

Traditional medicine used by inhabitant of Rural areas in western Uttar Pradesh, India

Shazia Bi

Department of Botany, G.F. College, Shajahanpur - 242001 (India)
shazia.amu@gamil.com

Abstract

The paper deals with some important medicinal plants having the healing properties growing in the rural areas of Western Uttar Pradesh (Pilibhit, Bareilly, Badaun, Aligarh, Agra, Mathura, Bulandshahar). The ethno medicinal in formations were collected through questioners by interviewing local communities tribes and Vaid (herbalists) and Hakims. The therapeutic practitioners were treating the common diseases like cough cold, fever,

Toothache, Snake bite, wounds, diabetes, and the antitumor. In total 25 species belonging to 22 Families were recorded.

Key words : Medicinal plants, Analgesic, antipyretic, Western Uttar Pradesh.

Drugs which are in use presently for the management of pain and inflammatory conditions are either narcotics (e.g. opioids) or non-narcotics (e.g. salicylates) and corticosteroids (e.g. hydrocortisone). All of these drugs present well known side and toxic effects. Moreover synthetic drugs are very expensive to develop since, for the successful introduction of a new product approximately 3000-4000 compounds are to be synthesized, screened and tested whose cost of development ranges from 100 to 500 INR. Analgesic herbs reduce or eliminate pain; some herbs are strong pain relievers, often working best against pains of specific cause. The lack of potent analgesic and anti-inflammatory drugs now actually in use prompted the present study, in which Indian

medicinal herbs for their reported biological activities in indigenous system of medicine. For the preparation of the manuscript relevant literature¹⁻³⁰ has been consulted.

The annual average rainfall of the Western Uttar Pradesh is 1025 mm and the soil is fertile alluvial and sandy to clayey loamy in general. Here my studies, these districts Pilibhit, Breilly, Badaun, Aligarh, Agra, Mathura, Bulandshahar regions were selected for the survey. The herbal plants of this region in different habitats such as forest land, orchard lands, crop lands, agricultural land, near the road side, near the house, Factories or buildings, From anywhere of herbs were located and identified. During the survey work,

local as well as regional names of the medicinal plants were also recorded side-by-side, discussing with the local peoples, particularly belonging to rural areas.

Important healing herbs of Districts of different parts of Western Uttar Pradesh and their utilizations are described below :

1. *Adhatoda vasica* Nees

Family : Acanthaceae

Common Name : Adhatoda, *Arusa*

Part used : Whole Plant

Habitat Found in north indian plains and in forests of Upper Gangatic plain, M.P. and Rajasthan.

Product offered : Leaves and Roots

Utilization :

The leaf juice is given in diarrhoea and dysentery. Fresh juice of the leaves mixed with ginger and honey is used in chest diseases. Powder of the leaves is also given in chronic bronchitis and asthma. Poulitice of the leaves is applied over fresh wounds, rheumatic joints and inflammatory swelling. A warm decoction of leaves is used for scabies and other skin diseases. The root is expectorant is used in the disease of respiratory system, diphtheria and gonorrhoea.

2. *Abutilon indicum* (L.) Sweet :

Family : Malvaceae

Common Name : Abutilon, Indian Mallow

Part Used : Whole Plant

Habitat : Present in sub-himalayan tract and hills upto 1,200 m and in hotter parts of india.

Product offered : Wholeplant

Utilization : It is sweet, cooling, digestive, laxative, expectorant, diuretic, astringent, analgesic, anti-inflammatory, anthelmintic, demulcent and aphrodisiac. It is useful in gout, tuberculosis, bleeding disorders, and worms. Decoction used in toothache and tender gums. Demulcents of leaves are locally applied to boils and ulcers. Roots are prescribed in fever, chest affection and urethrities.

3. *Argemone mexicana* L.

Family : Papaveraceae

Common Name : Bhatkataya or Pili katile.

