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Introduction Of Medicinal Plants And Herbs

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Abstract The ethnobotany of the medicinal plants of Alamut region is important in understanding the cultures and traditions of Alamut people. This study documents 16 medicinal plant species, most commonly used by the indigenous people of Alamut region (Ghazvin Province), noerthwest, Iran. The botanical name, family name, vernacular name, part used, and the application of the plants have been provided in this paper. Alamut region was divided into different villages with with the aid of maps. We recorded traditional knowledge and use of medicinal plants from herbal practitioners and village seniors in Almout . The plants were gathered from different sites. The fully dried specimens were then mounted on herbarium sheets. We found 16 medicinal plants belonging to 11 families which were traditionally used in Alamut. Finally, we describe traditional usages by the native people in the Alamut region. The obtained results were compared with data on the herb's clinical effects. A set of voucher specimens were deposited to the Institute of Medicinal Plants Herbarium (IMPH)

Introduction of Medicinal Plants and Herbs

The term "medicinal plant" includes various types of plants used in herbalism ("herbology" or "herbal medicine"). It is the use of plants for medicinal purposes, and the study of such uses.

The word "herb" has been derived from the Latin word, "herba" and an old French word "herbe". Now a days, herb refers to any part of the plant like fruit, seed, stem, bark, flower, leaf, stigma or a root, as well as a non-woody plant. Earlier, the term "herb" was only appliedto non-woody plants, including those that come from trees and shrubs. These medicinal plantsare also used as food, flavonoid, medicine or perfume and also in certain spiritual activities.

Plants have been used for medicinal purposes long before prehistoric period. Ancient Unani manuscripts Egyptian papyrus and Chinese writings described the use of herbs. Evidence exists that Unani Hakims, Indian Vaids and European and Mediterranean cultures were using herbs for over 4000 years as medicine. Indigenous cultures such as Rome, Egypt, Iran, Africa and America used herbs in their healing rituals, while other developed traditional medical systems such as Unani, Ayurveda and Chinese Medicine in which herbal therapies were used systematically.

Traditional systems of medicine continue to be widely practised on many accounts. Population rise, inadequate supply of drugs, prohibitive cost of treatments, side effects of several synthetic drugs and development of resistance to currently used drugs for 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.

Importance of some herbs with their medicinal values:

Herbs such as black pepper, cinnamon, myrrh, aloe, sandalwood, ginseng, red clover, burdock,bayberry, and safflower are used to heal wounds, sores and boils.

Basil, Fennel, Chives, Cilantro, Apple Mint, Thyme, Golden Oregano, Variegated Lemon Balm, Rosemary, Variegated Sage are some important medicinal herbs and can be planted in kitchen garden. These herbs are easy to grow, look good, taste and smell amazing and many ofthem are magnets for bees and butterflies.

Many herbs are used as blood purifiers to alter or change a long-standing condition by eliminating the metabolic toxins. These are also known as 'blood cleansers'. Certain herbs improve the immunity of the person, thereby reducing conditions such as fever.

Some herbs are also having antibiotic properties. Turmeric is useful in inhibiting the growth of germs, harmful microbes and bacteria. Turmeric is widely used as a home remedy to heal cut and wounds.

To reduce fever and the production of heat caused by the condition, certain antipyretic herbs such as Chirayta, black pepper, sandal wood and safflower are recommended by traditional Indian medicine practitioners.

Sandalwood and Cinnamon are great astringents apart from being aromatic. Sandalwood is especially used in arresting the discharge of blood, mucus etc.

Purgative	Cascara bark, Senna leaf, Rhubarb
Bitter Tonic	Nux-vomica, Gentian, Picorhiza, Chirata, Kalmegh
Cardiotonic	Digitalis, Squill, Strophanthus
Tranquilizers	Rauwolfia Roots
Expectorant	Benzoin, Tolu Balsam, Vasaka
CNS action	Ergot, Belladonna, Stramonium, Ephedra, Physostigma

Some herbs are used to neutralize the acid produced by the stomach. Herbs such as marshmallow root and leaf. They serve as antacids. The healthy gastric acid needed for properdigestion is retained by such herbs.

