

## A review on alternative treatment of psoriasis

Sandu Rajesh<sup>1</sup>, Shaik Khaza Mohiddin<sup>1</sup>, Medagam Harsha Vardhan Reddy<sup>1</sup>, Thapeta Joshi Anand<sup>2\*</sup>

<sup>1</sup> Chalapathi Institute of Pharmaceutical Sciences Lam, Guntur, Andhra Pradesh, India

<sup>2</sup> Assistant Professor, Department of Pharmacology, Chalapathi Institute of Pharmaceutical Sciences Lam, Guntur, Andhra Pradesh, India

### Abstract

World is affected by so many diseases, and the diseases cure by some of the treatments, but some of the diseases there is no proper treatment in that one of the diseases that affecting our largest part of human body is skin affected due to some antigen and antibody reaction, increases the keratinocyte proliferation, progression of T-cells and cytokines leads to the silver scales and itchy, it is psoriasis, it is one of the disease that affecting many population due to genetic and external factors, but there is no proper treatment of psoriasis, but some of topical, systemic treatments but there is severe adverse effects. But in our ancient treatment in Ayurveda, Siddha, Unani, using some of herbals to treat psoriasis by inhibiting keratinocyte proliferation and high wound healing of plant possess those characteristics.

**Keywords:** psoriasis, topical treatment, ant psoriasis, wound healing, herbal plant, anti-inflammatory, anti-oxidant

### Introduction

Inflammation is a part of the body's immune response and is the end result of oxidative stress in any body part. Among the various inflammatory diseases psoriasis is found to be more severe in form, though it is not infectious. The mostly affected parts in psoriasis are the skin, nails and joints. It comes under papulo-squamous disorders. Here, the outer layer of skin i.e., the epidermis moves towards the surface and then continually shed from skin. The skin formation touches a dramatically higher turnover rate. The name psoriasis is from the Greek language, meaning "roughly itching condition" (psora: "itch", sis: "action"). Psoriasis is an immune mediated disorder, where a normal skin cell mistakes for a pathogen, and sends a faulty signal that causes over production of new skin cell. It is also a hereditary condition but the way it inherits is still not predictable. It is a typically lifelong condition, which is not having a permanent cure, but various treatments can be implemented for controlling the severity of symptoms produced by it. The relationship between human, plant and plant derived products is very old. Plants have been therapeutically used by human in diverse physiological disorders starting from inflammation to life threatening diseases like cancer. In recent time, WHO is also promoting the herbal drugs because of their therapeutic benefits along with safety. This review deals with a precise discussion about psoriasis and the available plant derived medication for its treatment along with the future of herbal medication in this field.

**Symptoms:** Mainly causes patches of skin that are dry, red and covered in silver scales. Some people with Psoriasis cause itching.

### Types of Psoriasis

#### 1. Plaque Psoriasis/Psoriasis vulgaris

This is most common from accounting for about 80 to 90% of cases. Symptoms are dry skin lesions, known as plaques.

They normally appear on your elbows, knees, scalp and lower back, but can appear anywhere on your body. The plaques can be itchy or sore. In severe cases, the skin around joints may crack and bleed.



Fig 1

## 2. Scalp Psoriasis

This can occur on parts of your scalp or on the whole scalp, it causes red patches of skin covered in thick silvery white-scales. Some people find scalp Psoriasis extremely itchy, can cause hair loss.



Fig 2

## 3. Nail Psoriasis

In about half of all people with Psoriasis, the condition affects the nail, Psoriasis can cause your nails, to develop tiny dents or pits, become discolored or grow abnormally. Nails can often become loose and separate from the nail bed. In severe cases, nails, may crumble.



Fig 3

## 4. Guttate Psoriasis

Guttate Psoriasis causes small drop shaped sores on your chest, arms, legs and scalp. Guttate Psoriasis will disappear completely after a few weeks, but in some people go on to develop plaque Psoriasis. This type of Psoriasis sometimes occurs after a streptococcal throat infection and is more common on among children and teenagers.



Fig 4

## 5. Inverse Psoriasis

This affects folds or creases in your skin, such as the armpits. Groin between the buttocks and under the breasts. It can cause large, smooth red patches in some or all these areas. Inverse Psoriasis is made worse by friction and sweating.



