

# Edthnopharmacological Review of Medicinal Plants for the Treatment of Alopecia

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**Abstract:** Alopecia is the medical term for hair loss or baldness. I'm in good health Hair loss on some or all parts of the body, usually scalp. There are various causes of hair loss, including genetics. Addiction, environmental factors, chemical exposure, medication, Due to malnutrition, extreme stress, long-term illness, etc. due to hair Loss patterns and causes, alopecia are divided into several categories. Two main form, d. H. Mainly alopecia areata and male pattern baldness problem. There are now many synthetic therapies such as corticosteroids. Dithranol, tretinoin, minoxidil, zinc, systemic cortisone, stimulants, immunosuppressants, finasteride, azelaic acid available for treatment Alopecia (both male and circular) but without single or multiple drugs Treatment provides satisfactory and lasting results for patients with alopecia. Also, there are many side effects associated with its use synthetic compounds, including erythema, scaling, itching, dermatitis; So, check here for hair loss problems Explored nature's treasures and discovered many proven herbs For the treatment of alopecia. Nutritional support, DHT blockers, improving scalp circulation Proposed mechanism of action of these herbal remedies. Be natural Medicines Using them has many advantages, low cost, and multiple mechanisms of action Treatment of alopecia.

**Keywords:** Alopecia; Avicenna; Canon; Medicinal plants

## I. INTRODUCTION

Hair is one of the most important parts of the body Body derived from skin ectoderm is protective Is an appendage of the body and is considered an appendage structure of the skin with sebaceous glands Sweat glands, sweat glands, nails. They are known as epidermal derivatives derived from Epidermis during embryonic development. Hair is An important factor in the overall attractiveness of the human body. Alopecia, a dermatological condition Recognized for over 2000 years, the common The problem of primary care, not just cosmetics Good result. It is spread all over the worldIs estimated to be between 0.2% and 2% of world population. Synthetic drugs such as minoxidil A Powerful Vasodilator and Scientifically Proven Treatment of alopecia. However, the use of these syntheses The drug is associated with many adverse events, Generally not recommended as safe and effective Treatment of hair loss, a drug of natural origin Synthesis should be replaced and reduced Related side effects. So this Review article presents all updated compilations Information on natural herbs with powerful effects Against alopecia with mechanism of action. Alopecia is the medical term for hair loss or baldness. Alopecia has many causes. B. Genetics trend 1 , environmental triggers, exposure to chemicals, drugs, malnutrition, oxidation stress 2 Or there are different types, such as long illness Alopecia, but the two main types of concern are: Alopecia areata and male pattern baldness 3 .For the face and tobacco intolerance. Very easy to handle Click here for hair loss concerns in nature's treasure Herbs with Proven Treatment Alopecia. As a natural medicine, there are many Benefits of use such as patient compliance, below Side effects and multiple mechanisms of action, Treatment of alopecia.

## II. EXTRACTS FROM PLANTS WITH HAIR GROWTH ENHANCEMENT

There are many substances of plant origin. Plants are considered As an excellent source of pharmaceuticals, pesticides and fragrances, Flavors and food coloring. Rich in plant extracts Hair growth stimulating effect for use and treatment Prevents hair loss. How these products work remains unclear Shows efficacy but claims hair growth is secondary Promotes blood flow, activates dermal papilla in growth phase, DHT Inhibitory, anti-inflammatory, nutritional fortification [27].Some extracts show excellent hair growth promoting effect Here are some examples of common herbs

used to treat hair loss. Others are summarized in Polygonum multiflorum (Polygonaceae) distributed in the northeast Asia is a well-known traditional Chinese herbal medicine commonly known as “He-shou-wu” in China. Commonly used as a tonic Prevents and nourishes premature aging of the kidneys and liver Strengthens and strengthens blood, muscles, tendons and bones, Stabilize your hips and knees [28, 29]. Also used in Korean anti-allergic, tumor suppressor, antibacterial, hemostatic, antispasmodic and analgesic properties [30]. P. multiflorum has also been documented to have roots Hair growth activity in traditional medicine and many studies It showed a strong effect on hair growth and hair color. For example, A recent study showed that one of the active ingredients is 2,3,5,4-O-tetrahydroxystilbene-2-O-β-D-glucoside, from P. multiflorum It induced melanogenesis in melanocytes [31]. Hair growth promotion effect and mechanism of P. multiflorum extract Effectiveness has been reported [32]. Red ginseng extract of 70% Korean ginseng (Steamed and dried Panax Ginseng C.A. Meyer root. Ginseng Radix) has demonstrated the ability to promote hair growth in cultured mouse hair follicles. The main extract Ginsenoside Rb1 or G-Rb1 is active, while the other extracts are inactive. Panax Ginseng root extract is considered a beauty ingredient, Used as a skin care product. Discover the latest clinical treatments Oral intake of ginseng extract (3000mg/day) Effectively promotes hair density and thickness for 24 weeks Alopecia patients [33]. Zizyphus jujuba is a spiny plant of the Ramune family, widely distributed in Europe and Southeast Asia. Its fruit is edible, Different parts show different medicinal effects such as antifertility, analgesia and antidiabetes [34, 35]. In China, Z. Jujube has been used to treat insomnia and anxiety. And you Effective in improving blood sugar levels and serum lipids Composition in dietary hyperlipidemic rats. Especially Z. Jujube seeds are more effective than treatment regimens in control Metabolic disorders in adult diseases. Zizyphus jujube essential The oil has also shown effectiveness in promoting hair growth [36]. Carthamus tinctorius L. (safflower) belongs to the Asteraceae family. family whose flowers were used to treat stroke, Gynecological disease, coronary artery disease, angina pectoris, inflammation, hypertension [37-39]. The flower was used Promote Blood circulation in China [40]. Also, C. Aqueous extracts of tinctorius flowers are traditionally used Improvement of hair color in Thailand [37]., C. tinctorius Extract (CTE) inhibited 5α-reductase activity and stimulated hair mouse growth [41]. Ethanol extract of flowers of C. tinctorius promotes proliferation of dermal papilla cells (DPC), Human keratinocytes (HaCaT) and upregulated genes that promote hair growth, including VEGF and keratinocyte growth factors (KGF) [42]. CTE suppressed the expression of transformed growth factor-β1 (TGF-β1), a gene associated with hair loss. increase the length of cultured hair follicles, Hair growth with topical effects in mice [42]. Chamaecyparis obtusa is a coniferous tree of the Cupressaceae family Cupressaceae native to Northeast Asia [43,

