

# Baladur (*Semecarpus anacardium* Linn): An overlooked Unani medicine having potential health benefits with broad spectrum of pharmacological activities

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## Abstract:

The herbal medicine is achieving attention globally for its different medicinal properties. Baladur (*Semecarpus anacardium* Linn.) is one of the medicines that possess a wide range of medicinal properties. It is generally known as marking nut which is well recognized for its folklore uses and effective in various diseases both internally and externally. It is scattered in the sub-Himalayan and equatorial parts of India. It was used in the traditional system of medicine for various ailments as common household remedies since ancient times. Baladur has a broad spectrum of pharmacological activities like central nervous system (CNS) stimulant, antioxidant, anti-cancer, immuno-modulator, hypoglycemic, anti-microbial, anti-inflammatory, analgesic, hypocholesterolemic, wound healing, hair growth promoter, etc. Immuno-boosting and other multifunctional qualities of this drug may be beneficial in the COVID-19 pandemic like situations. It has a great scope of research, especially on traditional or folklore uses. Despite having so many therapeutic benefits, this drug seems to be overlooked, hence further study on the scientific platform is advisable. Baladur comes under the category of a toxic drug, it may develop serious gastrointestinal symptoms and sterility in females if taken internally and causes inflammation, redness, and itching locally, therefore, it is recommended to be taken under the supervision of physician after the classical detoxification method.

## Keywords:

*Baladur, Folklore uses, Unani medicine.*

## Introduction:

The Unani system of medicine is well known for its holistic approach which comprehensively deals with physical, mental as well as spiritual well-being. Prevention, healing, restoration, and promotion of health are the major concerns of the Unani system of Medicine. (Anonymous, 2013; Qaiser et al., 2020). The humoral theory has a key role in the Unani system which is based on the balance in quantity and quality of four body fluids - (Akhlāt) Blood (Dam), Phlegm (Balgham), Yellow bile (Safrā), and,



Black bile (Sawda), and temperament is usually signified by the prevailing humour (Akhlāt) i.e. Sanguine (Damavi), phlegmatic (Balghami), Chloric (Safrawi) and Melancholic (Sawdawi). Any disturbance in the quantity and quality of the humour (Akhlāt) causes diseases. (Anonymous 2013; Qaiser et al.2019)

All the traditional systems of medicine in the world mostly comprise plant-origin drugs for their high potential therapeutic benefits. Likewise, drugs and interventions being chosen for specific humour (Akhlāt) rectification are mostly plant-based.

(Qaiser et al.2018)

*Baladur* is a fruit obtained from *Semecarpus anacardium* Linn. of the Anacardiaceae family. It is well known for its folklore uses and has been used for various medicinal properties in traditional systems of medicines as household remedies since ancient times. (Anonymous 2001a) It is a fruit of a plant similar to the shape of the heart of the bird and reddish black in color. (Baytar 1985) It is disseminated in sub-Himalayan and equatorial parts of India and is usually known as the Marking nut or Dhobi nut tree because the fruit pericarp is used as a substitute for marking ink. The medicine possesses a toxic effect that can develop eruptions and ulcers, and exposure to its smoke can produce allergic dermatitis, if used internally it causes serious gastrointestinal symptoms and sterility in females thus it should be detoxified or purified before use and called *Bhilawa Mudabbar*. The detoxification method is explained in Unani literature. (Baytar 1985; Chopra 1982; Khare 2004; Kabiruddin YNM), It is commonly used in a great number of traditional herbal remedies. *Baladur* is effective in a wide range of diseases and is used internally as well as externally.