Fig 5

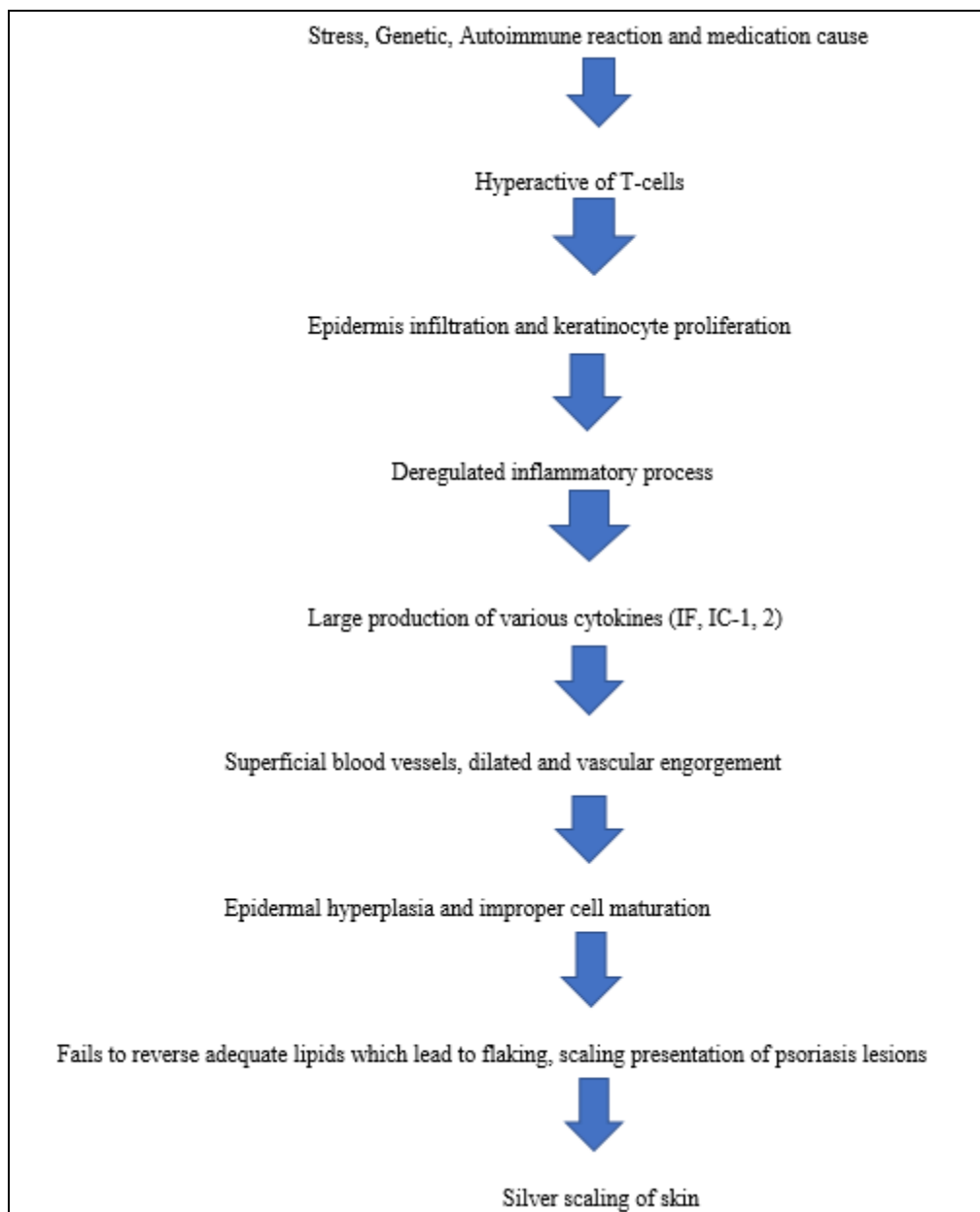
**Pathophysiology: (2)**

Fig 6

**Treatment**

- 1. Topical therapy:** 1<sup>st</sup> line treatment of mild to moderate Psoriasis should include on emollient as well as a topical treatment, mild to moderate topical steroids are useful for delicate skin sites such as face and flexus. Dithranol and tar products are effective bur limitations of use include irritation, messy application and potent odor.

2. **Vitamin D analogues:** Vitamin D analogues inhibit keratinocyte differentiation and production. Most commonly prescribed vitamin D analogue is calcipotriol. This is commonly used within primarily case for mild localized Psoriasis is available as a lotion ointment, cream, scalp treatment
3. **Steroids:** Topical steroids are cosmetically acceptable and easy to apply mild to moderately potent steroids are of greatest value in acutely inflamed Psoriasis to reduce inflammation.
4. **Coal tar:** Along with Dithranols, coal tar is one of the oldest topical treatments for Psoriasis. Coal tar has anti-inflammatory antibacterial, antipyretic and antimitotic effects. Coal tar in combination with topical steroids can be effective.
5. **Dithranol:** Dithranol is a synthetic anthracene derivative which has an anti-proliferation & anti-inflammatory effect on the chronic plaque Psoriasis. Drawbacks include burning and irritation on normal skin.
6. **Salicylic acid:** Useful to reduce scale, particularly while treating hyperkeratosis palms and soles. It can be mixed with coal tar, steroid.

