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MEDICINAL PLANTS IN A.M.A.L. COLLEGE, ANAKAPALLE: A PERSPECTIVE STUDY

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ABSTRACT

Since the dawn of civilization of mankind solely depended on herbs to cure almost all ailments like fevers, injuries, bites by snakes and wild beasts etc. through the utilization of leaf pastes, root decoctions and bark and seed pastes. Natural products had long been a pioneer to many synthetic analogues of therapeutically important drugs. In recent years the world is switching over the herbal products as they are more available, less harmful without side effects, pollution free and cost effective. A part from the reliance on therapeutic values described in ancient texts and current interpretations by specialists in the field of Ayurveda Laboratories in several countries have initiated analytical studies to scientifically determine the efficacy of better known medicinal plants in the treatment of diseases. Hence, the present study is focused to identify and know the medicinal plants and their properties, whatever the plants available in A.M.A.L.College campus with the help of authentic reference books in medical botany like Useful Plants of India, Indian Medicinal Plants and Medicinal Plants in Andhra Pradesh.

Keywords: Civilization, Decoctions, Analogues, Therapeutic, Interpretations, Medicinal, Properties and Botany.

Introduction

The term 'medicinal plant' include various types of plants used in herbalism or herbalogy or herbal medicine. Now a days, herb refers to any part of the plant like fruit, seed, sterm, bark, flower, leaf, stigma or a root. These medicinal plants are also used as food, flavonoid, medicine or perfume and so on. The infectious diseases have led to increased emphasis on the use of plant materials as a source of medicines for a wide variety of human ailments. Among ancient civilizations, India has been known to be rich repository of medicinal plants. Treatment with medicinal plants is considered very safe as there is no side effects. Recipes for the treatment of common ailments such as diarrhoea, constipation, hyper tension, low sperm count, dysentery and weak penile erection, piles, menstrual disorder, bronchial asthma and fevers are given by the traditional medicine practitioners very effectively.

ENNUMERATION OF SPECIES AND THEIR USESES

[1]. Abutilon indicum (Linn.) Sweet in Hort. (Thuttura benda) Malvaceae:

The roots and leaves used for rheumatism and cooling agent. Seeds are laxative and demulscent. The bark is astringent, diuretic and gonorrhea.

[2]. Abrus precatorius (Linn.) (Gurivinja) Fabaceae:

The roots and leaves are astringent, emetic, diuretic and also useful in cough, inflammation. The seeds are purgative, abortifacient, aphrodisiac and also useful in skin diseases, wounds and fever.

[3]. Acalypha indica Linn. (muripindi/kuppinta) Euphorbiaceae:

The plant is bitter, expectorant, purgative, gastrointestinal and diuretic. The roots and leaves used to treat skin diseases, constipation, bronchitis and ulcers.

[4]. Achyranthes aspera Linn. (uthareni) Amaranthaceae:

The plant is bitter, expectorant, carminative, diuretic and anti-inflammatory. It is useful in bronchitis flatulence, vomiting, leprosy, skin diseases, helminthiasis and stomach disorders.

[5]. Acorus calamus Linn. (vasa) Araceae:

The rhizome is acrid, aromatic, intellect promoting, laxative, stomachic, anthelmintic, expectorant, aphrodisiac, anti-inflammatory, nervine tonic, sedative and insecticidal. It is useful in hoarseness, amenorrhea, cough, bronchitis, epilepsy, depression, dysentery and intermittent fevers.

[6]. Adahtoda vasica Nees. (Addasaram) Acanthaceae:

Leaves and roots are useful in cough and bronchitis.

[7]. Adenanthera pavonica Linn. (Bandigurivinja) Mimosaceae:

The leaves and bark astringent, aphrodisiac and ulcers. The seeds are sweet, cooling aphrodisiac and febrifuge. Heart wood is useful in dysentery and hemorrhages.

[8]. Aerva lanata (Linn.) Juss. ex Schultes (Pindikura) Amaranthaceae:

The plant is bitter, vermifuge, diuretic and emollient. It is useful to teat boils, cephalalgia, cough and lithiasis in kidneys.

[9]. Albizia lebbeck (Linn.) Benth (Dirisena) Mimosaceae:

The bark is aphrodisiac, anti-inflammatory, cephalic and ophthalmic. It is useful in ophthalmopathy, nyctalopia skin eruptions, leprosy, leucoderma, wounds and diarrhea. The flowers are useful in chronic cough and bronchitis. The seeds are useful in skin diseases, seminal weakness and poisoning.

