

ASSAM—AN ASSET OF UNANI MEDICINE**Uzma Siddiqui*, Mohd. Amir, Md. Akhter Hussain Jamali and Abdullah**

Regional Research Institute of Unani Medicine, Central Council for Research in Unani Medicine, Ministry of AYUSH, Government of India, Veterinary Market, Ghungoor, Silchar, Assam, 788014.

Article Received on
12 August 2023,
Revised on 02 Sept. 2023,
Accepted on 22 Sept. 2023,
DOI: 10.20959/wjpr202317-29733

Corresponding Author*Dr. Uzma Siddiqui**

Regional Research Institute
of Unani Medicine, Central
Council for Research in
Unani Medicine, Ministry of
AYUSH, Government of
India, Veterinary Market,
Ghungoor, Silchar, Assam,
788014.

ABSTRACT

Assam is a state in the northeastern part of India. It is primarily an agrarian economic state with 74% of its population engaged in agriculture and allied activities. There are over 6560 species of medicinal plants reported so far from India and more than 952 species from Assam. They can not only cure our ailments but can also be a source of economic development. The state not only emanates flavours of tea but also shows biodiversity. It has a network of rivers and hilly territory. The diverse flora and fauna bestowed by nature have garnished Assam with an awesome feeling. Minerals embedded in the soul of soil have made the state glitter. The land bounded by international boundaries has increased its importance globally. The land of aromatic plants has made the olfactory sensation pleasant. The medicinal plants have added a feather to the cap of the state. In the Unani system of medicine, 95% of the source drugs are derived from

plants and the rest from animals and minerals. Some of the important plants found in the state have been described here highlighting their potent action.

KEYWORDS: Assam, Medicinal plants, Biodiversity, Unani Medicine.

INTRODUCTION

The name of the state Assam owes its origin to the Sanskrit word 'Asom' which means 'Unparallel' or peerless. In other opinions, Assam derives its name from the name of the 'Ahom' who ruled the state for six hundred long years till the British came to India. The geographical location of the state of Assam is the northeastern part of India. Bhutan and Arunachal lie the north of the Assam. Mizoram and Tripura lie in the south of the state of

Assam; Nagaland and Manipur lie in the East and West of Assam is bordered by Bangladesh and the states of Meghalaya and West Bengal. On the India map, it looks like the 'Y' letter of the alphabet. Among the three major physical regions of Assam, the Brahmaputra River valley is the largest. The other two physical regions of Assam are the Barak River valley in the South and the hilly region between Meghalaya (to the West) and Nagaland and Manipur (to the East) (Ghosh *et al.*, 2015).

Barak valley comprises three districts namely Cachar, Karimganj, and Hailakandi. Bangla is the lingua franca of people living in the valley. Cachar whose headquarter is Silchar has many prestigious educational and research institutions such as the National Institute of Technology (NIT), Assam University, Silchar Medical College and Hospital, and Cachar Cancer Hospital. For the Unani system of Medicine, Regional Research Centre (Unani) was established here in 2006 and it is upgraded to the Regional Research Institute of Unani Medicine at Veterinary Bazar Gali, Ghungoor in November 2022. It is well connected by rails, roads and air routes. The state of Assam has diverse topologies. It has a riverside and hills and valleys. The diverse topology of the state provides a platform for the biodiversity of Assam.

The climate of Assam

Assam, a part of one of the biodiversity hotspots, occupies a special place in the northeastern part of India located between 24°44'N to 27°45'N latitude and 89°41'E to 96°02'E longitude, covering 2.4% of the geographical area of the country, i.e., 78,438 sq. Km. The annual rainfall ranges between 305 cm maximum to 178 cm minimum with an average of 211.76 cm. The temperature recorded in summer is 37°C maximum and 18°C min. and 26°C max and 7°C minimum in winter with an average humidity of 83.0% (Mehmud, *et al.*, 2017). The main profession of people of the Assam is agriculture. The principal food crop is rice and the cash crop includes tea, jute and cotton (Ghosh *et al.*, 2015). The tea industry of Assam plays an important role in the state as well as in the national economy. India is the second-largest tea-producing country in the world. Assam is the largest tea-producing state of India and the largest tea-producing region of the world producing approximately 51% of India's tea, and nearly 11% of the world's tea (BASIC, 2019). Tea production in the state stood at nearly 672.14 M.Kg for the year 2021-2022 (Tea Board, India). Major fruit growing in the state of Assam are orange, mango, guava, banana, jackfruit, pineapple, etc. Assam is well known for sericulture. An exclusive variety of silk i.e., Eri, Muga, Pat is produced in Assam. Muga silk

is produced only in Assam in the world (Anonymous, 2017). In the Unani system of Medicine, Abresham (Cocoon of Silkworm) is used as a Cardiac tonic (Anonymous, 2009; Kabeeruddin, 2018).