#### Topical treatment of Psoriasis at special sites

**Scalp:** Tar shampoo is effective in mild scalp Psoriasis, coconut oil, peanut oil and greasy emollient with salicylic acid can be used as descaling agents.

**Genitals:** Genital regions are prone to irritation and mild to moderate topical steroids can be used.

**Phototherapy:** Majority of Psoriasis patients exhibit important of symptoms on sunny holiday deterioration in symptoms on sun exposure. Photo therapy has an immunosuppressive effect on skin and has been used in the treatment of Psoriasis. U.VB (311-313nm). Is used due to increase safety and reduce risk of burning.

**PUVA:** Psoralens plus UVA light has available role in the treatment of stable moderate to severe Psoriasis. Psoralens are drugs that are activated by long-wave ultraviolet light there by interfering with DNA synthesis is and reducing epidermal turnover. Common adverse effect is nausea due to ingestion of oral psoralens. Most serious adverse effects is an increased risk of long-term cutaneous malignancy  
Systemic therapy: <sup>[2]</sup>

**Cyclosporine A:** Binds to cyclophilin producing a complex that blocks calcineurin reducing the effect of the NF-AT in T-cells, resulting in inhibiting of interleukin.

**Methotrexate:** Blocks dihydrofolate reductase leading to inhibition of purine and pyrimidine synthesis leading to accumulation of anti-inflammatory adenosine

**Acitretin:** Binds to retinoic acid receptors contribute to improvement by normalizing keratinization and proliferation of epidermis.

#### Alternative treatment for Psoriasis

**Aloe Vera:** *Aloe barbadensis miller* is most biologically plant grown in various place in world. It belongs to family LILIACEAE, especially its plant parts, gel is more useful. Gel from the aloe Vera plant is used in treatment of Psoriasis, to prevent redness and scaling. Aloe Vera consists of anthraquinones, Steroids, Saponins and salicylic acid. Salicylic acid has keratolytic property to remove Psoriasis plaques <sup>[1]</sup>.

**Silybum marianum:** *Silybum marianum*, common name milk thistle, belonging to family Asteraceae; Grown in Mediterranean regions, now disturbed worldwide. Seeds are used in traditional medicine to treat liver and gall bladder to prevent from poisoning by toxins, and snake bites. It is very well known for hepato protective activity, so it is used in Psoriasis patients including periportal inflammation, necrosis. This plant mainly regulates the, inhibition of CAMP phosphor disease and leukotriene synthesis <sup>[4]</sup>.

**Devil's claw:** *Harpagophytum procumbens* or devil claw found in South Africa. It consists of group decarboxylated iridoid glycosides 3% harpagoside -1-2%, small amounts of procumide. It relieves the inflammation and pain in people of Psoriasis and other skin disorders <sup>[39]</sup>.

**Capsicum annum/Capsicum frutescences:** It is commonly known as cayenne. In Psoriasis patients' substances is released and activity inflammatory cells and keratinocyte hyper proliferation. Capsaicin is chief constituent of capsicum annum is inhibits the substances and leads to depletion. Other uses to prevent the difference types of cancer rheumatism, stiff joints, and chest colds with cough <sup>[5]</sup>.

**Alpinia galanga:** It is obtained from *Alpinia galanga*, belongs to family Zingiberaceae. The rhizome of galangal is reddish brown color, 5 to 10 cm long. Galanga consists of volatile oil (methyl cinnamate). It is used in treatment of Psoriasis as anti-inflammatory, Antibacterial, Anti-oxidant.

***Annona squamosa*:** *Annona squamosa* is used herbal natural treatment belongs to family *Annonaceae*. Therefore, more acetogenins are isolated from the seeds and rhizomes. This plant is used in treatment of Psoriasis as it possesses anti-inflammatory, anti-oxidant, analgesic activity. Other activities of this plant are regulation of hyperthyroidism and lipid-peroxidation, antiulcer, antitumor activity [12].