### III. SUGGESTED MECHANISMS

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#### IV. ANDROGENETIC ALOPECIA

Male pattern baldness 4 : male pattern baldness 5 / female pattern baldness 6 Androgenetic alopecia can occur in both men and women Characterized by hair loss in women defined pattern. Male pattern baldness in women Appears as diffuse hair loss and occurs most often scalp. However, in men, loss patterns usually begin Hairline receding and becoming too thin top of head. Alopecia Areata: high level of alopecia areata An unpredictable and common autoimmune disease of the skin cause hair loss on the scalp and other areas on the body. It usually starts with one or more small letters. May progress to round, smooth patches on the scalp Complete hair loss (alopecia) or completely Alopecia generalis (alopecia universalis). Alopecia Universal is the rarest form of alopecia areata. Hair follicles are preserved in all forms of alopecia areata Alive and ready to resume normal hair production every time it receives a suitable signal. Generally In some cases, hair growth can occur without it Even after years of therapy. In addition, the existence of many synthetic therapies cortocosteroids, dithranol, tretinoin, minoxidil, etc. Zinc, systemic cortisone, stimulants, immunosuppressants, finasteride 24, azelaic acid treatment of alopecia (both androgenic and circular), No single or multiple medications Satisfaction of patients with alopecia. Side effects related to the use of these synthetic compounds Including erythema, desquamation, itching, dermatitis, itching Or skin rash. Avoid sun exposure while using minoxidil recommended by some dermatologists Minoxidil aggravates tissue damage. Includes rare events. Application site acne, Burning scalp, increased hair Loss, inflammation or sore hair roots, redness, swelling of the skin. Nutritional support: Minerals such as calcium, iron, copper, chromium, iodine, zinc and magnesium It is necessary to maintain healthy hair growth. Mineral Deficiency reduces the chances of regulating the blood circulation to promote healthy hair growth and Thyroid hormone that prevents hair dryness and hair loss As well as hair color defects. Too much iron is toxic your body. Always consult your doctor before taking Any mineral supplement. B vitamins (especially B6, B3, B5, folic acid), biotin (Sources of the antioxidant biotin are: Whole grain products, eggs Egg yolk, liver, rice, milk. Vitamin A is important Overall good health. It is also beneficial for hair follicles, Keeps hair roots lubricated. Vitamin E works like this Antioxidants to support effective blood circulation in the scalp As oxygen uptake in the blood increases, Plays an important role in promoting hair growth, Prevents hair loss. Coenzyme Q10 (CQ-10) is essential vitamins for our body Nutrients necessary for healthy hair growth. They also Promotes general vitality and contributes to beauty skin and strong nails. Yogurt and soy, dark green vegetables, whole grains Products, Essential Fatty Acids, Nuts, Seeds Fatty foods are usually the best sources.