Biodiversity of Assam

The term 'Biodiversity' refers to the diversity that is found among life forms within a given ecosystem, biome or on the globe. There are three levels of biodiversity; Genetic diversity- genetic variation among the living organism; Species diversity-variation encountered within a genus and Ecosystem diversity- diverse ecological complexity showing variation in ecological niches, tropic structure, food, etc (Barooha, et al, 2014.). India, a mega-diverse country with only 2.4% of the world's land area accounts for 7-8% of all recorded species including over 45,000 species of plants and 91,000 species of animals. Being one of the 17 identified mega-diverse countries; India has 10 bio-geographic zones and is home to 11.80% plant species. Four of the 34 globally identified biodiversity hotspots, namely the Himalayan, the Indo-Burma, the Western Ghats-Sri Lanka and the Sundarland are represented in India (Anonymous, 2014). Assam is one of the richest biodiversity zones in the world. This is because Assam falls in the transitional zone of Indian, Indo-Malayan and Indo-Chinese bio-geographical regions and possesses a special geomorphic environment with large plains and dissected hills. Broadly the climate is sub-tropical with heavy rainfall and humidity which support various habitats such as rainforests, riverine grassland, bamboo thickets and wetland ecosystems (Anonymous, 2017). Assam is home to several wildlife sanctuaries and national parks that are the breeding ground for some of the rarest global species. The many wildlife sanctuaries in Assam provide shelter to a large number of wildlife right from the Golden Langur (*Trachypithecus geei*), the Asiatic Elephant, the Swamp Deer, and the Asiatic Water Buffaloes to the one horned Rhinoceros (*Rhinoceros unicornis*) (Anonymous, 2017).

Important Medicinal Plants grown in the state

Some important medicinal plants grown in the state have been described here, which are used in the Unani system of medicine. The details of medicinal plants include Unani name, Botanical name, English name, Local name, Temperament, Part to be used, Action and Therapeutic uses as described in Classical Unani literature.

Agar, Ood Hindi (*Aquilaria agallocha Roxb*); Eagle Wood in English and locally known as Agar, Agor Gach (Anonymous, 2009; Khare, 2007). Its temperament is hot and dry in 2⁰ (Ibn e Baitar, 1999). **Part used:** Resinous wood of the plant. **Action:** *Muqawwi-i-Maida*

(Stomachic), *Muqawwi-i-Asab* (Nervine tonic), *Mushtahi* (Appetizer), *Dafi-i-Taffun* (Antiseptic) and *Mushil-i-Balgham* (Phlegmagogue). It is used in *Duf-al-Asab* (Neurasthenia), *Duf-al-Ishtiha* (Anorexia), *Amradh-al-Maida* (Gastric Disease), *Iltihab-al-ShuabMuzmin* (Chronic Bronchitis) and *Sual o Surfa* (Cough) (Majusi, 2010; Jurjani, 2010; Hakeem, 1999; Kabeeruddin, 2018). Agarwood incense has been burned to produce a pleasant aroma for centuries, in important ceremonies, by Buddhists, Hindus and Muslims (Alam, et al., 2015). In Arab society, Agarwood is highly prized and burned for guests as a sign of respect (Alam et al., 2015). In Unani it is also used in vapour dosage forms like *Bakhur* (Fumigation), *Inkibab* (Steam inhalation)), *Lakhlakha* (Perfume) etc (Majusi, 2010; Jurjani, 2010; Hakeem, 1999). Assam is reputed as India's Agarwood capital. *Agar* could be the driver of economic empowerment for the native of Assam. Hojai in Assam is one of the hubs of Agarwood.