Part Used : Whole plant

Habitat : is a common weed distributed throughout tropical and sub-tropical india

Product offered : Roots

Utilization:

The juice is diuretic and alternative, it is given in dropsy, jaundice, skin diseases and with the combination of *Aristolochia* sps. Juice in syphilis and gonorrhoea. The juice is applied to the blisters, rheumatic pains, excoriations, ulcers, scabies, herpatic eruptions. The root is alterative and etimulant; its decoction is given in gonorrhoea, blennorrhoea, gleet, vascular calculus and skin diseases. The root paste is applied over boils. The seeds are narcotic, stomachic, smetic, expectorant, nauseant, cathartic and demolcent. They are given in cough, pulmonary diseases, asthma and whooping cough.

4. *Aconitum heterophyllum* Wall. ex Royle

Common Name : Aconites, Indian Atees.

Part Used : Underground stem and roots.

Habitat : Present in alpine and sub-alpine region of Himalayan region at altitudes between 1,800 - 4,500 m.

Product offered : Roots

Use

The dried root is analgesic, anti-inflammatory, antipyretic, antiperiodic, aphrodisiac, astringent, cholagogue, febrifuge and tonic. It is used in the treatment of liver disorders, dyspepsia, diarrhoea, indigestion, nausea, vomiting, throat pain, anorexia, piles and coughs. Its useful in hiccup and bad breath. It is regarded as a valuable tonic and digestive. Also used in the treatment of rheumatism, intermittent fevers and acute inflammatory infections.

5. *Asteracantha longifolia* (L.) Nees

Syn : *Hygrophila auriculata* (K. Schum)

Family : Acanthaceae

Common Name : Kulikhara, Kokilaksah, Long Leaves Barleria

Part Used : Roots, Leaves, Seeds

Habitat : In India it is common in tropical and sub-tropical regions.

Product offered : Fruits

Utilization :

Roots are sweet, sour, bitter, refrigerant, diuretic, anti-inflammatory, analgesic, haemopoietic, hepatoprotective and tonic. It is useful in inflammations, hyperdipsia, strangury, jaundice and vesical calculi. It is also used in

flatulence and dysentery. Leaves are haemopoietic, hepatoprotective, anti-inflammatory, antioxidant, analgesic, antidiabetic, stomachic, ophthalmic, diuretic and liver tonic. It is used in hepatic obstruction, jaundice, arthritis, rheumatism and diseases of urinogenital tract. It is useful in flatulence and other stomach related diseases. It is useful in anemia and for treating blood diseases. It is used to lower the blood sugar level. Seeds are gelatinous, febrifuge, rejuvenating and nervine tonic. It is used in burning sensation, fever and headaches. It is also used in diarrhoea and dysentery. A paste of the seeds mixed with buttermilk or whey, is given for diarrhoea. A decoction of the roots is used as a diuretic and to treat rheumatism, gonorrhoea, and other diseases of the genito-urinary tract, jaundice and anasarca.

6. *Atropa belladonna* L.

Family : Solanaceae

Common Name : Belladonna

Part Used : Root, leaves, tops.

Habitat : Widely distributed over Central and Southern Europe, South-west Asia and Algeria; cultivated in England, France and North America.

Product offered : Whole plant

Use:

Abnormal menstrual periods, acute infections, acute inflammation, anesthetic, antispasmodic, anxiety, arthritis, asthma, bedwetting, bowel disorders, chicken pox, colds, colitis, conjunctivitis (inflamed eyes), dental conditions, diarrhea, diuretic (use as a "water pill"), diverticulitis, earache, encephalitis

(inflammation of the brain), eye disorders (dilation of the pupils), fever, flu, glaucoma, gout, hay fever, hemorrhoids, hyperkinesia (excessive motor function), inflammation, kidney stones, measles, motion sickness, mumps, muscle and joint pain, muscle spasms (excessive unintentional muscle movements), nausea and vomiting during pregnancy, organophosphate poisoning, pain from nerve disorders, Parkinson's disease, pancreatitis, peritonitis, rash, scarlet fever, sciatica (back and leg pain), sedative, sore throat, stomach ulcers, teething, toothache, ulcerative colitis, urinary tract disorders (difficulty passing urine), warts, whooping cough.