[10]. Allophyllus serratus (Roxb.) Kurz. (Eravalu) Sapindaceae:

The plant is astringent, bitter, anti-inflammatory, digestive and constipating. It is useful in bone fractures, dislocations, anorexia and diarrhea.

[11]. Aloe veera (Linn.) Burm. (Kalananda) Agavaceae:

The plant is bitter, cooling, anthelmintic, diuretic, stomachic, ophthalmic and alexeteric. The juice used in amenorrhea, burns, skin diseases. It is used for ulcers and purulent ophthalmic.

[12]. Alternanthera sessilis (Linn.) R.Br. ex DC. (Ponnagantikura) Amaranthaceae:

The plant is astringent, cooling, depurative, digestive, galacgtagogue and febrifuge. It is useful for diarrhea, leprosy, skin diseases and fever.

[13]. Ancardium occidentale Linn. (Jeedimamidi) Anacardiaceae:

Roots used as a purgative. Bark is rich in tannin (gum) and used for astringent, leprosy, ulcers, and ring worm. It us used for preventing hair loss and promote the hair growth.

[14]. Andropraphis paniculata (Burm.f) Wall. Ex Nees. (Nelavemu) Acanthaceae:

The plant is bitter, acrid, laxative, anti-pyretic, anti-periodic, anti-inflammatory, expectorant, digestive and stomachic. It is useful in chronic fever, intermittent fevers, cough, bronchitis, skin diseases, intestinal worms and diabetes.

[15]. Annona squamosa Linn. (Sitaaphalamu) Annonaceae:

Roots are powerful purgative and useful in mental depression and spinal disorders. Leaves are insecticidal and proctoptosis in children. The seeds are abortifacient and destroying lice in the hair.

[16]. Argemone mexicana Linn. (Balarakkisa) Papaveraceae:

The plant is bitter, diuretic, purgative, anti inflammatory, expectorant, aphrodisiac, emetic and sedative. The roots are useful in guinea-worm infestation, skin diseases, flatulence and malarial fever. The latex is useful in dropsy, jaundice, skin diseases, leprosy and rheumatalgia.

[17]. Aristolochia indica Linn. (Eswara Veru) Aristolochiaceae:

The roots are bitter, astringent, purgative, digestive, anthelmintic, stomachic, cardiotonic, antiperiodic and tonic. They are useful in ulcers, arthralgia, leprosy, skin diseases, intestinal worms, crdiac debility, fever, abdominal disorders in children and all types of poisonous bites and stings.

[18]. Aspargus racemosus Willd. (Pilliteegala/Satavari) Liliaceae:

The roots are bitter, cooling, nerve tonic, constipating, ophthalmic, aphrodisiac, rejuvenating, stomachic and antispasmodic. Tuberous roots useful in nervous discovers, diarrhea, dysentery, inflammations, throat infections, tuberculosis, gonorrhea, leprosy, epilepsy and hypertension.

[19]. Azadirachta indica A.Juss. (Vepa) Meliaceae:

The bark is bitter, astringent, antiperiodic, insecticidal, liver tonic, expectorant, urinary astringent, anthelmintic, hyperdipsia, leprosy, skin diseases, eczema, and intestinal worms.

The leaves are bitter, antisepeic, appetizer, skin diseases, boils and intermittent fevers especially measles.

[20]. Bauhinia variegata Linn. (Devakanchanam) Caesalpinaceae:

The roots and bark are astringent, constipating, anthelmintic, anti-inflammatoryaand diarrhea. It is also useful in diarrhea, dysentery, intestinal worms, cough, menorrhea and diabetes.

[21]. Boerhaavia diffusa Linn. (Atukamamidi) Nyctaginaceae:

The plant is bitter, astringent, cooling, diuretic, aphrodisiac, cardiac stimulant, emetic, expectorant, laxative and tonic. It is useful in all types of inflammations, leucorrhoea, jaundice, constipation, cough and bronchitis.

[22]. Borassus flabellifer Linn. (Thadi chettu) Arecaceae:

The roots are diuretic, stimulant and antiphlogistic. The juice of the leaf stalks and young roots are good for gastric catarrh. The ash obtained by inflorescence is good antacid and ant periodic. The fruits are sweet, cooling, laxative, stomachic aphrodisiac, flatulence, constipation and hemorrhages.