Sandal Safaid (*Santalum album* Linn); Sandalwood in English and locally known as Chandan (Anonymous, 2009; Khare, 2007). Its temperament is Cold in 3⁰ and Dry in 2⁰ (Kabeeruddin, 2018). **Part used:** Wood and Oil extract from the wood. **Action:** Mufarrih (Exhilarant), *Dafi-i Taffun* (Antiseptic) *Mushil-i-Balgham* (Phlegmagogue), *Muqawwi-i-Dimagh wa Qalb* (Brain and Cardiotonic), *Musaffi-i-Khoon* (Blood purifier). Externally it is *Mubarriid* (Refrigerant), *Radi* (Repellent) and *Musakkin* (helps to neutralize the heat of Humours). It is used in *Duf-al Qalb* (weakness of Heart), *Khafqan* (Palpitation), *Bawl-al-Dam* (Haematuria), *Sual Muzmin* (Chronic cough), *Ittisa-al-Shuab* (Bronchitis) (Majusi, 2010; Jurjani, 2010; Hakeem, 1999; Kabeeruddin, 2018). Sandalwood oil is also used in medicine. The temperament of Sandalwood oil is cold and moist in 2⁰ (Kabeeruddin, 2018). It is used in Urinary Tract Infection, *Sozak* (Gonorrhoea), and *Hurqa al-Bawl* (Burning Micturition) (Majusi, 2010; Jurjani, 2010; Hakeem, 1999; Kabeeruddin, 2018).

Chaliya, Fufal (*Areca catechu* Linn.); Areca Nut and Betel Nut in English and locally known as Supari, Tamul, and Gua (Anonymous, 2007; Khare, 2007). Its temperament is Cold in 2⁰ and Dry in 2⁰ (Kabeeruddin, 2018). **Part used:** Seeds. **Action:** *Qabid* (Astringent), *Radi* (Repellent) and *Muhallil-i-Awram Harra* (Resolvent of acute Inflammation). It is used in *Ishaal* (Diarrhoea), *Litha Damiya* (Bleeding Gums), *Taharrruk al-Asnan* (Odontoseisis), *Duf-al-Rahim* (Weakness of Uterus), *Saylan-al-Rahim* (Leucorrhoea) and *Jaryan* (Spermatorrhoea) (Majusi, 2010; Jurjani, 2010; Hakeem, 1999; Kabeeruddin, 2018). Total

annual production was 74.78 M.tonnes and the area covered was 77.62 Ha in 2016-17. Assam placed third position in India (Anonymous, 2022).

Gilo, Gul Bel (*Tinosporacardifolia Willd*); Mooncreeper in English and locally known as Guduchi, Amritalata (Khare, 2007; Mehmud et al., 2017). Its temperament is hot and dry (Kabeeruddin, 2018). **Part used:** Decoction of its leaves and stem and extract of the plant. **Action:** *Dafi-i-Humma* (Antipyretic), *Musaffi-i-Dam* (Blood purifier), *Muhallil* (Resolvent), and *Mudirr-i-Bawl* (Diuretic). It is very effective in treating all types of *Humma* (Fever) such as *Humma Diqqiyya* (Hectic fever), *Humma-Maharraqa* (Remittent fever), *Kharish* (Pruritus), *Buthur* (Eruption), *Dummal* (Boil), *Atishak* (Syphilis), *Sozak* (Gonorrhoea) and *Waja-al-Mafasil* (Polyarthrititis). It is also known as "Amrita for Life" in Ayurveda (Hakeem, 1999; Anonymous, 2007; Kabeeruddin, 2018).

Ananas (*Ananas comosus* (L) Mer.); Pineapple in English and locally known as Anaras and Matikothal (Khare, 2007; Mehmud et al., 2017). Its temperament is Cold and Moist in 2⁰ (Kabeeruddin, 2018). **Part used:** Fruits, **Action:** *Mufarraah* (Exhilarant), *Muqawwi-i-Aam* (general tonic), *Mudirr-i-Bawl* (Diuretic), Rich source of vitamin C and *Mushil-i-Safra* (Cholagogue). It is used as a *Muqawwi-i-Qalb wa Dimagh* (Cardiac and Brain tonic). It is efficacious in *Khafaqan* (Palpitation), *Hurqa-al-bawl* (Burning Micturition), *Ihtibas-al-Bawl* (Urinary Retention), *Hasah-al-Kulya wa Mathana* (Nephrolithiasis and Cystolithiasis). It is also useful in *Duf-i-Aam* (general weakness) (Hakeem, 1999; Kabeeruddin, 2018). Ananas is one of the commercially important fruit crops of Assam. Total annual production is estimated at 313.24M. tonnes of fruit. The area under Pineapple cultivation in Assam was 18.74 Ha in 2016-2017. The major Pineapple growing belt of Assam is Nagaon, Dhemaji, Kamrup, Karbi Anglong, N.C.Hills, Goalpara, Sonitpur and Dhubri (Anonymous, 2022). Lakhipur Anaras is very popular and in high demand among the local people of Cachar district.