7. *Aegle marmelos* (L.) Correa

Family : Rutaceae

Common Name : Bel

Part Used : Bark, Leaves.

Habitat : Throughout india, growing abundantly immediately after rains.

Product offered : Leaves

Utilization:

Juice of the bark is given with a little cumin (*Cuminum cyminum*) in milk as a remedy for poverty of the seminal fluid. Fresh leaves juice given with honey as a mild laxative in fever and asthma; mixed with *Solanum nigrum* is used in constipation and jaundice. The unripe or half ripe fruit is astringent, stomachic and digestive. It is best given in sub acute or chronic cases of diarrhoea, dysentery and irritation of the alimentary canal. A sharbat of the ripe fruit is given for chronic constipation and dyspepsia.

8. *Cassia occidentalis* (L.) Link

Family : Fabaceae (leguminaceae)

Common Name : Coffee Senna, Negro Coffee, Coffee Weed, Stinking Weed, Foetid Cassia

Part Used : Roots, Leaves, Seeds

Habitat : Throughout india, growing abundantly immediately after rains.

Product offered : Seeds

Utilization :

The plant is bitter, purgative, laxative, anti-inflammatory, expectorant, hepatoprotective, anti-malarial, analgesic, vermifuge and febrifuge. It mainly used to detoxify liver, use to cure internal bacterial and fungal disorders, to kill parasites and virUtilization, enhances immunity, and promotes perspiration. It is also helpful in cough, convulsions, reduces blood pressure, reduces spasms and as cardiogenic. Seeds are brewed into a coffee-like beverage for asthma, and a flower infusion is used for bronchitis. Leaves are used in the treatment of gonorrhoea, fevers, urinary tract disorders and edema.

9. *Cinnamomum camphora* (L.) J. Presl

Family : Lauraceae

Common Name : Camphor Tree, Gum Camphor, Camphor Laurel, French Camphor, Howood

Part Used : Roots, Wood

Habitat : Cultivated in india as an ornamental tree.

Product offered : Wood

Utilization :

Bark is anti-bacterial, anti-fungal, analgesic, analeptic, anthelmintic, antispasmodic, aromatic, aphrodisiac, carminative, diaphoretic, sedative, stimulant, narcotic and tonic. It is used as nervine depressant in case of hysteria, epilepsy, chorea and convulsions. It acts as stimulant for cardiac, circulation and respiration. It is useful in measles, typhoid, whooping cough, asthma, and hiccup. It is recommended in case of cough, cold, toothache and liver disorders.

Camphor oil is antihelmintic, antirheumatic, antispasmodic, cardiogenic and sedative. It is used for treating joints and muscle pains, cold sores and skin diseases. Camphor oil is best used for sedating nervous types particularly when associated with depression. Also used as an aromatherapy diffuser or vaporizer.

10. *Cissampelos pareira* L.

Family : Menispermaceae

Common Name : Velvet Leaf, Abuta, Pereira Root, Barbasco.

Part used : Whole Vine, Seed, Bark, Leaf, Root.

Habitat : Found in tropical region of India.

Product offered : Bark

Utilization :

Velvet leaf or Abuta is antibacterial, anti-inflammatory, antihistamine, antioxidant, antispasmodic, diuretic, hypotensive, muscle relaxant, uterine relaxant, antiseptic, aphrodisiac, analgesic, antihemorrhagic, cardiogenic, diaphoretic, expectorant, febrifuge, hepatopro-

tective stimulant and tonic.

It is known as Midwife's herb and is mainly used in women's ailments. It is used for menstrual problems, hormonal imbalance, ease childbirth, postpartum pain, prevent threatened miscarriage, and control uterine hemorrhages, hormonal acne and premenstrual syndrome. It is used for heart problems, kidney stones, kidney infections and pains, asthma, arthritis, muscle cramps and stomach pains.

It is also used to kill bacteria, prevents convulsions, ulcers, indigestion, skin irritations, cough, fever, intestinal worms, wounds and in snake bite. It is used against poisonous snake bites and is very effective in skin related ailments.

11. *Cleome gynandra* L.