***Azadirachta indica*:** *Azadirachta* possess greater used in herbal treatment from ancient periods, its parts such as leaves constituents and becomes to family *Meliaceae*. The main phytochemical constituents are Azadirachtin Nimbin, Nimbidin, Nimbidox, Sodium nimbinate. It possesses so many activities and proven by scientifically. It is used in treatment of Psoriasis inducing wound healing, Anti-oxidant, Antibacterial [21].

***Argemone mexicana*:** *Argemone mexicana* root is used in herbal treatment of Psoriasis associated itching and anti-inflammatory, anti-bacterial activity. It belongs to family *papavaraceae*, possess mainly phytochemical constituents such as alkaloids terpenoids, flavonoids, and few aromatic compounds. It possesses wound healing activity, Antiallergy, Antioxidant. Used in various skin disorders, skin warts and leprosy [9].

***Caesalpinia bonducella*:** It is mainly used in Ayurveda, Siddha, Unani and homeopathy. Belongs to family *Caesalpinaceae*. The leaves of *Caesalpinaceae*. The leaves of *Caesalpinia bonducella* possess of alkaloids, flavonoids and coumarins. It is used in treatment of psoriasis it possesses Antioxidant, Analgesic, Anti-inflammatory and antipsoriatic reduces the scales. Other uses are Antioxidant, Immunomodulatory, and Antimalarial nootropic [22].

#### ***Calendula officinalis***

There are so many researches had done on *calendula officinalis*. The flowers of calendula possess the many Phyto chemical constituents such as triterpene alcohols, Saponins, Flavonoid's, Carotenoids. *Calendula officinalis* is used traditionally in treatment of various skin tumors, dermatological lesions so it can used in Psoriasis patients. Other uses are ulcers and swelling and heavy disorders and used in more skin care forms. (22)

#### ***Cassia fistula***

*Cassia fistula* commonly known as the golden flower, Indiana caburnum, Raja uriksha. Fruit pulp of cassia fistula contains phytochemical constituent's oxalic acids, Tannins, Oxyanthraquinones, Anthraquinones, and Flavonoids. It therapeutic uses associated with psoriasis patient is antioxidant, antifungal, anti-inflammatory and other skin diseases, wound healing, anti-itching. Other uses are antitussive, Hypolipidemic, Anticancer, Anti-diabetic, Anti-ulcer, Antiepileptic [24].

#### ***Leucas aspera***

Commonly known as Thumbai, Belongs to family *Lamiaceae*. *Leucas aspera* is used traditionally as an antipyretic and insecticide. *Leucas* contains phytochemical constituents are triterpenoid contains oleanolic acid, reducing sugar (galactose). *Leucas* possess prostaglandin inhibitory and antioxidant and anti-microbial it is used in Psoriasis patients [25].

#### ***Melaleuca alternifolia***

Commonly called as tea tree, belongs to *Myrtaceae*. *Melaleuca* consists of chemical constituents such as terpinen-4-ol, r-terpinene, 1, 8-cineole, limonene. Therapeutic uses of tea tree oil is anti-inflammatory activity, Anti-microbial [26].

#### ***Momordica charantia***

Commonly called as bitter gourd belongs to family *cucurbitaceae*. *Momordica charantia* seeds contains wide range of Vitamin C, A, E, B, B2, B3, B9. *Momordica* consists of phytochemical constituents are glycosides, saponins, reducing sugars, resins phenolic constituents and fixed oils. It's mainly used to reduce the blood glucose levels in diabetic patients. Used to treat the skin infections [27].

#### ***Matricaria recutita***

Commonly known as chamomile. It possesses anti-inflammatory activity inhibition of cyclooxygenases and lipoxygenase and leukotriene. Chamomile oil has antimicrobial activity against skin pathogens, staphylococcus. Quercetin is active compound, potent inhibition of cyclooxygenase and lipoxygenase.

#### ***Curcuma longa***

*Curcuma* possess anti-inflammatory and also selective inhibition of phosphorylase kinase. Used to treat the Psoriasis, decrease in keratinocyte transferrin receptor.

#### ***Nigella sativa***

*Nigella sativa* is very popular in various traditional systems of medicine like unani, Ayurveda and siddha. Belongs to family *Ranunculaceae*. It consists important active constituents are thymoquinone, thymohydroquinone, terpineal. It's therapeutic uses are Antibacterial, Antifungal, Anti-schistosomiasis,

Antioxidant, Antidiabetic, Anticancer, Anti-inflammatory&analgesic activity, Immuno modulatory Gastro-protective activity hepato-protective activity, Nephroprotective property, Anticonvulsant activity <sup>[17]</sup>.