Internally it is a good nervine stimulant and brain tonic hence beneficial to treat various disorders related to nerves such as rheumatoid arthritis, sciatica, epilepsy, facial paralysis, etc. It is digestive and carminative hence used in relieving digestive disorders such as constipation, abdominal distention, ascites, haemorrhoids, and many types of intestinal worm infections, and also utilized as a hair growth promoter. The fruit and nut extracts show a range of activities like anti-phlegmatic, antidote, analgesic, and anti-inflammatory, antioxidant, antimicrobial, hypoglycemic, anti-carcinogenic, CNS stimulant, anti-hyperlipidemic, aphrodisiac, and cardiac tonic. It is a good expectorant and used to cure cough and asthma, flowers of this plant are very beneficial for asthma. (Baytar 1985; Khare 2004; Kabiruddin YNM; Semalty et al.2010; Akbar 2020)

Externally, the 'Asal-i Baladur (juicy content) is useful in moles, warts and boils [6], it is also used in gout, vitiligo, psoriasis, and leprosy. It is also used for some skin ailments like skin rashes, ringworms, cuts and wounds etc. Seed oil is used externally on rheumatism. (Kabiruddin YNM; Akbar 2020; Anonymous 2001b)

*Baladur* is a drug that is used in multiple ailments, well acknowledged for its folklore uses. It is highly used in indigenous systems of medicine and possesses so many medicinal properties. Besides having potential health benefits, unfortunately, this herb seems to be neglected, so the need was felt to compile a review regarding its medicinal properties which may be further utilized to validate or research point of view.



- **Objective:**

The aim of this review is to compile the information available in classical Unani literature, folklore uses as well as recent research conducted on *Baladur* to validate its medicinal properties.

- **Methodology:**

In order to compile data for review Unani classical books, authentic websites such as Pub Med, Google scholar, Planet Ayurveda, Medline were searched and papers published on *Baladur* in national and international journals were also reviewed.

## Drug Summary:

- **Distribution of the plant:**

The tree is observed in the outer Himalayas and Tropical areas of India. The plant is profusely seen in many parts of India i.e. Orissa, Assam, Sikkim, Bihar, Bengal, Punjab, Haryana, and Arunachal Pradesh and also found in the western peninsula of East Archipelago, Northern Australia. (Kabiruddin YNM; Semalty et al.2010; Akbar 2020; Kirtikar 1975.)

- **Botanical description:**

It is a deciduous tree that is moderate in size, measures 15-25 meters in length and normally grows in drier regions. The bark oozes an irritant secretion on slitting and is grey in color with an irregular surface. The leaves are simple, alternate, ovate, 20-60 cm lengthy and 10-30 cm broad, rounded on the apex leathery glabrous on the upper surface, and pubescent beneath. New leaves become visible in May and June. Easy to identify by big-sized leaves and the exuding bright red resin, which becomes black on exposure. The flowers are greenish-yellow or white. The fruit is 2.5 - 3cm long, laterally flattened, obliquely ovoid in shape, drupaceous nut with a fleshy pear-shaped receptacle, dark brown, smooth, shiny, and becomes lustrous black when ripe. [Figures 1 and 2] The fruit matures from December to March (Semalty et al.2010; Bhitre et al. 2008; Anonymous 2006a; Anonymous 2007)



Fig.1 *Baladur* plant



Fig.2 *Baladur* fruit



• **Taxonomical classification:**

The Taxonomical classification of *Baladur* is as follows (Semalty et al.2010):

Kingdom:	<i>Plantae</i>
Sub Kingdom:	<i>Tracheobionta</i>
Division:	<i>Magnoliophyta</i>
Class:	<i>Magnoliopsida</i>
Order:	<i>Sapindales</i>
Family:	<i>Anacardiaceae</i>
Genus:	<i>Semecarpus</i>
Species:	<i>Anacardium</i>

• **Vernacular Names:**

Urdu: Baladur, Bhilawa (Kabiruddin YNM)

Arabi: Habb-ul-Qalb, Habb-ul-Faham (Baytar 1985; Kabiruddin YNM)

Farsi: Baladur (Baytar 1985; Kabiruddin YNM)

Hindi: Bhilawa (Baytar 1985; Kabiruddin YNM; Semalty et al. 2010;