[23]. Calophyllum inophyllum Linn. (Ponnavittulu) Clusiaceae:

The bank is astringent, diuretics, emetic, purgative and emollient. It is useful to skin diseases, internal hemorrhages and the leaves are used in migraine, vertigo and ophthalmic. The seed oil is useful in leprosy, gonorrhea and scabies.

[24]. Calotropis gigantea (Linn.) R.Br.(Jilledu) Asclepiadaceae:

The dried whole plant is a good tonic, expectorant and anthelmintic. The dried root bark is a substitute for ipecacuna. The root bank is anthelmintic, laxative and coetaneous diseases. The powdered root promotes gastric secretions, asthma and bronchitis. The leaves are useful for treatment of paralysis, arthralgia and intermittent fevers.

[25]. Canthium parviflorum Lamk. (Balusu) Rubiaceae:

The roots and leaves are astringent diuretic and anthelmintic. They are useful in fever, leucorrhoea, intestinal worms and general debility.

[26]. Carica papaya Linn. (Boppai) Caricaceae:

The unripe fruits are bitter, stomachic, appetizer, carminative, antifungal and diuretic. The latex is anthelmintic, laxative and digestive. It is useful in round worm infestations, amenorrhoea, skin diseases and leprosy.

[27]. Cassia auriculata Linn. (Nelatangedu) Caesalpinaceae:

The roots are astringent, alexerative and are useful in skin diseases, leprosy, asthma and urethrorrhoea. The bark decoction used as enemas and gargales. The leaves are recommended for lepros, skin diseases and ulcers. The flowers are used in diabetes, nocturnal emissions and seeds are aphrodisiac, diabetes, ophthalmic, diarrhea and abdominal disorders.

[28]. Cassia fistula Linn. (Rela) Caesalpinaceae:

The roots are cooling, purgative and useful in skim diseases, syphilis and the bark is laxative anthelmintic, diuretic, leprosy, ring worms, diabetes and cardiopathy. The leaves are anti periodic, intermittent fevers. The flowers are bitter, emollient, expectorant and skin diseases.

[29]. Cassia occidentalis Linn. (Kasinda) Caesalpinaceae:

The plant is better, purgative, expectorant, cough, bronchitis, fever and epilepsy. The roots are bitter, anti-inflammatory, digestive, diabetes and Scorpion sting. The leaves are useful in leprosy. The seeds are purgative, stomachic, febrifuge, cough and bronchitis.

[30]. Cassia tora Linn. (Tagirisa) Caesalpinaceae:

The leaves and seeds are acrid, laxative, depurative, anti periodic, liver tonic, ophthalmic, expectorant cardio tonic and useful to ring worms, leprosy and skin diseases.

[31]. Catharanthus roseus (Linn.) G.Don. (Billa Ganmeru) Apocyanaceae:

The plant particularly the roots bark contains alkaloids which have hypotensive, sedative and tranquilising, properties. It is used as a folk remedy for diabetes. The root is toxic, bitter, stomachic and tonic. The Vincristine alkaloid is useful in some kinds of leukaemia.

[32]. Ceiba pentandra (Linn.) Gaertn. (Tella buruga) Bombacaceae:

The roots are diuretic, aphrodisiac, antipyretic and useful for gonorrhea, intermittent fevers. The bank is useful in abdominal disorders, constipation and flatulence. The leaves are used an emollient and the decoction of the flowers on a laxative.

[33]. *Cimmamomum zeylanieum* Bl. (Dalchina Chekka) Lauraceae:

The bark is acrid, sweet, aromatic, astringent, aphrodisiac, deodorant, expectorant and carminative. It is useful in bronchitis, cephalalgia, cardiac diseases, nausea, flatulence and fever. Cinnamon oil is stomachic and used in anorexia and tubercular ulcers.

[34]. Citrus limon (Linn.) Burm.f. (Nimma) Rutaceae:

The fruits are sour, digestive, laxative, anti scorbutic and mosquito repellent, It is also useful for constipation, scabies, vomiting, cough and bronchitis.

[35]. Cissus quadrangularis Linn. (Nalleru) Vitaceae:

The plant is bitter, laxative, carminative, digestive, stomachic, ophthalmic and useful for skin diseases, leprosy, epilepsy, bone fractures, swellings and tumors. Powdered roots as well I as the stems paste are very specific for bone fractures.

[36]. Cleome viscosa Linn. (Kukka vaminta) Capparaceae:

The plant is acrid, anthelmintic and soporific. The roots are stimulant, ant scorbutic and vermifuge. The leaf juice is digestive and is a good for nostalgia. The seeds are useful in fever, diarrhea, worm infestations, cardiac disorders and dyspepsia.