Family : Capparaceae

Common Name : Hurrhur.

Part used : Seeds, Leaf.

Habitat : Found in upper Gangaic region of India.

Product offered : Seeds.

Utilization :

The seeds and leaves of the plant are administered as decoction in typhus fever. Leaves are applied to the boils to prevent the puss formation.

12. *Cocculus hirsutus* (L.) W. Theob.

Family : Menispermaceae

Common Name : Cherenti

Part used : Bark, Leaf, Root.

Habitat : Found in upper Gangetic region of india.

Product offered : Root

Utilization :

The juice of the leaves mixed with water and sugar and are taken internally as a cure for gonorrhoea. Decoction of root with goat milk flavoured with long papper is administered in rheumatic and old veneral pains, and is considered heating, laxative and sudorific.

13. *Foeniculum vulgare* Mill

Family : Apiaceae

Common Name : Saonf

Part used : Leaf, Seeds.

Habitat : Found in upper Gangetic region of india.

Product offered : Seeds

Utilization :

Leaves are diuretic, stimulant, digestive, appetizing, lactagogue, they are usefull in cough, colic and thirst. Seeds are anthelmintic, carminative, lactagogue, it is given in eye diseases, burning senation, fever, thirst, wounds, dysentery, spleen and kidneys etc.

14. *Inula racemosa* Hook f.

Family : Asteraceae (compositae)

Common Name : Inula

Part used : Stem, Root

Habitat : It grows in the hilly regions in the northwestern himalayas.

Product offered : Roots

Utilization :

The rhizome is sweet, bitter and acrid in taste with a neutral potency and act as antiseptic, anti-bacterial, anti-fungal, anti-inflammatory, analgesic and mild diuretic. It is used in the treatment of contagious fevers, angina pectoris, heart disease and ischemic heart disease. It is also used in cough, hiccup, bronchial asthma, indigestion, flatulence, inanorexia and in fever. Externally, the paste of its roots is used effectively, in dressing the wounds and ulcers as the herb possesses antiseptic property. Also used to boost the appetite.

15. *Madhuca indica* (J. Konig) J.F. Macbr.

Family : Sapotaceae

Common Name : Butter Tree

Part used : Bark, Heartwood, Flowers, Fruits, Seeds.

Habitat : Found in north indian plains and in forests of karnataka, kerala, m.p. and rajasthan.

Product offered : Seeds

Utilization :

Madhuca fat is satisfactory for production of washing soaps. Seed Oil is used as ointment, in rheumatism and to prevent cracks in the skin in winter. It is used for edible purposes culinary, hair oil, illumination, lighting, keeps body glossy and warm.

Madhuca cake can be used as cheap organic manure and possess insecticide property. Flower juice is used in the treatment of enlargement of axillary gland, neurotic disorder and taken with cow's milk as an aphrodisiac, in cough and bronchitis.

Seed paste is applied to cure muscle fatigue and relieve pain in the muscle and joints to improve the texture and vigor of skin. Bark decoction is used in curing bleeding gums and ulcers. Madhuca oil extracted from the seeds has laxative properties. It helps cure piles by relieving chronic constipation. The leaves of Madhuca are effective in the treatment of eczema.

16. *Mimusops elengi* L.

Family : Sapotaceae

Common Name : Bullet-wood Tree, Indian Medaller

Part used : Bark, Flowers, Fruits And Seeds.

Habitat : Throughout sub-tropical regions i.e. south india and andaman islands in india.

Product offered : Bark

Utilization :

The bark, flowers, fruits and seeds are astringent, cooling, anthelmintic, tonic, and febrifuge. It is mainly used in dental ailments like bleeding gums, pyorrhea, dental caries and loose teeth.

Extract of flowers used against heart diseases, leucorrhoea, menorrhagia and act as antiduretic in polyuria and antitoxin. The snuff made from the dried and powdered flowers used in a disease called Ahwa in which strong fever, headache and pain in the neck, shoulders and other parts of the body occurs.

Ripened fruits facilitates in burning urination. The ripe fruit pounded and mixed with water is given to promote delivery in childbirth. Powder of dried flowers is a brain tonic and useful as a snuff to relieve cephalalgia.