Indian sages were known to have remedies from plants which act against poisons from animals and snake bites.

Herbs like Cardamom and Coriander are renowned for their appetizing qualities. Other aromatic herbs such as peppermint, cloves and turmeric add a pleasant aroma to the food, thereby increasing the taste of the meal.

Some herbs like aloe, sandalwood, turmeric, sheetrajhindi and kharekhasak are commonly used as antiseptic and are very high in their medicinal values.

Ginger and cloves are used in certain cough syrups. They are known for their expectorant property, which promotes the thinning and ejection of mucus from the lungs, trachea and bronchi. Eucalyptus, Cardamom, Wild cherry and cloves are also expectorants.

Herbs such as Chamomile, Calamus, Ajwain, Basil, Cardamom, Chrysanthemum, Coriander, Fennel, Peppermint and Spearmint, Cinnamon, Ginger and Turmeric are helpful in promoting good blood circulation. Therefore, they are used as cardiac stimulants.

Certain medicinal herbs have disinfectant property, which destroys disease causing germs. They also inhibit the growth of pathogenic microbes that cause communicable diseases.

Herbal medicine practitioners recommend calmative herbs, which provide a soothing effect to the body. They are often used as sedatives. Certain aromatic plants such as Aloe, Golden seal, Barberry and Chirayata are used as mild tonics.

The bitter taste of such plants reduces toxins in blood. They are helpful in destroying infectionas well Certain herbs are used as stimulants to increase the activity of a system or an organ, for example herbs like Cayenne (LalMirch, Myrrh, Camphor and Guggul).

A wide variety of herbs including Giloe, Golden seal, Aloe and Barberry are used as tonics. They can also be nutritive and rejuvenate a healthy as well as diseased individual.

Honey, turmeric, marshmallow and liquorice can effectively treat a fresh cut and wound. Theyare termed as vulnerary herbs. Frequently Used Traditional Plants with Specified Pharmacological Action is given in

Benefits of herbal medicine :

Herbal medicines (HM) include herbs, herbal materials, herbal preparations and finished herbal products that contain as active ingredients parts of plants, or other plant materials, or combinations and are used especially for the prevention and treatment of diseases. In contemporary times, HM remains a major component of the primary healthcare in many rural African and Asian communities. It also constitutes an integral part of the culture of many societies of the world. Many herbs and herbal recipes have a long traditional history of folk uses and claims of health benefits. Scientific research has shown that HMs contain complex chemical compounds that are responsible for the pharmacological activities, which corresponds to health benefits and/or toxicity they elicit. HMs have been used as prophylaxes for the passive maintenance of health as well as for radical treatment of varieties of mild to serious diseases.

Poly Herbal Formulation :

In contrast to the pharmaceutical drugs which often consist primarily of single chemical entity (pure compounds), HMs are typically made up of numerous compounds usually in the crude, unpurified state. Many finished herbal products are made from folk recipes often containing more than one herbal material as the active component. The polynomial constitution of most HMs may be the reason for many of their benefits.

The constituent polynomial ingredients of many HMs as indicated in many folk recipes are often important for the completeness of the product if desired effects are to be produced. The multicomponent ingredients may boost benefits by enhancing simultaneously certain important pharmacological activities such as absorption, distribution, metabolism and elimi
nation of bioactive components. Also, some constituents may

Reasons for the upsurge in the use of HM :

In recent times, the popularity and use of HMs have cut across geographical, gender, eco nomic and socio-cultural divisions. Indeed, HM is occupying a strategic position in the gen eral healthcare of

people worldwide. Some of the probable reasons adduced for this include:

Personal preferences for HM :

Perception of safety

Easy accessibility

Low cost

Efficacy of treatments

As the last resort

Future importance of Herbal Medicine:

