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# PROSPECTIVE USES OF BHRINGARAJA (ECLIPTA ALBA)–AN AYURVEDIC REVIEW

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# **ABSTRACT**

Bhringaraja (*Eclipta alba*) is one of the oldest known drugs in the Indian system of medicine. In Ayurvedic Samhitas, it is not classified under any mahakashaya or gana but it is mentioned in various formulations which prove its usefulness. According to Ayurvedic texts, its action includes kaphavatashamana (pacifies kapha and vata dosha), keshya (beneficial for hairs), vedanasthapana (analgesic action or restores normal sensation), shothaghna (anti-inflammatory action), vatanulomana (carmination), kusthaghna (cures skin disorders), jwaraghna (antipyretic), rasayana (rejuvenator), balya (general tonic), chakshushya (beneficial for eye disorders), yakrita uttejana (stimulates liver), dipana (stomachics), pachana (digestant), vrana ropana (wound healing action), pandughna (anti-anaemic), shvasakasahara (cure dyspnoea and cough), krimighna (wormicidal action) etc. In classics, it has been used in skin disorders, bleeding tendency, productive cough,

intestinal worms, eye diseases (like night blindness, optic atrophy, itching of eyes), all types of diseases of head, graying and falling of hairs, wrinkles on face, sinuses due to vata and kapha, scrofula, wounds, dyspnoea, cough, vitilago, vomiting caused by hyperacidity in acid gastritis, wound of soft chancre, dysentery with mucus and blood etc. It is claimed to have deobstruent, antihepatotoxic, anticatarrhal, febrifuge and hair growth promoting action as well as said to be hepatoprotective in almost all the modern texts. This article explores comprehensively the useful medicinal properties of bhringaraja especially in Ayurvedic texts.

**KEYWORDS:** Bhringaraja, *Eclipta alba*, Ayurveda, Trailing Eclipta.

## INTRODUCTION

Bhringaraja (trailing eclipta) is commonly called bhangra, bhangraiya in India. It has synonyms like bhringaja, bhringaraka, bhringara, keshranjana. kesharaja, bhringa, markava in the Indian system of medicine. Its botanical name is *Eclipta alba* and it belongs to the family Asteraceae. It is the water loving, erect or prostrate, often rooting at nodes, fleshy, annual-perennial herb with 30 - 100 cm height. It is found throughout India in moist situations particularly along the hill streams, irrigated canals, drainage water reservoir etc. It is also distributed in the other tropical regions including Sri Lanka, Malaysia, Bangladesh, and Pakistan etc.<sup>[1]</sup>

# **Properties**

According to Ayurveda, it has katu (pungent) and tikta (bitter) rasa (taste), laghu (produces lightness in body after digestion) and ruksha (dry) guna. It is ushna virya (hot in potency) and katu in vipaka (produces effects of katu rasa in body when final transformation occurs after the digestion).<sup>[2]</sup>

### **Chemical constituents**

Its root contains hemitriacontanol, stigmasterol, 14-heptaosanol while leaves contain alpha terthienyl-methanol, beta amyrin, glutamic acid, phenylalanine, tyrosine and methionine. The phytosterol-A, beta amyrin, triterpenic acid, fatty acids like palmetic, stearic, oleic and linoleic acids are present in whole plant.<sup>[3]</sup>

### **Actions**

According to Ayurvedic texts, its action includes kaphavatashamana (pacifies kapha and vata dosha), keshya (beneficial for hairs), vedanasthapana (analgesic action or restores normal sensation), shothaghna (anti-inflammatory action), vatanulomana (carmination), kusthaghna (cures skin disorders), jwaraghna (antipyretic), rasayana (rejuvenator), balya (general tonic), chakshushya (beneficial for eye disorders), yakrita uttejaka (stimulates liver), dipana, pachana, vrana ropana, pandughna, shvasakasahara, krimighna, amavatahara, dantarogahara etc.<sup>[4]</sup> It acts as deobstruent, antihepatotoxic, anticatarrhal, febrifuge and promoter of hair growth (leaf).<sup>[5]</sup>