#### ***Pongamia pinnata***

Pongam tree is known as one of the richest and brightest trees of India belongs to family *Leguminosae*. Pongamia pinnate is widely used in different alternative traditional medicine Ayurveda & Siddha. Pharmacological properties of pongamia are Antimicrobial, Antiulcer, Antidiarrhoea, Antiplasmodial, Antioxidant, Anti proliferation of skin, Anti-inflammatory <sup>[18]</sup>.

#### ***Phyllanthus simplex***

Phyllanthus simplex have been used as traditional medicinal materials for a longtime in china, india, Brazil and the southeast Asian countries, Belongs to family *phyllanthaceae*. Phyllanthus possess phytochemical constituents such as terpenoids phenylproparoids, tannins, flavonoids, sterols and alkaloids. It possesses antiviral, antioxidant, antidiabetic, anticancer, Immuno modulatory, analgesic, Anti-inflammatory, Antispasmodic activity, wound healing and other skin disorders <sup>[19]</sup>.

#### ***Rubia cordifoila***

*Rubia cordifoila* is well-known and valuable medicinal plant in Ayurveda system. It belongs to family *Rubiaceae*. It consists of various types of secondary metabolites including alkaloids, Glycosides, terpenoids, tannins. It possesses antioxidant and anti-inflammatory activities. Main important of Rubio is cardio protective effects <sup>[20]</sup>.

#### ***Smilax china***

Smilax is a traditional Chinese herb issued to treat various diseases in alternative system of medicine. It belongs to family *smilacaecae*. The rhizome of smilax possesses many constituents such as saponins, glycosides, gum, starch, flavonoids, tannins and alkaloids. Smilax is used to treat various skin disorders, possess antioxidant activity. Other therapeutic activities of smilax isosteoarthritis, diabetics, chronic arthritis and syphilis, urinary tract infections, anti-inflammatory <sup>[14]</sup>.

***Thespesia populnealinn***: *Thespesia populnealinn* is a medium sized evergreen tree up to 10mts, belongs to family *malvaceae*. Majorly used plant parts are roots, leaves, fruits in treatment of various diseases. Various chemical constituents were kaempferol, quercetin, 3-glucoside. Various pharmacological activities are dermatitis, Anti-hepatoprotective activity, Antisteroidogenic activity, wound healing, antioxidant, anti-psoriatic, Antibacterial activity, Anti nociceptive, Antidiabetic, Alzheimer's disease <sup>[15]</sup>.

***Tribulus terrestris***: *Tribulus terrestris* is an annual part of family *zygophyllaceae* treatment of system. Main phytochemical constituents present in tribulus is steroidal saponins, flavonoids, glycosides, tannins terpenoids. Main pharmacological actions of tribulus are improving sexual function, improvement in fertility, Antidiabetic, protective activity of neuronal cells, Antibacterial activity, Antioxidant, Anti-inflammatory, Hepatoprotective activity, Ant aging& memory improvement activity, anticaring activity <sup>[16]</sup>.

***Urgenia Indica***: *Urgenia Indica* commonly called as wild onion, belongs to family *Liliaceae*. *Urgenia Indica* contains alkaloids, flavonoids, glycosides, Quinone's, resins. *Urgenia* possess the antimicrobial activity against several microorganisms and treat various skin disorders <sup>[7]</sup>.

***Psoralea corylifolia***: *Psoralea corylifolia* is the important herbal species is found as wild weed in cold weather of Himalayas in India, belongs to family *Leguminosae*. *Psoralea* consists of phytochemical constituents such as flavones, coumarins, monoterpens, chalcones, lipids and flavonoids. *Psoralea* is an important part of therapeutics in Ayurveda and Chinese medicines. The seeds of *psoralea* is used in the form of paste and as an ointment for external as well as internal use for treatment of different conditions such as leprosy, psoriasis and eczema in various skin disorders. Other uses of psoriasis is antibacterial, antiviral, antifungal, anthelmintic, insecticidal and genotoxic, antiprotozoal, chemopreventive effect, anti-Alzheimer's, antidepressants, antioxidant, antidiabetic. (6)

***Cassia tora***: *Cassia tora* is a small herb belongs to family *Leguminosae*. Different parts of *cassia tora* are used in Ayurveda and Chinese medicine. Phytochemical constituents of *cassia tora* are anthraquinones, including 1-des methyl aurantion, anthraquinone glycosides. It possesses many activities like anti-proliferation of skin cells, antimicrobial, anti-inflammatory, antioxidant, antidiabetic, hepato protective, spasmogenic, Immuno modulatory. <sup>[8]</sup>