Anonymous 2006a) Bhela (Bhel), Bhelwa, Bhilwa (Semalty et al.2010)

Roomi: Anqarooya (Baytar 1985)

English: Indian Marking Nut Tree (Anonymous 2001a, Baytar 1985; Kabiruddin YNM; Anonymous 2006a), Marsh Nut, Oriental Cashew Nut (Anonymous 2001a; Semalty et al.2010)

Tamil: Erimugi (Erimuki) (Semalty et al. 2010; Anonymous 2006a)

Telugu: Nallajeedi (Semalty et al. 2010) Gerekai (Anonymous 2006a)

Kannad: Geru (Anonymous 2006a)

• **Temperament (Mizaj):**

Hot and Dry (*Harr Yabis*) (Kabiruddin YNM; Anonymous 2007)

Differences are seen among the scholars regarding its temperament (Mizaj). Some scholars acclaimed fruit as hot and dry (*Harr Yabis*) in fourth stage, (Baytar 1985) while some advocate it to be Hot and Dry (*Harr Yabis*) in second stage [18] and '*Asal-i Baladur* as Hot and Dry (*Harr Yabis*) in fourth stage (Baytar 1985; Kabiruddin YNM)

• **Part Used:**

Seed (*Tukhm*) (Kabiruddin YNM; Anonymous 2001b; Anonymous 2006b)

Fruit (*Thamar*) (Anonymous 2001a; Anonymous 2001b) Bark (Chal) (Anonymous 2001a), '*Asal-i Baladur* or *Roghan-i Baladur* (Kabiruddin YNM; Anonymous 2006b)

• **Dose (Miqdar-i-Khuraq):**

Detoxified fruit – 1-2 gm (Khare 2004)

*Maghz-i Baladur* – 1 *Masha* (gm) (Kabiruddin YNM)

'*Asal-i Baladur* is advised to be taken up to 4-6 mg (Anonymous 2006a)

The Unani Pharmacopeia of India recommended 125 mg (Anonymous 2007)

• **Substitute (Ba'dal):**

*Balsan* (*Commiphora gileadensis* Linn.) (Kabiruddin YNM; Anonymous 2006a)

*Roghan-i Fanduq* (*Corylus avellana*) (Anonymous 2006a), *Badranjboya* (*Melissa officinalis* Linn.) (Anonymous 2006a)

*Maghz Fanduq* 5 times, *Roghan-i Balsan* 4 times and egg yolk 6 times (Baytar 1985; Razi 1999; Razi 2000)



• **Corrective (Muslih):**

*Roghan Zard* (Pure Ghee) (Kabiruddin YNM; Anonymous 2006a), *Roghan-i Kunjud* (Oil of *Sesamum indica*) (Kabiruddin YNM; Anonymous 2006a), *Roghan-i Akhrot* (Oil of *Juglans Regia* Linn.) (Baytar 1985)

• **Action (Af'al):**

The Medicinal properties of *Baladur* is as follows (Baytar 1985; Kabiruddin YNM; Anonymous 2006a; Anonymous 2007):-

Neurotonic (*Muqawwi-i-A'sab*), Brain Tonic (*Muqawwi-i-Dimagh*), Memory enhancer, (*Muqawwi-i-Zahan wa-Hafiza*), Cardiogenic (*Muqawwi-i-Qalb*), Anti-phlegmatic disease (*Dufi'-i-Amrad-i-Balghamiyya*), Antidote (*Tiryaq-i-Sumum*), Analgesic and Anti-inflammatory (*Musakkin wa Muhallil*), Carminative (*Kasir-i-Riyah*), Aphrodisiac (*Muqawwi-i-Bah*).

