenol in green tea called epigallocatechin gallate has been reported to prevent the growth of skin cancer in the body, according to the National Center for Complementary and Alternative Medicine. It rejuvenates old skin and makes the skin look younger. (34)

Tbale1: Summary of medicinal plants used in treatment of skin diseases

Sr. no	Name of plants	Uses
1	Aloevera	Antiwrinkle, stretch mark removal property.
2	Turmeric	Improve skin tone, used against eczema.
3	Neem	Antifungal, antibacterial, anti viral.
4	Orchid tree	Anti-ulcer.
5	Mehndi	Hair colour.
6	Chamomile	Anti ulcer, wound healing property.
7	Prickly chaff flower	Used against scabies, Skin eruption.
8	Ashoka	Used against Scabies, Eczema, Dermatitis, Psoriasis
9	Thyme	Antifungal, Antibacterial
10	Tomato	Protect against skin redness caused by UV exposure
11	Eucalyptus oil	Used against scabies
12	Ganja	Dermatitis, psoriasis, acne, scabies, eczema
13	Saffron	Prevent skin cancer
14	Red cabbage	Antineoplastic activity
15	Beetroot	Antineoplastic activity
16	Wallich spurge	Antic acne
17	Doctor Bush	prevent ringworm
18	Golden Bath	Used on ringworm and other fungal skin infections.
19	Mango tree	used as a dressing for cracked and itchy feet
20	Lavender	Anti tumor activity.
21	Green tea	Act as antioxidants, prevent the growth of skin cancer.

CONCLUSION

Despite significant medical advances in recent years, skin infections are still an untreatable health problem. The main reason for this is the development of resistance to some existing antibiotics, antibiotics and antibiotics. The plant kingdom is a rich source of medicinal preparations and many chemical compounds, giving it great potential in the development of new drugs. The phytochemistry of many plant species suggests that phytochemicals may be more effective than synthetic drugs. Over the past few years, scientists have developed many drug models based on natural antibiotics and are currently under development. Therefore, the plant kingdom has great potential that needs further research.

REFERENCES

1. Sansare, A., Mali, S., Review on Herbal Drugs Use In Skin Disorder. IJTSRD, volume., 05: page no:4136.
2. Ernst, E., (2005). The efficacy of herbal medicine an overview. Fundamental and Clinical Pharmacol.,19:405-409.