***Angelica sinensis***: *Angelica sinensis* is belongs to family *Apiaceae*. Its root is used in chinese medicine as Immuno modulatory phenolic compounds, Carbohydrates. Most active ingredients are polysaccharides, z-ligustilide and ferulic acid. Medicine uses of *Angelica sinensis* herb is anti-inflammation, antioxidant, atherosclerotic, antihypertensive. <sup>[11]</sup>

**Liquorice:** It is obtained from glycyrrhiza glabra of unpleed rhizome and roots. Consists of water-soluble active constituents are glycyrrhizic acid. It also contains flavonoids are liquiritigenin, isoliquiritigenin. It has anti-inflammatory activity, and inhibiting the enzymes to convert prostaglandins and glucocorticoids <sup>[1]</sup>.

**Feverfew:** Feverfew is a herbal plant belongs family *Asteraceae*. It inhibits blood platelet aggregation, to treat dermatitis, skin itching's. Active ingredients in dried leaves are germacrene and guianane <sup>[1]</sup>.

**Gaultheria procumbens:** Commonly known as wintergreen plant. It consists of methyl salicylate. It possesses anti-inflammatory properties. It reduces the inflammation.

**Givatia rottleriformis:** *Givatia rottleriformis* have been used traditionally for treating various skin disorders like psoriasis, leprosy and belongs t family *euphorbiaceae*. Phytochemical screening of bark of giuatia shows presence of carbohydrates, alkaloids, flavonoids, tannins, glycosides, triterpenoids. Pharmacological activity of givatia is antipsoriatic, antibacterial, antioxidant <sup>[10]</sup>.

**Pinus halepensis:** *Pinus halepensis* is a medicinal plant in alternative treatment of Ayurveda and unani. Treatment against diarrhea, wounds, rheumatism, cough, gastrointestinal illness hypertension, hemorrhoids, anti-inflammatory, hepatoprotective <sup>[35]</sup>.

**Juglans regia:** *Juglans regia* is a medicinal plant with different properties that is considered less, despite having greater therapeutic potential in traditional medicine. *Juglans* composed of chemical compounds such as ascorbic acid, flavonoids, antracene and caffeic acid. *Juglans* possess the activity of antioxidant, antidiabetic, hypolipemic, antimicrobial and antihypertensive activity as well as liver protection <sup>[36]</sup>.

**Coleus forskohlii:** *Coleus forskohlii* is an important therapeutic crop which contains for skohlil in their roots. *Forskohlii* is a useful drug used in treating hypertension glaucoma asthma, including its anticancer, antidepressant, antidiuretic. It is reported that improvement in symptoms of psoriasis in patients treated with *forskohlii*. The ability of *forskohlii* to regulate CAMP levels in skin cells has been shown to have therapeutic benefits for suffer of psoriasis <sup>[37]</sup>.

**Ammi visnaga:** *Ammi visnaga* with symptom's *Ammi daucoides* and *daucus visnaga* is of family *Apiaceae/umbelliferrae*. The active chemical constituents khellin and visnagin. Seeds of *visnaga* used in activity of antilithogenic and pleiotropic. It has been used in treatment of several diseases including psoriasis, asthma, hypoglycemia, poisons bite, alopecia <sup>[29]</sup>.

**Olea europaea:** Traditional uses of *olea europaea* is oil is taken with lemon juice to treat gall stones. Leaves are taken orally for stomach and intestine diseases and used as mouth cleanser. Hot water of extract of fresh leaves taken orally to treat hypertension and induce diuresis. To prevent hair loss, oil is applied every night and scalp. Seed oil is applied externally as an emollient and pectoral. Used to treat dermatitis and bronchial as asthma, anti-inflammatory <sup>[30]</sup>.

**Ficus carica:** *Ficus carica* is an important member of the genus *ficus*, it is ordinally and commonly called as "fig". *Ficus carica* has been traditionally used for its medicinal benefits as antioxidant, antibacterial & antifungal, antipyretic, antispasmodic and antiplatelet activity, hypoglycemic, hepatoprotective activity <sup>[28]</sup>.

**Wrightia tinctoria:** *Wrightia tinctoria* commonly called "Indrajau" belongs to family *Apocynaceae*. It is used in Indian traditional medicine. The bark of this plant is used as a galactagogue to treat abdominal pain, skin diseases and wounds, as an antipyretic, anti dysenteric, anti-diarrheal and anti-hemorrhagic agents, used as antidote for snake poison. Seeds of this plants are also used as an aphrodisiac. Leaves are applied as a poultice for mumps and herpes. The bark and seeds are effective against psoriasis and non-specific dermatitis. It has anti-inflammatory, antidandruff properties used in hair oil preparations <sup>[31]</sup>.