# Uses

It is well known drug from ancient period, as in Atharvaveda, it has been used in the treatment of kustha and palitya. In Indian system of medicine, it has been used as one of the

ingredients of the kashmardadi yoga for the treatment of kaphaja kasa (productive cough). [6] In Raktapitta, the paste of its root is mixed with the paste of root of yavasa along with the juice of dung of cow and taken with tandulodaka.<sup>[7]</sup> Its expressed juice mixed with honey and used as drink before meal to destroy the cause of origin of intestinal worms.<sup>[8]</sup> It is used as an ingredient of sahacharadi oil (used intranasally) which is clearly indicated for the treatment of palitya.<sup>[9]</sup> It is also used as an ingredient of mahaneela oil (used through oral and intranasal route as well as applied for massage on head) which has chakshushya, aayushya actions and useful in the treatment of all types of diseases of head. [10] Its decoction is made with madanphala seed and used for vamana karma in cases of kaphaja roga. [11] The saireyakadi oil (prepared with bhringaraja and other drugs) made according to Sushruta samhita is given intranasally and massaged on head in cases of graving and falling of hairs as well as wrinkles on face. [12] The oil prepared with its juice and pastes of bhallataka, arka, maricha, rock salt, vidanga, haridra, daruharidra and chitraka is useful in cases of nadivrana due to vata and kapha, apachi (scrofula) and wounds. [13] The oil made with its juice and oil of sesamum in the ratio of 10:1 is used externally as well as internally in cases of dyspnoea and cough. [14] In vitilago, one should take bhringaraia which is fried in oil and kept in iron vessel followed by intake of milk cooked with bijaka. [15] It is said that who take the juice of bhringraja daily for a month keeping on milk diet become full of strength and vigour and attain the life span of hundred years. [16] Its juice and decoction of asana is cooked with oil of tila and bibhitaka in an iron vessel and used as snuff to improve weak eye sight. [17] The juice of bhringraja, ardraka, tila and kanji are used in form of lepa and then luke warm water is used for bath in cases of indralupta (hair fall).<sup>[18]</sup> The powder of bhringaraja and haritaki mixed with old jaggery controls vomiting caused by hyperacidity in acid gastritis. [19] Its juice is used to wash the wound of updansha (soft chancre). [20] The pill made of bhringaraja with water alleviates dysentery with mucus, blood and gripping. [21] Its juice is used to prepare triphala ghrita which is used orally and locally in naktaandhya (night blindness), timira (optic atrophy), nakulandhya (eyes are unable to see and look like eyes of nakula or erythropsia in modern medical science), itching of eyes etc. [22] It is used to prepare shadbindu oil which is used as snuff in the amount of six drops for the treatment of all the disorders of head, loose teeth, graying and falling of hairs. [23] It is said to be beneficial for hairs, teeth, skin, general weakness and useful in kaphadosha, amadosha, pandu, hridroga, skin disorders, eye diseases, shopha, krimi, kasa, shvasa, kustha and visha roga. [24-26]

It is known to have wedelolactone and demethylwedelolactone, which showed a dose dependent effect against CCl4, *d*-galactosamine- or phalloidin-induced cytotoxicity in primary cultured rat hepatocytes and exhibited potent antihepatotoxic property. The whole plant shows effect on liver cell regeneration. Immuno-active property has been observed against surface antigen of hepatitis B-virus. The plant is also reported to be effective in the treatment of peptic ulcer, inflammatory diseases, including rheumatoid arthritis, diseases of the gallbladder and skin infections. Aqueous extract of leaves exhibits myocardial depressant and hypotensive activity (unrelated to cholinergic and histaminergic effects). The roots are very rich in thiophene acetylenes. Thiophene derivatives show activity against nematodes. Root is used in venereal diseases. A decoction of bark is used internally and as gargle in throat infections. It is useful in hepatitis, spleen enlargements and chronic skin diseases. Its extract in oil is applied to scalp before bed time in insomnia. The herb is also used as an ingredient in shampoos.<sup>[27]</sup>

### **CONCLUSION**

From the above review, it can be concluded that bhringaraja has been used in India for very long time and the Ayurvedic texts contain many uses of it mainly in combination with other drugs in various diseases and disorders like skin disorders, bleeding tendency, productive cough, intestinal worms, eye diseases (like night blindness, optic atrophy, itching of eyes), all types of diseases of head, graying and falling of hairs, wrinkles on face, sinuses due to vata and kapha, scrofula, wounds, dyspnoea, cough, vitilago, vomiting caused by hyperacidity in acid gastritis, wound of soft chancre, dysentery with mucus and blood etc. The uses of bhringaraja with exact references explored in this article can provide the new treatment measures in many diseases but before its recommendation, its scientific validation, standardization and safety evaluation should be done.

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