• **Therapeutic Uses (Mawaqi-i-Iste'mal):**

Therapeutic effects of *Baladur* are as follows (Baytar 1985; Kabiruddin YNM; Anonymous 2006a; Anonymous 2007):-

Nervine Weakness (*Du'f al-A'sab*), Amnesia (*Nisyan*), Cardiac weakness (*Du'f al-Qalb*), Paralysis (*Falij*), Stroke (*Laqwa*), Palpitation (*Khafaqan*), Nervine and Phlegmatic diseases (*Amrad Balghamiyya wa Asbiyya*), Joint Pain (*Waja' al-Mafasil*), Sciatica (*Irq al-Nasa*), Cold and Coryza (*Nazla-o-Zukam*), Sexual debility (*Du'f al-Bah*).

'*Asal-i Baladur* (juicy content) is used as brain tonic and aphrodisiac. It is also used in treatment of various dermatological problems like chronic wound/ulcer, ring worm, vitiligo etc. It also seems to be effective in snake bite and piles.

(Baytar 1985; Kabiruddin YNM)

• **Folk Medicinal Claims:**

i) In case of snake bite, mature fruits are soaked in water overnight and subjected to distillation. The liquid thus obtained is stored in a dark colored glass bottle and kept as a house-hold remedy against snake bite, 5-10 drops of the medicine are mixed in 100 ml fresh water and given orally to the patient frequently until sign of consciousness or relief develop. (Anonymous 2001b)

ii) Oil obtained from the ripe fruits by heating is applied externally over the cuts or old wounds 2-3 times daily, till cure. (Anonymous 2001b)

iii) About 50 seed with 3 ripe fruits of *Dhatoora* (*Dhatoora Fastuosa L.*) and common salt are ground together and given as full dose once only with fodder to the elephant suffering from diarrhea, indigestion. (Anonymous 2001b)

iv) Gum from bark used is scrofulous venereal and leprous infection and nervous debility, nut is bruised and applied to os-uteri to procure abortion given as a vermifuge. (Anonymous 2001b)

v) Oil from nuts is vesicant in nature and used externally in rheumatism and leprous nodule. (Anonymous 2001b)

vi) Small piece of stem bark is boiled in water and cake of wheat flour (1" diameter) is made with the extract; 1 cake is given orally with pure ghee and jaggery daily for 7 days in the empty stomach for joint pain. (Anonymous 2001a)



- vii) Fruit oil is applied with needle on the opposite side of the scalp to treat migraine. (Anonymous 2001a)
- viii) Fresh bark is rubbed on the effected part in ringworm. (Anonymous 2001a)
- ix) Root decoction in required quantity is given once daily for 5 days to treat eczema. (Anonymous 2001a)
- x) Resin and luke worm seed oil is applied on cuts, wounds, skin diseases and joint pain. (Anonymous 2001a)
- xi) Crushed seed mixed with cow ghee is boiled and given in chest pain. (Anonymous 2001a)
- xii) Black resin is applied hot to get relief from backache, chest pain and to remove warts. (Anonymous 2006c)
- xiii) Extracted resin is boiled in sufficient milk, strained and cooled. It is given orally for gastric disorder. (Anonymous 2006c)
- xiv) Extracted resin mixed with 'Kattha' juice in 1:1 ratio is applied locally on white patches of leukoderma. (Anonymous 2006c)

- **Phytochemistry:**

- i) The Chemical constituents found in *Semecarpus Anacardium* Linn. are Bhilwanols, phenolic compounds (Semalty 2010; Mathur 1953; Rao 1973; Gedam 1974; Deepa 2021) sterols and glycosides (Semalty 2010; Akbar 2020) Biflavonoids, (Anonymous 2001a; Anonymous 2001b) minerals, vitamins and amino acids. (Semalty 2010)
- ii) A chemical constituent namely Biflavanone, Semecarpetin, has been separated from the nut shells of *Semecarpus Anacardium*, (Murthy 1988) and Biflavonoid, Jeedi Flavanone, has also been isolated from the alcoholic extract of the nut shells of *Semecarpus Anacardium*. (Murthy 1988; Murthy 1984; Ishatulla 1977)

## Research conducted on Baladur (*Semecarpus anacardium*):

- **Neuroprotective activity:**

Farooq et al. 2007 assessed the cognitive enhancer properties of nuts of *Semecarpus anacardium* extracted with milk in different experimental animal models.