Decoction of bark is used to wash the wounds.

17. *Michelia champaca* (L.) Baill ex Pierre

Family : Magnoliaceae

Common Name : Champa

Part used : Roots, Leaves, Fruits, Seeds.

Habitat : Throughout india as an ornamental plant.

Product offered : Seeds

Utilization:

The flowers are diuretic and are used in gonorrhoea to relieve scalding, pounded with coconut oil they are applied as a plaster to inflamed parts. The root is said to be emmenagogue, and oil of the seed is rubbed into the abdomen to relieve flatulence.

18. *Oroxylum indicum* (L.) Benth.ex Kurz

Family : Bignoniaceae

Common Name : Indian Trumpet Tree

Part Used : Roots, Leaves, Fruits, Seeds.

Habitat : Throughout india in deciduous forests and in moist areas.

Product offered : Bark

Utilization :

The roots are sweet, astringent, bitter, acrid, refrigerant, expectorant, digestive, carminative, febrifuge, diuretic, antimicrobial, antifungal, anti-inflammatory and tonic. They are useful for vata and kapha, dropsy, flatulence, colic, diarrhea and dysentery.

Stem bark paste is applied for the cure of scabies and to treat arthritis.

Leaf decoction is given in treating stomachache, ulcers, rheumatism pain and enlarged spleen. Mature fruits are useful in

treating cough, bronchitis, piles, jaundice dyspepsia, smallpox, colic, leucoderma, pharngodymia, cardiac disorders, gastropathy, hemorrhoids and cholera. The decoction of the roots is commonly used for arthritis. Used externally as a paste of its skin of roots, it dries up the discharges and promotes the wound healing.

19. *Oligomeris linifolia* (Vahl) J.F. Macbr.

Family : Resedaceae

Common Name : Lineleaf or Whitepuff

Part used : Whole plant

Habitat : Throughout india in deciduous forests and in moist areas.

Product offered : Whole plant

Utilization :

Plant useful in treating various types of diseases and in lowering blood glucose, especially in type 2 diabetes levels. The herb can be used to treat colds, fevers, parasitic infestations on the body and inflammation of joints and headaches. Its value in the treatment of fevers, dysentary and tooth problems. It works as a great mosquito repellent to prevent malaria and dengue fever.

20. *Parmelia perlatum* (Huds) M. Choisy

Family : Parmeliaceae

Common Name : Stone Flower, Lichen

Part Used : Dried Lichen

Habitat : Mainly found in himachal pradesh and west bengal.

Product offered : Bark, Lichen

Utilization :

Stone flower is used as food and medicine. It contains no fat, carbohydrates and protein of 1-5% are present. It is eaten as soup and in salads. It is kapha and pitta suppressant. It is a good pain reliever and also promotes early healing of wounds due to its bitter taste. It helps in treating the skin related problem due to its cold potency. It acts as expectorant, antibiotic and astringent. It helps in avoiding the calculi and it helps in maintaining the normal body temperature. It is also used as anti-fungal and anti-viral agent. It is helpful in relieving from pain when applied on head. It also helps in itching and skin related problems. It helps in reducing any kind of inflammation in the body. It shows antibacterial activity and is fairly effective against Protozoans. Its decoction is given for laryngitis. It helps against boldness, period aches, worms and lice.

21. *Pinus roxburghii* Sarg.

Family : Pinaceae

Common Name : Chir Pine, Three Leaved Pine, Himalayan Long Leaved Pine.

Part used : Wood, Oleoresin And Oil

Habitat : Found in himalayan region at 450-2,200 m elevation, from kashmir to bhutan.