Chobchini (*Smilax glabra Roxb*); China Root in English and locally known as Tukchini (Khare, 2007). Its temperament is *Murakkab-al-Quwa ba darja Hararat wa Yabusat* (Kabeeruddin, 2018). **Part used:** Tuberous Root. **Action:** *Musaffi-i-Dam* (Blood purifier), *Mugharri* (Mucilaginous), *Mufattih* (Deobstruent), *Muhallil* (Resolvent), *Mujaffif* (Desiccative), and *Muarriq* (Diaphoretic) properties. It is used in diseases due to chronic blood abnormalities like *Judham* (Leprosy), *Atishak* (Syphilis), *Kharish* (Pruritus), *Quba* (Ring Worm), *Qarha Khabisha* (Lupid Ulcer), *Suda Muzmin* (Chronic Headache), *Shaqiqa*

(Migraine), *Nazla Muzmin* (Chronic Cold), *Zukam* (Coryza), *Falij* (Hemiplegia), and *Hudar* (Rheumatism) (Hakeem, 1999; Anonymous, 2008; Kabeeruddin, 2018).

Shooneez, Habb al-Sawda, Kalonji (*Nigella sativa* Linn); Black Cumin in English and locally known as Kalijeerah (Anonymous, 2007; Khare, 2007; Mehmud et al., 2017). Its temperament is hot and dry in the 2⁰ (Kabeeruddin, 2018). **Part used:** Seeds and oil. **Action:** Internally *Muhallil* (Resolvent), *Kasir-i-Riyah* (Carminative), *Mudirr-i-Hayd* (Emmenagogue), *Muqawwi-i-Asab* (Nervine tonic) and externally it is *Jali* (Detergent) and *Jadhib* (absorbed excess blood). It is used for *Nafkh al-Shikam* (Flatulence), *Waja-al-Shikm* (Gastralgia), *Qolinj* (Colic), *Istisqa* (Ascites), *Ihtibas-al-Tamth* (Amenorrhoea), *Rasha* (Tremor) *Duf-al-Asab* (Neurasthenia) *Duf al Dimagh* (Cerebrasthenia), *Nisyan* (Amnesia), *Falij* (Hemiplegic) (Hakeem, 1999; Anonymous, 2007; Majusi, 2010; Jurjani, 2010; Kabeeruddin, 2018).

Kharbaq, Kutki (*Picrorhiza kurroa Royleex Benth*); Picrorrhiza in English and locally known as Katuki and Katakai (Khare, 2007). Its temperament is hot and dry in 3⁰ (Kabeeruddin, 2018). **Part used:** Rhizome and Roots. **Action:** *Mushil-i-Balgham* (Phlegmagogue), *Mushil-i-sawda* (Melanagogue), *Hadhim* (Digestive), *Kasir-i-Riyah* (Carminative), *Qatil-i-Didan-i-Ama* (Antihelmenthic) and *Musakkin-i-Hararat* (Antipyretic). It is used in *Su-i-Hadhm* (impaired Digestion), *Duf-al-Hadham* (Delayed digestion), *Didan-al ama* (Worm infestation), *Ihtibas-al batn* (Constipation), *Istisqa lahami* (Anasarca), *Istisqa* (Ascites), *Hummiyat-i-muzmina* (chronic Fevers), *Humma Safrawiya* (Bilious fever), and *Yarqan* (Jaundice) (Majusi, 2010; Jurjani, 2010; Hakeem, 1999; Kabeeruddin, 2018).

Waj (*Acorus calamus* Linn.); Sweet flag in English and locally known as Bach (Khare, 2007; Anonymous, 2008; Mehmud et al., 2017). Its temperament is hot and dry (Kabeeruddin, 2018). **Part used:** Roots and Rhizome. **Action:** *Muqawwi-i-Dimagh* (Brain tonic), *Hadim* (Digestive), *Mudirr-i-Bawl* (Diuretic), *Mudirr-i-Hayd* (Emmenagogue), *Kasir-i-Riyah* (Carminative). It is used In *Nisyan* (Amnesia), *Sara* (Epilepsy), *Falij* (Hemiplegia), *Khadar* (Numbness), *Ikhtinaq-al-Rahim* (Hysteria), *Ihtibas-al-Bawl* (Urinary Retention), *Ihtibas-al-Tamth* (Amenorrhoea), and *Didan-al-Ama* (Worm Infestation) (Majusi, 2010; Jurjani, 2010; Hakeem, 1999; Ibn-e Baitar, 2003; Kabeeruddin, 2018).

