



MEDICINAL PROPERTIES OF BHANGRA (*Eclipta alba* (L.) HASSK.) FROM THE PERSPECTIVE OF UNANI MEDICINE: A REVIEW

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INTRODUCTION

The Unani system of medicine compiles four different modes of treatment, which are Iaj bil Dawa (Pharmacotherapy), Ilaj bil Ghiza (Dietotherapy), Ilaj bil Tadbeer (Regimental therapy), and Ilaj bil Yad (Surgical therapy) [1]. Ilaj bil Dawa plays a major role in the treatment. It includes single and compound drugs derived from plants, animals, and minerals. Herbs are prominent among them and they have been used for thousands of years. Although many of them were subjected to clinical studies and their therapeutic effects were proven, there are still certain herbs which require further studies on therapeutic effects. *Eclipta alba* (L.) Hassk. is such a herb, which grows abundantly near wetlands and paddy fields as a weed, belongs to *Asteraceae* family that consists of multiple therapeutic uses. It is an annual herb grows up to a handful tall or sometimes even shorter; the stem is mostly fleshy and strigose with scanty leaves that are similar to pomegranate also they resemble broad basil leaves. It contains lanceolate, oblong simple leaves, which are oppositely arranged [2]. Its flowers are white in colour; it provides little bitter and sharp taste and are in capitulum or head, solitary or in pair together on unequal axillary peduncles. Fruit of *E. alba* is cypselas and covered with warty excrescences, brown in colour while the seeds are dark brown and hairy. Its roots are well developed [3]. *Bhangra* is commonly used by Traditional practitioners, and indigenous medical system in Sri Lanka to treat various ailments, in several formulations internally and topically. This study was conducted with the objective to ascertain new study proposals on therapeutic uses and pharmacological actions of *E. alba* by collating the information. Thus, this Study was done based on systematic literature review on Unani classical literature and research publications.

METHODOLOGY

This study was carried out on the basis of a systematic examination of classical Unani literature and research publications pertaining to *E. alba*. 4 classical unani texts such as Makhzan ul Mufradat, Manafe ul Mufradat, Unani Adviya Mufrad and Kithab ul Mufradat were probed along with research articles entitled on pharmacological effects and therapeutic effects, which were abstracted from indexed journals from 2012 to 2020, through search engines such as “PubMed”, “Google Scholar”, “Mendeley” and “Science-direct” to compile the information on *E. alba* in the view of Unani medicine. The research articles related to commercial, and agriculture were excluded. “*Bhangra*”, “*Eclipta alba*”, “pharmacological actions” and “therapeutic effects” were the key words used in search engines.

RESULTS AND DISCUSSION

The entire plant of *Bhangra* is used medicinally. Whole plant of *Bhangra* accommodates variety of chemical constituents. Alkaloids, Ecliptine, and Nicotine are abundantly present. Principal constituents of *E. alba* are Coumestan derivatives like Wedololactone, demethylwedololactone, desmethyl-wedelolactone-7 glucoside and other constituents are Ecliptal, β -amyrin, luteolin-7-O-glucoside, Hentriacontanol, Heptacosanol, Stigmasterol [4]. According to classical Unani literature the temperament of *Bhangra* is Hot and Dry and it possess several pharmacological actions which are summarized in Table 1.

Table 1 Pharmacological actions according to the classical Unani literature

	Makhzan ul	Manafe ul	Unani Adviya	Kithab ul



	Mufradat	Mufradat	Mufrada	Mufradat
Actions	Blood purifier (Musaffi e khoon), Aphrodisiac (Muqawi e bah), Eye tonic (Muqawi e basar), Carminative (Kassuriyah), Hepatoprotective (Muqawi e Jigar), Anti-inflammatory (Muhallil e varm), Cholagogue (Muwallid e safra) [5]	Analgesic (Musakkin e alam), Hepatoprotective (Muqawi e Jigar), Aphrodisiac (Muqawi e bah), Anti-inflammatory (Muhallil e varm), Deobstruent (Mufatit e sudad) [6]	Aphrodisiac (Muqawi e bah), Hepatoprotective (Muqawi e jigar), Anti-inflammatory (Muhallil e varm), Deobstruent (Mufatit e sudad) [7]	Blood purifier (Musaffi e khoon), Aphrodisiac (Muqawi e bah), Eye tonic (Muqawi e basar), Carminative (Kassuriyah), Anti-inflammatory (Muhallil e varm), Cholagogue (Muwallid e safra) [8]
Uses	With castor oil it is given in worm infestation and used as ear drop in earache. Distillate of the plant is used as eye drop to treat conjunctivitis [5]	Used in Migraine (Shaqeeqa) Distillate is used in jaundice and hepatitis. Leaves of <i>Bhangra</i> are useful in Blood related disorders and in chronic skin diseases [6]	Used in Jaundice (Yarqan). Oil made by boiling the leaves in coconut oil promotes hair growth and blackens the hair [7]	Juice of the leaves administered in jaundice and fever. 2 to 4 ounces of decoction of the leaves used in uterine haemorrhage [8]

Leaves of *Bhangra* are prescribed in the dose of 5 *masha* and seeds in the dose of 1 *masha* [9]. *Bhangra* does not usually produce any side effects, but excess and prolonged use of *Bhangra* is not recommended in hot temperament individuals (garam mizaj) [8]. *Majoon e Bhangra* and *Roghan e Bhangra* are compound formulations that incorporates *E. alba* as one of the important ingredients [6][5]. Several studies elicit the hepato-protective actions of *E. alba* which can be correlated with Muqawi e Jigar and Muwallid e safra which has proposed in Unani classical texts. Few more studies suggest that neuroprotective [10], anti-epileptic, anti-parkinsonism [11] actions that can be correlated with Mufatit e sudad and Muhallil e varm as per the Unani view. Further, Musaffi e khoon and Muhallil e varm actions are much more relevant to anti-carcinogenic effects. Phytochemical analysis and experimental studies have been carried out on *E. alba* clinical studies manifest *Bhangra* as a Hepato-protective [12], Anticancer [13] [14], Analgesic, Antioxidant [14] [15], Antimyotoxic, Antihemorrhagic, Antihepatotoxic [16], Antiviral, Antibacterial [17], Spasmogenic, Hypotensive, promoter for blackening and growth of hair [18], Antihyperlipidemic, Anti-arthritis activity [19], Anti-depressant, Anti-fungal [20] actions.

CONCLUSION/RECOMMENDATIONS

E. alba is a weedy herb that is grown commonly without any intervention in its propagation. However, it is concluded, whole plant of *E. alba* has been used to treat various diseases since ancient times. Recent clinical studies depicted that it possesses hepatoprotective and anti-inflammatory actions, which are much relevant to the actions mentioned in Unani classical texts. However, further detailed clinical studies on aphrodisiac (Muqawi e bah) and eye tonic (Muqawi e basar) actions mentioned in Unani classical has to be explored.



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