The *Semecarpus anacardium* was found potent in extending the half-life of acetylcholine by inhibiting the acetylcholinesterase enzyme. Intellectual weakening can be effectively treated by *Semecarpus anacardium* and is also known for boosting memory or related Central nervous system (CNS) activity.

- **Anti-inflammatory action:**

A study was carried out by Ram et al. 2004 on acute and chronic phases of inflammation by carrageenan-induced paw edema and cotton pellet granuloma test. The effect of *Baladur* on adjuvant arthritis was also evaluated and it was found that carrageenan-induced paw edema was remarkably reduced.

A bioflavonoid that is found in the seeds of *Semecarpus Anacardium* is cyclooxygenase inhibitory in nature and very commonly utilized in Indian traditional medicine for the remedy of rheumatoid arthritis. An animal study was also performed for the anti-inflammatory impact of Tetrahydro amentoflavone compared with ibuprofen, one of the widely recognized NSAIDs. (Selvam et al. 2004)



• **Anti-Oxidant Activity:**

In a study by Kumar et al. in 2008, *Semecarpus Anacardium* extract was reported to affect lymphocytes and lymphoid organs in the spleen and thymus of rats with adjuvant-induced arthritis, especially lipid peroxides, superoxide dismutase and catalase, glutathione peroxidase, and the effects of reduced glutathione were researched. The contents of reactive oxygen species, especially hydroxyl radicals, superoxide radicals, and H<sub>2</sub>O<sub>2</sub>, were also measured in the spleen, thymus, and lymphocytes of control and experimental animals. Biochemical markers of stimulation, specifically C-reactive protein level and erythrocyte sedimentation rate, were determined.

Arthritic mice showed remarkable elevation in lipid peroxidation, reactive oxygen species, and decreases in antioxidant enzymes. When treated with the test drug, the above changes returned to almost normal levels. Elevated levels of C-reactive protein and erythrocyte sedimentation rate in arthritic mice also reached normal levels.

• **Analgesic Activity:**

Lingaraju et al. 2011 carried out a study on pain relieving activity of chloroform, petroleum ether and methanolic extract of *Semecarpus anacardium* were detected via both (tail flicking and writhing) methods. The methanol extract was found more effective. This study supported the ethno medicinal claims of *Semecarpus anacardium*.

• **Wound healing promoting Activity:**

Lingaraju et al. 2012 performed a study on the wound healing quality of methanolic extract of *Semecarpus anacardium* stem bark in three different wound models using albino Wistar rats. At a dose of 100 mg/kg(-L), the methanol extract showed significant wound healing potency, whereas it was less effective in animals treated with doses of 50 and 75 mg/kg(-L). This study also supported the folk medical assertion of *Semecarpus anacardium*.

• **Antimicrobial Activity:**

Mohanta et al. 2007, developed aqueous and natural solvents of plant extracts and tested their antibacterial and phytochemical efficacy. The fractions of petroleum ether and aqueous extract exhibited inhibitory effects against *Staphylococcus aureus* and *Shigella flexneri*. The chloroform extract hampered the growth of *Bacillus licheniformis*, *Vibrio cholerae*, and *Pseudomonas aeruginosa*, while the ethanol extract inhibited the growth of *Pseudomonas aeruginosa* and *S. Aureus*.

• **Anti tumour and Pharmacological effects of oil from *Semecarpus anacardium*:**

The anti-tumor activity of *Semecarpus anacardium* was discovered by Indape et al. 1983. The hot methanol extract and its isolated resin fraction showed antitumor effects against P388 lymphocytic leukemia in BDF1 mice. Petroleum ether extracts were also evaluated for the same, and both showed anticancer activity.