Satawar, (*Asparagus racemos willed*); Indian Asparagus in English and locally known as Shatmul and Shatawari (Khare, 2007; Mehmud et al., 2017). Its temperament is cold in 1⁰ and

moist in 2⁰ (Kabeeruddin, 2018). **Part used:** Tuberous Roots. **Action:** *Muqawi-i-Raham* (Uterine tonic), *Mudir-i-Laban* (Galactagogue), *Muqawi-i-Bah* (Aphrodisiac), *Mughharri* (Mucilaginous) and *Mughalliz-i-Mani* (increase viscosity of Semen). It is used in *Saylan-al-Rahim* (Leucorrhoea), *Sura-al-Inzal* (Premature Ejaculation), *Jaryan* (Spermatorrhoea), *Ihtilam* (Nocturnal Emission), *Ishal* (Diarrhoea) and *Zahir* (Dysentery) (Anonymous, 2009; Hakeem, 1999; Kabeeruddin, 2018).

Asrol (*Rauvolfia serpentine Benth. ex Kurz*); Indian Snakeroot in English and locally known as Sarpghondha (Anonymous, 2008; Khare, 2007; Bhattacharya et al., 1991). Its temperament is cold and dry in the 3⁰ (Zakai, 2000). **Part used:** Root. **Action:** *Musakkin* (helps to neutralize the heat of Humours), *Mukhaddir*, *Munawwim* (Sedative), *Musakkin-i-Asab* (Antineuralgic), *Daght-al-Dam Qawi* (Antihypertensive). It is used in *Sahr* (Insomnia), *Sara* (Epilepsy), *Malankhulaya* (Melancholia), and *Daght-al-Dam Qawi* (Hypertension) (Anonymous, 2008; Zakai, 2000).

Maalkangani (*Celastrus paniculatus Willd*); Staff Tree in English and locally known as Jyotishmati (Khare, 2007). Its temperament is hot and dry in 3⁰ (Kabeeruddin, 2018). **Part used:** Seeds and oil extracted from the seeds. **Action:** *Muharrik-i-Dimagh wa Asab* (Brain and Nerve stimulant), *Muqawwi-i-Dimagh-wa-Asab* (Brain and Nerve tonic), *Muqawwi-i-Maida* (Stomachic), *Hadhim* (Digestive), *Kasir-i-Riyah* (Carminative) and *Musaffi-i-Dam* (Blood Purifier). It is used in *Waja-al-Mafasil* (Poly Arthritis), *Irq-al-Nasa* (Sciatica), *Waja-al-Khasira* (Low Back Ache), *Falij* (Hemiplegia), *Laqwa* (Facial Palsy), *Sara* (Epilepsy) and *Duf-al-Asab* (Neurasthenia), *Judham* (Leprosy), *Jarab* (Scabies) (Hakeem, 1999; Kabeeruddin, 2018).

Musali Siyah (*Curculigoorchioides Gaertn*); Black Musale in English and locally known as Talmuli (Khare, 2007). Its temperament is hot in 1⁰ and dry in 2⁰ (Kabeeruddin, 2018). **Part used:** Roots. **Action:** *Mughharri* (Mucilaginous), *Muqawwi-i-Bah* (Aphrodisiac), *Muwallid-i-mani* (Spermatogenic) and *Mughalliz-i-mani* (increases viscosity of semen). It is used in *Ishal* (Diarrhoea), *Riqqat-i-Mani* (Oligospermia), *Jaryan* (Spermatorrhoea), *Saiylan-al-Rahim* (Leucorrhoea), *Zahir* (Dysentery), and *Sozak* (Gonorrhoea) (Hakeem, 1999; Kabeeruddin, 2018).

Zaranabad, Narkchur (*Curcuma caesia Roxb*); Black Zedorary in English and locally known as Kola Haldi (Khare, 2007; Mehmud et al., 2017). Its temperament is hot in 2⁰ dry in

3⁰ (Kabeeruddin, 2018). **Part used:** Roots. **Action:** *Hadim* (Digestive), *Kasir-i-Riyah* (Carminative), *Mani-i-Qay* (Antiemetic), *Mani-i-Ghathiyan* (Antinauseant) and *Dafi-i-Taffun* (Antiseptic). It is used in *Duf-al-Hadam* (Delayed Digestion), *Duf-al-Ishtiha* (Anorexia), *Kasrat-i-Riyah* (Excessive Gaseous Formation), *Nafkh-al-Shikam* (Flatulence), *Ghathiyan wa Qay* (Nausea and Vomiting), *Hayza* (Cholera), and *Ishal* (Diarrhoea) (Hakeem, 1999; Jurjani, 2010; Majusi, 2010, Kabeeruddin, 2018).