**Prunus amygdalus:** *Prunus amygdalus* mainly used in diet for maintain the health and prevention and treatment of disease. According to alternative treatment, the disease can be treated first through diet. Almond is a good source of vitamin E, MUFA, PUFA and arginine. Active constituents of almonds are globulins such as amandine and albumin, amino acids. Almond possess the memory improving activity, Hepatoprotective activity, Hypoglycemic activity anxiolytic activity, anti-aging, antioxidant activity <sup>[32]</sup>.

**Lawsonia inermis:** *Lawsonia inermis* is one of the commonly used herbal medicine belongs to family *lythraceae*. The active constituents of leaf is lawsone. Other constituents are 5-10% of gallic acid with some resins, sugars and tannins. It possesses the antibacterial and antifungal activity due to lawsone in leaves of henna plant. One of the important use is hair dye in several hair care products <sup>[33]</sup>.

**Musa mysore:** Banana is the common name for herbaceous plants of genus musa. All parts of banana plant have medicinal applications. The flowers used in bronchitis and dysentery and on ulcers. Used in the cases of hysteria, epilepsy, fever, hemorrhages. Young leaves of musa is placed on burns and other skin disorders [34].

**Achillea millefolium:** Achillea is a widely distributed medicinal plant throughout the world and has been used in ancient time. Popularly used in the treatment of wounds, bleeding, headache, inflammation, pain, spasmodic effect and antioxidant, antiulcer, immunosuppressant. [38]

**Table 2:** List of herbal Plants to treat Psoriasis

S. No	Plant Botanical name	Family name	Plant part used
1	<i>Achillea millefolium</i>	<i>Asteraceae</i>	Leaves
2	<i>Allium sativum</i>	<i>Amaryllidaceae</i>	Bulb
3	<i>Aloe vera</i>	<i>Liliaceae</i>	Leaf
4	<i>Alpinia galanga</i>	<i>Zingiberaceae</i>	Rhizome
5	<i>Ammi visnaga</i>	<i>Apiaceae</i>	Fruits
6	<i>Andrographis nallamalyanna</i>	<i>Acanthaceae</i>	Whole plant
7	<i>Angelica sinensis</i>	<i>Apiaceae</i>	Root
8	<i>Annona squamosa</i>	<i>Annonaceae</i>	Rhizome and leaf
9	<i>Anthemis cotulax</i>	<i>Compositae</i>	Flowers
10	<i>Arctium lappa</i>	<i>Asteraceae</i>	
11	<i>Argemone mexicana</i>	<i>Papovaceae</i>	Root
12	<i>Avena barbata pott</i>	<i>Poaceae</i>	Seeds
13	<i>Azadirachta Indica</i>	<i>Meliaceae</i>	Leaves, Bark, Stem
14	<i>Caesalpinia bonducella</i>	<i>Caesalpiniaceae</i>	Leaves
15	<i>Calendula officinalis</i>	<i>Compositae</i>	Flowers
16	<i>Capsicum annum</i>	<i>Solanaceae</i>	Leaves
17	<i>Cassia fistula</i>	<i>Caesalpiniaceae</i>	Fruit pulp
18	<i>Cassia tora</i>	<i>Caesalpiniaceae</i>	Leaves
19	<i>Centella asiatica</i>	<i>Apiaceae</i>	Whole plant
20	<i>Citrus liman</i>	<i>Rutaceae</i>	Fruit
21	<i>Coleus forskohlii</i>	<i>Lamiaceae</i>	Flowers
22	<i>Crotalaria juncea</i>	<i>Leguminosae</i>	Seeds
23	<i>Curcuma longa</i>	<i>Zingiberaceae</i>	Rhizomes
24	<i>Dillenia indica</i>	<i>Dilleniaceae</i>	Leaves, Stem
25	<i>Feverfew</i>	<i>Asteraceae</i>	flowers
26	<i>Ficus carica</i>	<i>Moraceae</i>	Fruits
27	<i>Guatita rottleri formis</i>	<i>Euphorbiaceae</i>	Bark
28	<i>Glycyrrhiza glabra</i>	<i>Leguminosae</i>	Roots
29	<i>Harpagophytum procumbens</i>	<i>Pedaliaceae</i>	Stem
30	<i>Indula viscosa</i>	<i>Compositae</i>	Leaves
31	<i>Juglans regia</i>	<i>Juglandaceae</i>	Fruits (peels)
32	<i>Kigelia africana</i>	<i>Bignoniaceae</i>	Leaves
33	<i>Lawsonia inermis</i>	<i>Lythraceae</i>	Leaves
34	<i>Leucas aspera</i>	<i>Lamiaceae</i>	Aerial parts
35	<i>Linum usitatissimum</i>	<i>Linaceae</i>	Seeds
36	<i>Magrolia officinalis</i>	<i>Magnoliaceae</i>	Whole plant
37	<i>Malva sylvestris</i>	<i>Malvaceae</i>	Leaves
38	<i>Matricaria recutita</i>	<i>Asteraceae</i>	Flowers
39	<i>Melaleuca alternifolia</i>	<i>Myrtaceae</i>	fruits
40	<i>Mohonia aquefolium</i>	<i>Berberidaceae</i>	leaves
41	<i>Momordica charantia</i>	<i>Cucurbitaceae</i>	Seeds
42	<i>Musa mysore</i>	<i>Musaceae</i>	seeds
43	<i>Musa paradisiaca</i>	<i>Musaceae</i>	Fruits
44	<i>Nigella sativa</i>	<i>Ranunculaceae</i>	Seeds
45	<i>Olea europaea</i>	<i>Oleaceae</i>	Fruit oil
46	<i>Origanum jordanicum</i>	<i>Lamiaceae</i>	Leaves
47	<i>Paronychia argentia</i>	<i>Caryophyllaceae</i>	Entire plant
48	<i>Persea americanamill</i>	<i>Lauraceae</i>	Fruits
49	<i>Phyllanthus simplex</i>	<i>Phyllanthaceae</i>	Whole plant
50	<i>Pinus halepensis</i>	<i>Pinaceae</i>	Wood
51	<i>Pongamia pinnata</i>	<i>Fabaceae</i>	Seeds