3. Dubale ,S. Dattatray, B. L.R. and Hingane L. D., (2021). Review article of herbal drugs used in skin disorder. World Journal of Pharmaceutical Research.2;2, page no:536.
4. Abascal, K., Yarnell, E.,(2007). Botanicals for chronic venous insufficiency. Altern Complement There. 13(6):304–11.
5. Khan, S,, Joice, Aney., and Patel, A., World Journal of Pharmaceutical Research. Volume 7, Issue 9, 464-481. Review page no.466.
6. Van, P., HPA, Juhlin, L., (1999): Acne conglobata after pregnancy [8]. Acta Derm Venereol.; 79(2): 169.
7. Parisi ,R., Symmons D, P., Griffiths C. E., Ashcroft D. M. (2013): Global epidemiology of psoriasis: A systematic review of incidence and prevalence. J. Investing. Dermatol. ; 133:377– 385. doi: 10.1038/jid.2012.339.
8. Preeti, G., Ajay, K., Nisha,S., Madhvendra, Patel., Anita, M., and Shweta, S.,(2017): A Review On Phytomedicines Used In Treatment Of Most Common Skin Diseases, Indian Journal of Drugs, 5(4), 150-164.
9. Dubale ,S, Dattatray (B Pharm),Bagwan L.R. (M Pharm) and Hingane L. D., (M Pharm, PhD, World Journal of Pharmaceutical Research, review article of herbal drugs used in skin disorder, cholara) Revised on 17 Jan. 2021, Accepted on 07 Feb. 2021, page no: 541,546.
10. Kim, J., Lee Is, Park ,S., Choue ,R., (2010): Effects of *Scutellariae radix* and Aloe vera gel extracts on immunoglobulin E and cytokine levels in atopic dermatitis NC/Nga mice. J Ethnopharmacol. ;132:529-32. [PubMed] [Google Scholar].
11. Syed, TA., Ahmad, SA., Holt ,AH., Ahmad, SA., Ahmad, SH., Afzal M. (1996): Management of psoriasis with Aloe vera extract in a hydrophilic cream: A placebo-controlled, double-blind study. Trop Med Int Health, ;1:505-9.
12. Kaufman ,T., Kalderon, N., Ullmann, Y., Berger (1988): Aloe vera gel hindered wound healing of experimental second-degree burns:A quantitative controlled study, J Burn Care Rehabil. ;9:156-9.
13. Miller, MB., Koltai, P.,(1995): Treatment of experimental frostbite with pentoxifylline and aloe vera cream, Arch Otolaryngol Head Neck Surg. ;121:678-80. [PubMed] [Google Scholar].
14. Arora ,N., Bansal, MP., Koul ,A., (2013): *Azadirachta indica* acts as a pro-oxidant and modulates cell cycle associated proteins during DMBA/TPA induced skin carcinogenesis in mice. Cell Biochem Funct.; 31:385–94. [Pub Med] [Google Scholar].
15. Rasheed, A., Shama, SN., Joy, JM., Reddy, BS., Roja, C., (2012): Formulation and evaluation of herbal anti-acne moisturizer. Pak J Pharm Sci. ; 25:867–70. [Pub Med] [Google Scholar].
16. Agrawal, RC., Pandey, S., (2009): Evaluation of anticarcinogenic and antimutagenic potential of Bauhinia variegata extract in Swiss albino mice. Asian Pac J Cancer Prev; 10:913–6.
17. Kingston, C., Jeeva, S., Jeeva GM., Kiruba, S., Mishra, IP., Kannan, D., (2009): Indigenous knowledge of using medicinal plants in treating skin diseases in Kanyakumri district, Southern India Indian / Tradit Knowl :8:196-200. [Google Scholar].
18. Aertgeerts, P., Albring, M., Klaschka, F., Nasemann, T., Patzelt-Wenczier R, Rauhut K, et al.,(1985): Comparative testing of Kamillolan cream and steroidal (0.25% hydrocortisone, 0.75% fluocortin butyl ester) and non-steroidal (5% buferamac) dermatologic agents in maintenance therapy of eczematous diseases. 2 Houtkr.:60-270-7. [PubMed] [Google Scholar].
19. Chakraborty, A., Brantner A., Mukainaka T.,Nobukuni ,Y., Kuchide, M., Konashima T, et al.,(2002): Cancer chemopreventive activity of *Achyranthes aspera* leaves on Epstein-Barr virus activation and two-stage mouse skin carcinogenesis. Cancer Lett:177:1-5. [PubMed][Google Scholar].
20. Anand, G., Gavale., and Prashant, R., Wagh, (2023): Herbal Drugs Use in A Skin Disorders Review Article, Vol 12, Issue 9, Page no. 2773
21. Nahida, T., and Mariya, H., (2014): Plants used to treat skin diseases, Pharmacogn Rev., Jan-Jun; 8(15), 52-60,doi: 10.4103/0973-7847-125531.
22. Stahl, W., Heinrich, U., Wiseman, S., Eichler O, Sies K, Tronnier, H., (2001): Dietary tomato parte protects against ultraviolet light induced erythema in humans./Nutr. 2001/131:1449-51. [PubMed] [Google Scholar].
23. Morsy, TA., Morsy, GH., Sanad,M, EM., (2002): Eucalyptus globulus (camphor oil) in the treatment of human demodicidosis. / Egypt Soc Parasitol. ;32-797-803 .[PubMed] [Google Scholar].
24. Olsen, DL., Raub, W., jtc. Bradley, C., Johnson ,M, Macias., [L, Love V, et al. (2001): The effect of aloe vera gel/mild soap versus mild soap alone in preventing skin reactions in patients undergoing radiation therapy. Oncol Nurs Forum. 28:543-7. [PubMed] [Google Scholar].
25. Das, L., Das, S ,Saha ,T., (2010): Saffron suppresses oxidative stress in DMIRA-induced skin carcinoma. A histopathological study Acta Hutochem. 112:317-27. [PubMed] [Google Scholar].
26. Isbir ,T., Yaylim, 1, Aydin, M., Oztürk ,O., Koyuncu ,H., Zeybek ,U., et al. (2000): The effects of Brassica oleraceae var capitata on epidermal glutathione and lipid peroxides in DMBA-initiated TPA-promoted mice Anticancer Res. :20:219-24. [PubMed] [Google Scholar].
27. Kapadia GJ. Tokuda H, Konoshima T, Nishino H. (1996): Chemoprevention of lung and skin cancer by Beta vulgaris (beet) root extract. Cancer Lett. ;100:211-4: [PubMed] [Google Scholar].
28. Tantray , MA., Tariq, KA., Mir, MM., Bhat, MA., Shawi ,AS.,(2009): Ethnomedicinal survey of shopian, Kashmir (1 and K), India. Azian/ Tradit Med. 4:1-6. [Google Scholar].
29. Chanda, S., Baravalia, Y., (2010): Screening of some plant extracts against some skin diseases caused by oxidative stress and microorganisms. Afr/ Biotechnol. 9:3210-7 .[Google Scholar].
30. Joshi, AR., Joshi, K.,(2007): Ethnomedicinal plants used against skin diseases in some villages of kali Gandaki Bagmati and Tadi Likhu watersheds of Nepal. Ethnobotanical Leaif. ;11-235-46. [Google Scholar].

31. Duraipandiyan, V., Ignacimuth ,S., (2007): Antibacterial and antifungal activity of Cassia fistula L: An ethnomedicinal plant. *Journal of ethnopharmacology* 112(3):590-594.
32. Joshi, AR, Joshi, K.,(2007): Ethnomedicinal plants used against skin diseases in some villages of Kali Gandaki Bagmati and Tadi Likhu watersheds of Nepal. *Ethnobotanical Leaflets* ;11:235-46. [Google Scholar].
33. Kim, HM., Cho, SH., (1999): Lavender oil inhibits immediate-type allergic reaction in mice and rats. / *Pharm Pharmacol.* 51:221-6. [PubMed] [Google Scholar].
34. Renu, S., (2010): Treatment of skin diseases through medicinal plants in different regions of the world, *Int/Compr Pharm.* 4:1-4 [Google Scholar].

Copyright: © 2024 Author. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.