[37]. *Clitoria ternatea* Linn. (Shankupushpam) **Fabaceae**:

The roots are bitter, ophthalmic, laxative, intellect promoting and useful in leprosy, leucoderma elephantiasis, inflammation, bronchitis. The leaves and seeds used for visceralgia and nostalgia.

[38]. Cocas nucifera Linn. (Kobbari) Arecaceae:

The roots are diuretic. The juice of the young spadix in sweet intoxicating and used for dysentery, leprosy and general debility. The kernel is sweet, appetizer, aphrodisiac and laxative. The water is sweet and useful in dysentery, dehydration and general debility.

[39]. Cyperus rotundus Linn. (Tunga) Cyperaceae:

The tubers are bitter, acrid, astringent, intellect promoting, digestive, stomachic and useful in hyperpiesia inflammations, skin diseases, flatulence, diarrhea and renal disorders.

[40]. Dalbergia sissoo Roxb. (Sissam) Fabaceae:

The roots are astringent and useful in diarrhea and dysentery. The leaves are bitter, ophthalmic, digestive, anthelmintic and used in gonorrhea, menorrhagia and burning sensation. The bark and heart wood anti-inflammatory, expectorant aphrodisiac and used for skin diseases, leprosy, scabies, scalding of urine, syphilis, hiccough and bronchitis.

[41]. Datura metal Linn. (Ummetha) Solanaceae:

The plant is narcotic, antispasmodic, emetic and used for asthma, cough, fever, ulcers and skin diseases. The juice of the leaves used for epilepsy, cephalalgia and dandruff. The seeds are aphrodisiac narcotic and used in skin diseases and food for dandruff and lice.

[42]. Dendrophthoe falcate (Linn.f) Etting. (Badanika) Loranthaceae:

The plant is cooling, bitter, aphrodisiac and diuretic and useful in pulmonary tuberculosis, asthma, menstrual disorders, wonder ulcers, renal and visceral disorders.

[43]. *Desmodium gangeticum* (Linn.) DC.(Githanaram) Fabaceae:

The roots are sweet, thermogenic, nerving tonic, diuretic, cardio tonic, anti-inflammatory, expectorant and useful in anorexia, dysentery, fever, cough, asthma, bronchitis cardiopathy and debility.

[44]. Desmodium triflorum (Linn.) DC. (Mumtamandu) Fabaceae:

The plants is acrid, sweet, cooling, expectorant and galactogogue and used in cough, bronchitis, wounds, dysentery, flatulence and burning sensation.

[45]. *Eclipta prostrata* (Linn.) Linn. (Guntagalagara) Asteraceae:

The plant is bitter, anti-inflammatory, ophthalmic, digestive, diuretic, aphrodisiac and used in elephantiasis, gastropathy, cephalalgia. It is good for blackening and strengthening of the hair. The seeds are good for increasing sexual vigor.

[46]. Emilia sonchifohia (Linn.) DC. Asteraceae:

The plant is astringent, sweet, thermogenic, antipyretic, antiasthma tic and useful in gastropathy, diarrhea, ophthalmic, nyctalopia and cuts and wounds.

[47]. *Evolvulus alsinoides* (Linn.) Linn. (Vishnukaranthm) Convolvulaceae:

The plant is acrid, aphrodisiac, intellect promoting anthelmintic, expectorant and tonic. It is useful in bronchitis, internal haemorrhages, dyscentery, diarrhea, falling and graying of hair, intermittent fevers and general debility.

[48]. Ficus bengalensis Linn. (Marri.) Moraceae:

The parts of the plant are astringent, anti-inflammatory, ophthalmic antidiarrhoeal and tonic,. The bank is used for burning sensation, diabetes, ulcers, skin diseases, gonorrhea, leucorrhoea and hyperdiplsia. Leaves are good for leprosy and skin allergy,. The latex is useful in rheumatism, gonorrhea, inflammations, and cracks of the sole skin diseases.

[49]. Ficus hispida Linn.f. (Bodda chettu) Moraceae:

The bark is emetic, laxative. The fruits are astringent, antidysenteric, anti-inflammatory and galactogogue. They are useful in ulcers, leucoderma psoriasis, jaundice, intermittent fever and inflammations.