• **Anti-hyperlipidemic Effect:**

Banu et al. 2013 conducted an animal trial. The Streptozotocin-Induced type-2 diabetic rat model was used to evaluate the anti-hyperlipidemic activity. The study exhibits a considerable amount of anti-inflammatory and anti-hyperlipidemic effect of *Semecarpus anacardium*.



The milk extract of *Semecarpus anacardium* considerably lowered the changes in the lipid metabolism in diabetic animal models efficiently at a dosage of 200 mg/kg orally.

- **Anticancerous Efficiency:**

This research showed the effectiveness of *Semecarpus anacardium* nut milk extract for the treatment of hepatocellular carcinoma either alone or in combination with chemotherapy. (Joseph et al. 2013)

SA-3C, an important anticancer agent, was isolated from the nut of *Semecarpus anacardium*, which can be used to treat cancer. (Nair et al. 2009)

Mathivadhani et al. 2007 discovered the inhibitory effect of *Semecarpus anacardium* on human breast cancer cells (T47D)

- **Effect on male reproductive function:**

Sharma et al. 2003 assessed the spermatogenesis activity of ethanol extract of *Semecarpus anacardium* nut in experimental animals. For this purpose mice were fed with a 50 % ethanol extract of *Semecarpus anacardium* fruit for 60 days. After 60 days of treatment, a fertility test was done. Biochemical and histological examinations of the blood and reproductive organs were carried out and showed a noticeable decrease in the protein, cholesterol, and glycogen content of the testes and the fructose content of the seminal vesicles after treatment. The number of primary and secondary sperm cells is reduced.

It is established that feeding with *Semecarpus anacardium* extract has an anti-spermatogenic effect, reducing the number of spermatogenic cells and sperm and reducing sperm density in the cauda epididymis may be associated with changes in androgen metabolism.

The principal cells of the epididymis synthesize proteins that play an important role in sperm maturation. Changes in the release and properties of these proteins impair sperm maturation, and changes in testicular androgen levels may also affect the conversion of sperm cells to spermatozoa. Blood counts remained normal.

- **Hypocholesterolemic Activity:**

Sharma et al. 1995 disclosed that administering *Semecarpus anacardium* nut extract to cholesterol-fed rabbits significantly reduced serum cholesterol and serum LDL cholesterol. Extract intake further prevented cholesterol/triglyceride accumulation in the liver, coronary heart muscle, and aorta and induced plaque regression. This suggests that *Semecarpus anacardium* has hypocholesterolemic properties and regulates cholesterol-induced atheroma.

- **Immunomodulatory Effect:**

Vanu et al 2006 studied the immunomodulatory properties of *Semecarpus anacardium* nut milk extract in adjuvant arthritis by comparing changes in foot edema, tumor necrosis factor, nitric oxide and myeloperoxidase activities as inflammation-reducing results. and also analyzed changes in humoral and cellular immune responses. Additionally, therapeutic studies were performed in experimental rats to evaluate the anti-inflammatory, analgesic, antipyretic, and ulcer-forming effects of *Semecarpus anacardium* and Indomethacin. *Semecarpus anacardium* treatment significantly restored changes in humoral and cellular immunity to normal



levels. All of these results were very similar to the effects of indomethacin, except for ulcers, where indomethacin caused severe ulcers. This study demonstrated the immunoprotective and therapeutic action of *Semecarpus anacardium*.

• **Anti-parkinsonian Effect:**

Ahmad et al evaluated the anti-parkinsonian activity of 50% ethanolic extract of Baladur by Tremorine test in animal model. Significant reduction in score for tremors was observed which revealed its anti-parkinsonian effect by virtue of anticholinergic activity. (Ahmad. 1994)

• **Toxicity:**

i) Since *Baladur* is extraordinarily harsh, warm and irritant in nature, it should not be used without physician's advice. It has to be avoided by the individuals having hypersensitivity, small children, very aged persons, pregnant females and people of *Safrawi al-Mizaj*. It can develop serious inflammation and ulceration in internal organs and sterility in females. The oily part of the nut is poisonous and develops hypersensitive reactions like rash, itching and swelling and ulcer. It is purified before use for the safety reasons. (Baytar 1985; Kabiruddin YNM; Matthai 1979)

ii) Allergic contact Dermatitis may occur in a patient, who is exposed to smoke of its seeds due to its active allergen known as Urushiol.