52	<i>Prunus amygdalus</i>	<i>Rosaceae</i>	Seeds
53	<i>Psoralea corylifolia</i>	<i>Fabaceae</i>	Seeds
54	<i>Radix Paeonia</i>		
55	<i>Ricinus communis</i>	<i>Euphorbiaceae</i>	Seeds
56	<i>Rosa damascene</i>	<i>Rosaceae</i>	Flowers
57	<i>Rose wood</i>	<i>Arecaceae</i>	Nut
58	<i>Rubia cordifolia.L</i>	<i>Rubiaceae</i>	
59	<i>Salvia fruticose</i>	<i>Lamiaceae</i>	Leaves
60	<i>Senna alxendrina</i>	<i>Leguminosae</i>	Leaves
61	<i>Silibuem marianem</i>	<i>Asteraceae</i>	
62	<i>Simmondsia chinensis</i>	<i>Simmondsiaceae</i>	Seeds
63	<i>Smilax china</i>	<i>Smilacaceae</i>	Rhizome
64	<i>Teucvium capitatum</i>	<i>Lamiaceae</i>	Fruits
65	<i>Thespesia populnea</i>	<i>Malvaceae</i>	Bark
66	<i>Tribulus terrestris</i>	<i>Zygophyllaceae</i>	seeds
67	<i>Trigonella arabica</i>	<i>Leguminosae</i>	Seeds
68	<i>Ulmusrubra</i>	<i>Ulmaceae</i>	Barks
69	<i>Urgenia indica</i>	<i>Liliaceae</i>	Bulbs
70	<i>Urtica urenus</i>	<i>Urticaceae</i>	Leaves
71	<i>Vitex glabarata</i>	<i>Lamiaceae</i>	Leaves
72	<i>Vitia vinitera</i>	<i>Vitaceae</i>	Fruits
73	<i>Winter green</i>	<i>Ericaceae</i>	Leaves
74	<i>Woodfordila fruticosa</i>	<i>Lythraceae</i>	Leaves
75	<i>Wrightia tinchoria</i>	<i>Apocynaceae</i>	Leaves
76	<i>Ziziphus spinachristi</i>	<i>Rhamnaceae</i>	Leaves

### Conclusion

Psoriasis is a complex multifunctional inflammatory skin disease characterized by T-cell activation, local vascular changes, abnormal keratinocyte proliferation and neutrophil activation. The synthetic drugs used to treat it are having side effects and it has been seen that some of the synthetic drugs have psoriasis as adverse effect. In that case, the herbal natural remedy is the obvious alternative, which is safe and equally effective as the synthetic drug. Several plant sources have been highlighted in this article on the basis of traditional knowledge and reports of different researchers. The investigative parameters which are the major aspects for herbal drug screening has also been mentioned some where in the paper, which will hopefully help the researchers working in this area.

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