Baranj Kabuli, Baobarang (*Embelia ribes* Burn.f.); Embelia in English and locally known as Biranga, Silgilla, Vai-vidango (Anonymous, 2007; Khare, 2007). Its temperament is hot and dry in 2⁰ (Kabeeruddin, 2018). **Part used:** Fruits. **Action:** *Mushil-i-Balgham* (Phlegmagogue), *Qatil-i-Didan Ama* (Antihelmenthic), *Hadim* (Digestive) and *Kasir-i-Riyah* (Carminative). It is used for *Waja-al-Mafasil* (Polyarthritis), *Didan-al-Ama* (Worm Infestation), *Badhadmi* (Indigestion), and *Duf-al-Hadam* (Delayed Digestion) (Anonymous, 2007; Hakeem, 1999; Kabeeruddin, 2018).

Chalmogra (*Hydnocarpus kurzii* (King) Warb.); Chalmogra in English and locally known as Chawlmogra, Dalmugra (Khare, 2007; Bhattacharya et al., 1991). Its temperament is hot in 2⁰ and dry in 3⁰ (Kabeeruddin, 2018). **Part used:** Oil obtained from seeds. **Action:** *Muhammir* (Rubefacient), *Jali* (Detergent) and *Musaffi-i-Dam* (Blood purifier). Due to these properties, it is used for *Judham* (Leprosy), *Quba* (Ring Worm), *Nar Farsi* (Eczema), *Hikka* (Pruritus), *Waja-al-Mafasil* (Poly Arthritis) and *Niqris* (Gout) (Hakeem, 1999; Kabeeruddin, 2018).

Konch (*Mucuna prurita* Hook); Cowhage in English and locally known as Bandor Kekoa (Khare, 2007; Bhattacharya et al., 1991). Its temperament is moderate (Kabeeruddin, 2018). **Part used:** Seeds. **Action:** *Mughalliz-i-mani* (increases viscosity of Semen) and *Muqawwi-i-Bah* (Aphrodisiac). It is used for *Jaryan* (Spermatorrhoea), *Sura-al-Inzal* (Premature Ejaculation), and *Riqqat-i-Mani* (Low Semen Volume) (Hakeem, 1999; Kabeeruddin, 2018).

Maida Lakri (*Litsea glutinosa* (Lour.) C.B.Rob); Litsea Bark in English and locally known as Heluka, Mejankuri (Khare, 2007; Anonymous, 2008). Its temperament is hot in 2⁰ and dry in 1⁰ (Kabeeruddin, 2018). **Part used:** Oil obtained from fruits and berries and Paste of the steam bark is also used as plaster in case of fracture. **Action:** *Muhallil-i-Awram* (Anti-inflammatory), *Qabid* (Astringent), *Muqawwi-i-Asab wa Maida* (Gastro and Nervine Tonic) and *Muharrik-i-Bah*. It is used for *Waja-al-Khasira* (Lowbackache), *Iraq-al Nasa* (Sciatica),

Niqris (Gout), *Watha* (Sprain and Strain), *Kasr* (Fracture), *Zarba wa Saqta* (Injury), *Tashannuj* (Convulsion), *Zuf-i Bah* (Anaphrodisia), and *Tahllul-i-Salaba* (Dissolve hardening) (Anonymous, 2008; Hakeem, 1999; Kabeeruddin, 2018; Rauf et al., 2018).

Sheetraj Hindi (*Plumbago zeylanica* Linn); Leadwort in English and locally known as Bogu, Agychit, Chitkara (Anonymous, 2007; Khare, 2007; Mehmud et al., 2017). Its temperament is hot and dry in 3⁰ (Kabeeruddin, 2018). **Part used:** Root. **Action:** Sheetraj is *Mufarrih* (Exhilarant), *Muhammir* (Rubefacient), *Hakkak* (Irritant), and *Muharrik-i-Asab* (Nervine stimulant). Externally it is effective in skin diseases like *Bars* (Vitiligo), *Bahaq* (Pitriyasis), *Jarab* (Scabies), *Quba* (Ring Worm) and *Taqashshur-al-Jild* (Psoriasis), and also useful in *Waja-al-Mafasil* (Polyarthritis), *Falij* (Hemiplegia), *Laqwa* (Facial Palsy), and *Duf-al-Aasab* (Neurasthenia) (Anonymous, 2007; Hakeem, 1999; Kabeeruddin, 2018).