[50]. Ficus religiosa Linn. (Raavi) Moraceae:

The bank is cooling aphrodisiac and antibacterial activity. It is used in gonorrhea dysentery. Powdery paste of the bark is good for inflammatory swellings. Fruits are dried, pulverized and taken in water cures asthma. Seeds sedative and the latex is good for neuralgia.

[51]. Gloriosa superba Linn. (Adavinabhi) Liliaceae:

The rhizomes are bitter, intensely poisonous, abortificient, anthelmintic, purgative, expectorant and useful in ulcers, parasitic skin diseases, leprosy, helminthiasis, flatulence and intermittent fevers. In large doses it is highly poisonous and will cause vomiting.

[52]. Glycosmis arborea (Roxb.) DC. (Golugu) Rutaceae:

The plant is vermifuge, anti-inflammatory and expectorant. The roots are good for facial inflammations, rheumatism for eczema, skin diseases and the fruits are sweet and used in cough, bronchitis and piles.

[53]. *Gymnema sylvestre* (Retz.) R.Br.(Podapatri) Asclepiadaceae:

The plant is bitter, anti-inflammatory, laxative, cardio tonic, expectorant and uterine tonic. It is used in constipation, jaundice, renal and vescical calculi, asthma, bronchitis and amenorrhea. The fresh leaves when chewed the remarkable property of paralyzing the sense.

[54]. *Oldenlandia corymbosa* Linn. (Verrinelavemu) Rubiaceae:

The plant is bitter, pectoral, digestive, diuretic expectorant and lever tonic. It is used in fevers, depression, jaundice, flatulence, constipation leprosy and skin diseases.

[55]. Heliotropium indicum Linn. (Nagadanti) Boraginaceae:

The plant is thermogenic, emollient and diuretic. It is used in ulcers, wounds, stings of insects, rheumatism. The roots and leaves are useful in fever, ringworm, rheumatism, skin diseases and gonorrhea. The flowers in large doses abortificient and the seeds are stomachic.

[56]. Hemidesmus indicus (Linn.) R.Br. (Sugandhipala) Asclepiadaceae:

The roots are astringent, aromatic, aphrodisiac, appetizer, expectorant and tonic. They are useful in leucoderma, leprosy, skin diseases, asthma, bronchitis, epileptic fits, syphilis and arthralgia. The leaves are useful in vomiting, leucoderma and the stem is laxative and useful to treat inflammations.

[57]. Hibiscus rosa-sinensis Linn. (Mandara) Malvaceae:

The roots are sweetish acid taste, febrifuge and useful in venereal diseases, menorrhagia. The leaves emollient, depurative and used in skin diseases fever and increase the hair growth. The flowers aphrodisiac, brain tonic, urinary astringent and cardio tonic and useful in inflammations, epilepsy, urethrorrhea, menorrhagia, seminal weakness, skin diseases, leprosy and purities.

Conclusion

We cannot escape from nature because we are the part of nature. But our life style is now getting modern and we are moving away from nature. It leads to many health issues. As herbs are natural products they are free from side effects, they are comparatively safe. There is a need to promote them to save the lives of human being. Over the past few decades, there has been a tremendous increase in the use of herbal medicine, however, there is still a significant lack of research in this area.

References

- [1]. Gamble J.S. and Fisher, C.E.C., Flora of the Presidency of Madras (3 Vol.) London (Rep. ed. 1957).
- [2]. Hooker, J.D. et al. The Flora of British India, London (1872-97).
- [3]. Venkateswarlu. J. Murthy, P.V.B. and Rao, P.N., The Flora of Visakhapatnam, Andhra Pradesh, Academic of Sciences, Hyderabad (1972).
- [4]. Rao. R.S. and Sreeramulu, H.S., Flora of Srikakulam District, Andhra Pradesh, India, Hon.Sec., Indian Botanical Society, Meerut, (1986).
- [5]. The Wealth of India, A Dictionary of India Raw Material and Industrial Products, C.I.S.R., New Delhi, India (1956).
- [6]. Chopra, R.N. Nayer, S.L. and Chopra, I.C. Glossary of Indian Medical Plants, CSIR, New Delhi, India(1956).
- [7]. Ambasta, S.P. The Useful Plants of India,, CSIR, New Delhi,India (1986).
- [8]. Arya Vaidyasala, Indian Medicinal :Plants, Orient Longman Ltd., Chennai (1995).
- [9]. Rao. R.S. and Hemadri. K., Medicinal Plants in Andhra Pradesh, Telugu Akademi, Hyderabad, A.P.(2000).