Product offered : Leaves, Oil, Gum Resins

Utilization :

The wood is acrid, bitter, sweet, thermogenic, emollient, aromatic, antiseptic, deodorant, haemostatic, stimulant, anthelmintic, digestive, liver tonic, diaphoretic and diuretic. It is useful in eye, ear and pharynx diseases, foul ulcers, haemorrhages, haemoptysis, worm infection, flatulence, liver diseases, bronchitis, inflammations, skin diseases, pruritus and

giddiness. Oleoresin is acrid, bitter, thermogenic, expectorant, anodyne, anti-inflammatory, purgative, rubefacient, vermifuge and demulcent. It is useful in cough, cold, asthma, chronic bronchitis, inflammations, liver and spleen diseases, kidney and bladder infections, gonorrhoea, scurvy, epilepsy, haemorrhoids and tuberculosis.

Oil obtained is utilized in rheumatic problems, arthritis and neuralgia. Oil is also an ingredient in many ointments, and lotions for treating aches and pains.

22. *Raphanus sativus* L.

Family : Brassicaceae

Common Name: Mooli

Part used : Whole plant

Habitat : Found in himalayan region at 450-2,200 m elevation, from kashmir to bhutan.

Product offered : Root

Utilization :

Juice of leaves increase the flow of urine and promotes bowel movements. Root is used for piles and stomach pains. Juice used to expel wind from the bowels. Poultice of roots used for burns, scalds, or fetid smelling feet. Decoction of root used for fevers. Seeds promote the flow of urine, bowel movements, and menstruation. The roots stimulate the appetite and digestion, having a tonic and laxative effect upon the intestines and indirectly stimulating the flow of bile.

23. *Sida cordifolia* L.

Family : Malvaceae

Common Name : Bala, Country Mallow

Part used : Whole Plant

Habitat : It is a common weed distributed throughout tropical and sub-tropical india and ceylon in waste places and jungles upto an altitude of 1050 m.

Product offered : Wholeplant

Utilization :

The plant is aphrodisiac, analgesic, anti-inflammatory and tonic in nature. It effects on central nervous system and provides relief from anxiety. It is used to reduce the body weight. It lowers the blood pressure and improves cardiac irregularity. It is useful in fevers, fits, ophthalmia, rheumatism, leucorrhoea, micturition, gonorrhoea, colic, nervous disorders and general debility. The root juice is used for the healing of wound. Whole plant juice is used in spermatorrhoea. Plant bark is effective in curing facial paralysis and sciatica. It is also used to improve sexual strength. The oils are used topically to the sore muscles, sore joints in arthritis and rheumatism, in sciatica and neuritis of legs.

24. *Tinospora cordifolia* (Thunb.) Miers

Family : Menispermaceae

Common Name : Gurch

Part used : Whole Plant

Habitat : It is a common weed distributed throughout tropical and sub-tropical india and ceylon in waste places and jungles upto an altitude of 1050 m.

Product offered : Wholeplant

Utilization:

The fresh plant is considered more

efficacious than the dry. It is antiperiodic, alterative, hepatic stimulant and diuretic; its watery extract, known as Indian Quinine is very effective in ordinary fever due to cold or indigestion. The plant is commonly used in rheumatism, urinary diseases, dyspepsia, general debility, syphilis, skin diseases, jaundice and liver complaints. The juice of the fresh plant is administered with long pepper and honey in gonorrhoea, cough and chronic fever.

25. *Tamarix dioica* Roxb. ex Roth

Family : Tamaricaceae

Common Name : Jhau

Part used : Bark, Leaves.

Habitat : It is a shrub common on the dry bank of the river in India.

Product offered : Leaves

Utilization:

Dried leaves powder mixed with Gur (solidified sugarcane juice) is used in diarrhoea and dysentery. Leaves mixed with *Ficus carpica* and fermented sugarcane juice, prepared the paste. This paste is applied over the tumour for three hours. The bark of the twig is astringent and laxative.

During this study, a total numbers of 25 species belonging to 22 Families were recorded. plant species were identified and recorded in the Barreilly and adjoining districts such as, Shahajanpur Plilibhit and Herdoi . which is clearly enlisted in listed below. Which describes botanical names, english names, regional names, plant parts used and families of all identified medicinal plants of this region.

The various parts of the plants have been used as a source of medicines by man from ancient to modern era are also having miraculolous values of analgesics properties. Plant species belonging to different genera and families are used by most of the local people for the treatment of common diseases.

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