Firferan, Usaar-e-Rewand (*Garcinia hanburyi* Hook. f.); Siam Gamboge in English and locally known as Thekera (Khare, 2007). Its temperament is hot and dry in 2⁰ (Kabeeruddin, 2018). **Part used:** Resin obtained from stem. **Action:** *Mushil* (Purgative), *Muqawi* (Tonics), *Mudirrkhafif* (Mild Hydragogue) and *Qatil-waMukhrij-i-Didan Ama* (Antihelminthic and Vermifuge). It is used in *Amrad Baridwa Ratab Dimagh wa Asab* eg. *Falij* (Hemiplegia), *Laqwa* (Facial Palsy), *Tashannuj* (Convulsion), *Istisqa* (Ascites), *Ihtibas-al-Bawl* (Urinary Retention) *Ihtibas-al-Batn* (Chronic Constipation), *Didan-al-Ama* (Worm Infestation) (Hakeem, 1999; Kabeeruddin, 2018).

More medicinal plants of Assam

With its vast hills and forest, Assam is the home to a variety of medicinal plants such as *Filfil Daraz* (*Piper longam* Linn), *Amla* (*Emblica officinalis* Gaertn), *Halela* (*Terminalia chebula* Retz.), *Balela* (*Terminalia belerica*), *Arjun* (*Terminalia aarjuna* Wight & Arn.), *Zaravand* (*Aristolochia* Species), *Firferan* (*Garcinia* species), *Baraahikand* (*Dioscorea bulbifera*), *Daarchob* (*Curcuma aromatica*), *Jamun* (*Eugenia jambolana*), *Zanjabeel* (*Zingiber officinale*), *Kaayphal* (*Myrica esculenta*), *Karonda* (*Carissa carandas*), *Brahmi* (*Chenopodium album*), *Neem* (*Azadirachta indica*), *Papita* (*Carica papaya*), Many Citrus species such as *Santra* (*Citrus aurantium*) and *Leemu* (*Citrus limon*), *Bael* (*Aegle marmelos* L.), *Paan* (*Piper betel* L.) are some of the most commonly used plants in treatment of various ailments. But the list is not exhaustive (Ghosh et al., 2015; Mehmud et al., 2017; Khare, 2007; Anonymous, 2017).

CONCLUSION

Assam is a rich reserve of varieties of plants due to its biodiversity and favourable climate conditions. Since time immemorial people have accumulated knowledge about plants and their uses, especially as food and medication to alleviate pain and cure different illnesses. Assam is home to the number of plants having medicinal uses in Unani and modern medical practices. If sufficient scientific evidence of benefit is available for a plant, then it may be legitimized to be used appropriately to promote the use of that plant, so that these benefits can be used for the promotion of public health and the treatment of diseases. Treatment with medicinal plants is considered very safe, as there is no or minimal side effect. These remedies are in sync with nature, this is the biggest advantage.

REFERENCES

1. Alam J., Mujahid M., Badruddin, AzizurrahmanM., AkhtarJ., KhalidM., JahanY., Bari A., Khan A., Shawwal M., Iqbal S. S., Journal of Applied Pharmaceutical Science, 2015; (08): 173-181.
2. Anonymous The Unani Pharmacopeia of India, Part-I, Vol. I, Ministry of Health and Family Welfare, Department of AYUSH, New Delhi, 2007; 19-20,28-29,30-31,42-43,80-81.
3. Anonymous The Unani Pharmacopeia of India, Part-I Vol. V, Ministry of Health and Family Welfare, Department of AYUSH, New Delhi, 2008; 9-10, 23-24,52,53,107-108.
4. Anonymous The Unani Pharmacopeia of India, Part-I Vol. VI, Ministry of Health and Family Welfare, Department of AYUSH, New Delhi, 2009; 54-55, 3-4,72-75.
5. Anonymous Standard Unani Medical Terminology, Central Council For Research In Unani Medicine, New Delhi, 2012; 23,132,133,134,142,143,144,145,190, 214, 263,273.
6. Anonymous India's fifth National Report to the convention on Biological Diversity, Ministry of Environment and Forest, Government of India, New Delhi, 2014; 1,27,29.
7. Anonymous Glimpses of Biodiversity in Assam, Assam state Biodiversity Board, Anubhab Enterprises & co. Guwahati, 2017; 1,4, 5, 6, 16,17,18,20,21, 22.
8. Anonymous, Agriculture Statistic at A Glance 2021, Ministry of Agriculture & Farmers Welfare Department of Agriculture & Farmers, Government of India, New Delhi, 2022; 190,225,168-169.
9. TEA BOARD India, State/Region wise and Month wise Tea Production data for the year (FINAL),14, B.T.M. Sarani Kolkata- 700 001, 2021.
10. https://www.teaboard.gov.in/pdf/Production_data_for_2021_and_2021_22_pdf223.pdf