iii) The oral toxicity of peanut butter and *Semecarpus anacardium* extracts was compared with the same extracts emulsified with Tween-80 saline solution. The traditional route of administration of peanut butter is safe, with increases in body weight, red blood cell count, and hemoglobin % observed without mortality at doses up to 25 mg/kg/day for 9 days. The same dose using Tween-80 saline solution produced significant results. (Patwardhan et al. 1988)

iv) A toxicity study was performed on mice administered milk extract of *Semecarpus anacardium* nuts. The drug was found safe in acute and subacute toxicity studies. Biopsy of major organs showed normal structure, indicating no structural abnormalities. (Vijayalakshmi et al. 2000)

v) A toxicological review of the drug reveals that juice of fruit causes an eczematous eruption on skin when applied locally. It is not very much irritant when taken internally in small dose but may produces sever swelling on pharynx and serious gastrointestinal discomfort, followed by dyspnea, increased pulse rate, decreased blood pressure, dilated pupils, restlessness, unconsciousness and death may occur within 12 to 24 hours if taken in in large doses. Ingestion of its juice internally may leads to accidental poisoning but homicidal and suicidal poisoning are uncommon. (Venkatrao 2015)

• **Method of Detoxification (*Tadbir-i-Adwiyya*):**

In the Unani system of medicine, drugs that come under the third and fourth category are compulsory subjected to proper detoxification before use. Therefore '*Asal-i Baladur* (juicy content) also needs to be rectified before medicinal use. For this purpose, the cap of the *Baladur* fruits is removed first then it is pressed with the help of red-hot tongs so that its juicy contents are removed, The *Baladur* fruits are boiled in water three times, after that the fruits are boiled in cow milk, at the end it is washed with water and dried up. Safety measures should be taken during the procedure. (Baytar 1985; Muzaffar et al, 2010)



## Important Formulations:

- *Ma'jun-i-Baladur* is an Unani compound Preparation used chiefly for the management of Neurological Ailments (Anonymous 2007; Muzaffar et al. 2010; Kabiruddin 2006)
- *Anqaroya Kabir* (Anonymous 2007; Kabiruddin 2006; Hafeez 2005)
- *Anqaroya Sagheer* (Anonymous 2007; Kabiruddin 2006; Hafeez 2005)
- *Anqaroya Surayi* (Anonymous 2006b)

## Conclusion:

Unani system of medicine is gaining recognition worldwide for its holistic approach. Differentiation of disease and medication according to involved humour (*Akhlat*) and individual's specific *Mizaj* is a unique approach to treatment. The literature survey showed that *Baladur* (*Semecarpus anacardium* Linn.) has a broad spectrum of pharmacological activities. It has numerous therapeutic potentials, especially in nervine disorders such as paralysis, stroke, amnesia, and joint disorders like rheumatoid arthritis, and sciatica, being CNS stimulant and anti-inflammatory in nature. Many researches reveal that *Baladur* also exhibits activities like a digestive stimulant, hypoglycemic, anti-microbial, anti-cancer, immunomodulatory, hypolipidemic, anti-atherogenic, antioxidant, etc.

Unani scholars recommended it as an Aphrodisiac (*Muqawwi-i-Bah*) agent contrary to this fact study conducted by Sharma et al showed it to be an anti-reproductive agent. Hence it is suggested that biomedical research on scientific parameters should be conducted to evaluate *Baladur's* effects on male reproductive functions.

It has great scope for research especially on its traditional or folklore uses which need to be further validated and clinical trials may be conducted to explore its neglected therapeutic potentials, especially in the Covid-19 pandemic era.

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