#### V. HERBS PROVIDING NUTRITIONAL SUPPORT IN THE TREATMENT OF ALOPECIA

DHT blockers and  $5\alpha$ -reductase blockers 7, 8, 9, 10 : After knowing the established role of DHT in hair loss, the use of herbs that have is recommended Prominent DHT or  $5\alpha$ -reductase blocking activity Can be used to treat alopecia (especially androgens). There are some herbs that have proven themselves DHT blocking activity of *Pygeum africanum*, *Seneroa*, etc. Other plants with potential  $5\alpha$ -reductase inhibitory capacity such as *repens*, *Urtica dioica*, and *Camellia sinensis*, *Ginseng*, etc. (Table 1). Proposed mechanism Mechanism of action of DHT blockers and  $5\alpha$ -reductase



blockers Aromatherapy: Can be used as aromatherapy Dietary supplement for the treatment of alopecia. Heavily used Concentrated extract obtained from Flowers, leaves, bark, roots of various plants Arnica montana, Cedrus atlantica, Lavandula, etc. agustifolia, Oscimum sanctum, Pilocarpus jaborandi, Rosmarinus officinalis, Thyme vulgaris, etc. Aromatherapy, essential oils enter the body through the “inhalation” of the olfactory system or As with herbs taken orally through your skin, essential oils enter the cycle Blood ) where It binds and changes receptors chemical composition. These oils are cellular level to strengthen/calm the nervous system,

#### **VI. HERBS FOR ALOPECIA WITH THEIR MODE OF ACTION FOR THE TREATMENT OF ALOPECIA FEW HERBAL PREPARATION AND METHOD OF APPLICATION**

Few herbal formulations and directions for use To treat alopecia: □Ginkgo (Ginkgo biloba) Chemical composition: Ginkgolide A, B, C, J, M, Bioflavins, sitosterols, lactones, anthocyanins. Application type: The drug is extracted with coconut The oil is massaged for at least 2 minutes. Reason 21: The drug is known to improve □ the brain Promotes microcirculation and increases oxygen supply. Phyllanthus embelica (Spurgeaceae) component: vitamin C, filembin, tannins, phosphorus, iron, calcium.

#### **VII. MODE OF APPLICATION**

Application type: Indian gooseberry oil, prepared by boiling dried pieces of Indian gooseberries in coconut Oil is considered a valuable hair growth agent that enriches hair growth. Equal Blend of Fresh Indian Products gooseberry juice and lime juice used as shampoo It also stimulates hair growth and prevents hair loss. Cause: Iron is involved in supplying oxygen to the body red blood cells in the body. Important for normal hair Healthy hair growth and maintenance. For the amount of mIron cannot □ be supplemented with food, iron Lack of oxygen leads to hair loss defect. Allium cepa L. (Liliaceae) component: protein (albumin), allyl propyl Disulfide, diallyl sulfide, alliin, allicin. Also Potassium, zinc, calcium, Magnesium and traces of chromium. Application type: I found a green onion Beneficial for patchy hair loss. The affected area Until rubbed with onion juice in the morning and evening red. After that, it must be rubbed with honey. Reason 13 : Zinc contributes significantly to scalp secretion Removes necessary oils and prevents dandruff that causes hair loss. Iron is involved in oxygenating redness in your body blood cells. Essential for normal hair growth maintaining healthy hair. (iv) Rosmarinus officinalis (Labiatae) and Lavandula angustifolia Miller (Lamiaceae) component: Rosemary makes up 1-2% of essential oils with 0.8-6% ester and 8-20% alcohol, The main components are 1,8-cineol, borneol, Camphor, bornyl acetate, monoterpene hydrocarbons. The main component of lavender oil is ravenanol. Linalyl acetate, linalool, lavendulyl acetate, terpineol, cineole. Application type: These oils were massaged in Apply to Scalp for at least 2 minutes, 7 minutes daily Moon. Reason 12: essential oils pass through your system by the olfactory system “inhaling” and/or you It Reaches the skin and reaches the circulatory system “blood”. Where they bind to receptors and change chemicals Constitution. Topical herbal remedies stimulate hair Proven to be the surest way to deal with follicles Different types of hair loss (alopecia) but perfect The pharmacological effects of these herbs and oils are not yet known Not known. Application type: All applications of walnut oil Apply to scalp and massage into hair roots It is also effective against hair loss. This Cares for hair and promotes hair growth. Cause: The fruit contains essential minerals, Helps grow healthy hair. More iron As already mentioned, blood circulation and oxygenation. Zinc helps the scalp to produce much-needed oil Prevents dandruff that causes hair loss. In Case of Copper, studies have shown that these tripeptide complexes Even patients may actually be able to regrow hair Whole body hair loss due to alopecia. Healthy tissue Copper concentration is 1.7 to 3.5 milligram. (vi) Glycyrrhiza glabra Linn. (legumes): Component: The main ingredient is glycyrrhizin, Potassium and calcium salts of glycyrrhizic acid. Application type: licorice paste Grind the pieces in milk with a pinch of saffron Another valuable remedy for patchy hair loss. This The paste should be applied to bald areas at night before going to bed.

#### **VIII. CONCLUSION**

The condition of hair has been the centre of attention of human civilization since ancient times. Alopecia is one of the major problems amongst urban people due to subjection to stress, environmental problems, etc. So with the help of this review article, we conclude that there are many herbal drugs having potency for curing alopecia with no sides effect. These herbal extracts having multiple phytoconstituents can treat alopecia either by providing nutritional

supplements or by acting as DHT and 5- $\alpha$ -Reductase blockers. There are also few natural treasures having volatile oil active constituents which can be used as aromatherapy for treating alopecia by improving scalp blood circulation.

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