11. Baroocha C. and Ahmed I., Plant Diversity of Assam; A check list of Angiosperm and Gymnosperm, Assam Science Technology and Environment Council, Ghuwahati, 2014; 1.
12. Bhattacharya P.C., Mazumdar R., Sharma G. C. Dev., Rare Medicinal Plant of Assam, Ancient Science of Life, 1991; 234-238.
13. Bureau for the Analysis of Societal Impacts for Citizen Information (BASIC), October Study of Assam Tea Value Chains, Research Reports, Oxfam Germany and the German Ministry for Economic Cooperation and Development (BMZ), 2019; 3, 12, 13, 14.
14. Chatterjee S., Saikia A., Dutta P., Ghosh P. and Worah S. Review of Biodiversity in NorthEast India, WWF, Delhi, India, 2006; 4, 12, 16, 21, 22, 9, 10, 57.
15. Das A. K., Dutta B. K. and Sharma G. D. (July), Medicinal plants used by different tribes of Cachar district, Assam, Indian Journal of Traditional Knowledge, 2008; VII(3): 446-454.
16. Ghosh D. and Parida P. Medicinal Plants of Assam, India: A Mini Review, International Journal of Pharmacology and Pharmaceutical Sciences, 2015; II(6): 5-10.
17. Hakeem M.A. BustanulMufradat, Zafar Book Depot, Delhi, 1999; 37, 45, 74, 82, 89, 140, 143, 148, 151, 176, 182, 192, 224, 227, 247, 248, 258, 266, 279, 304, 321, 327.
18. Ibn Baytar Al-Jami li-Mufradat al-Adwiyawa al-Aghziya (Urdu Translation), Vol-IV, CCRUM, New Delhi, 2003; 412-414.
19. Ibn Baytar Al-Jami li-Mufradat al-Adwiyawa al-Aghdhiya (Urdu Translation), Vol-III, CCRUM, New Delhi, 1999; 161-162, 156-158, 193-194, 234-235, 320-321, 386-387.
20. Jurjani, I. Zakhira Khwarazm Shahi, Urdu Translation by Khan A.H., Idara kitab us Shifa, New Delhi, 2010; 221, 252, 311, 32, 371, 390, 479, 637, 645.
21. Kabeeruddin H. MakhzanulMufradat al Maruf Khwas al Adwiya, Faisal Publication, Deoband, 2018; 16, 17, 19, 60, 84, 98, 118, 121, 231, 242, 396, 397, 333, 397, 529, 251, 402, 446, 460, 469, 529, 555, 564, 584.
22. Khare C. P. Indian Medicinal plants, Springer science business media, New York, USA, 2007; 16-17, 68, 507-508, 134, 538, 185, 187, 237, 299, 646, 424, 608, 380, 501, 662-663, 59, 57, 284, 439, 579, 636.
23. Majoosi Ali ibn Abbas, Kamil us Sana, Urdu Translation by Kintoori, Idara Kitabus Shifa, Vol. I, New Delhi, 2010; 284.
24. Majoosi AIA. Kamil us Sana, Urdu Translation by Kintoori, Idara Kitabus Shifa, Vol. II, New Delhi, 2010; 128, 163-164, 165, 187, 143, 155.

25. Mehmud S. and Swarnkar A. A Review on Ethno Medicinal Plants for Joint Diseases from Assam, India, International Journal of Pharmaceutical Science and Research, 2017; 2: 39-40.
26. Rauf A. Ali., Arshad and Ahmad M. A. A Study of Analgesic and Anti-Inflammatory Activity of Maida Lakri (steam bark of Litseaglutinosa (Lour) C.B. Rob) in Albino Rats, Hippocratic J. Unani Med., 2018; 13(1): 1-8.
27. Zakai H. I. U. Encyclopaedia of Unani Adwiyamufrada, Aijaz Publishing House, New Delhi, 2000; 101.