It is estimated that there are about 350,000 species of existing plants (including seed plants, bryophytes, and ferns), among which 287,655 species have been identified as of 2004. Relatively small percentages (1 to 10%) of these are used as foods by both humans and other animal species. It is possible that even more are used for medicinal purposes. 30World Health Organization (WHO) has shown great interest in documenting the use of medicinal plants usedby tribes from different parts of the world. Many developing countries have intensified their efforts in documenting the ethno-medicinal data on medicinal plants. Research to find out scientific evidence for claims by tribal healers on Indian herbs has been intensified. Once these local ethno-medicinal preparations are scientifically evaluated and disseminated properly, people will be better informed regarding efficacious drug treatment and improved health status. The traditional knowledge system needs to be studied, documented, preserved and used for the benefit of humankind, before it is lost forever. This will require a holistic approach, and involvement and participation of local inhabitants. The Associated Chambers of Commerce and Industry of India (ASSOCHAM) has projected that the market size of herbal industry which is currently estimated at Rs. 7,500 crores (Rs. 75 billion) will double to levels at Rs.15,000 carore by 2015 since this industry would be growing at a compounded annual growth rate of over 20% hence forth. In a study brought out by ASSOCHAM on Herbal Industry and Global Market 2015, it is pointed out that India's rich resource of medicinal plants and traditional treasure of knowledge in this area, its share at present is considered very meager. A quick estimate of the potential reveals that India can generate raw stock of around Rs. 300 billion and easily achieve around Rs.150 billion value added products. Thus, India is hardly able to exploit less than 50% of its potential. Interestingly both raw materials (herbs) and herbal products have ready market globally.

History of Herbal Medicine:

Plants had been used for medicinal purposes long before recorded history. Ancient Chinese and Egyptian papyrus writings describe medicinal uses for plants as early as 3,000 BC. Indigenouscultures (such as African and Native American) used herbs in their healing rituals, while others developed traditional medical systems (such as Siddha, Ayurveda, Unani and TCM) in whichherbal therapies were used. The consumption of plant-based medicines and other botanicals in the West has increased manifold in recent years. About two centuries ago, our medicinal practices were largely dominated by plant-based medicines. However, the medicinal use of herbs went into a rapid decline in the West when more predictable synthetic drugs were made commonly available. In contrast, many developing nations continued to benefit from the rich knowledge of medical herbalism. For example, Siddha & Ayurveda medicines in India, KampoMedicine in Japan, traditional Chinese medicine (TCM), and Unani medicine in the Middle East and South Asia are still used by a large majority of people.

Plant Information:

GARLIC

Synonyms Allium, Lasan

Biological Source

Garlic is the ripe bulb of Allium sativum Linn., belonging to family Liliaceae.

Geographical Source

Garlic occurs in central Asia, southern Europe, and United States. It is widely cultivated in India.

Cultivation and Collection

The cultivation of Garlic is similar to that of onion. It is generally grown as an irrigated crop throughout the year. It can be grown under a wide range of climatic conditions but it succeedsbest in mild climates without extremes of heat and cold. It is grown on a wide variety of soils.It requires a rich well-drained clay loam to grow well. The land is well ploughed to a fine tilth, beds, and channels are made. Garlic is planted during October– November in plains and during February–March in the hills. The cloves are separated and pressed lightly into the soil. Garlic requires heavy manuring.

INHIBITORS OF NUCLEIC ACID SYNTHESIS

Inhibitors of RNA synthesis: Bind to DNA-dependent RNA polymerase and inhibit initiation of RNA synthesis. Rifampin, rifamycin, rifampicin (bactericidal)

Inhibitors of DNA synthesis: Bind to the A subunit of DNA gyrase (topoisomerase) and preventsupercoiling of DNA, thereby inhibiting DNA synthesis. Quinolones, fluoroquinolones, oxolinic acid (bactericidal).

Agents That Impair the Template Function of DNANone of them is therapeutically useful; however, chloroquine and miracil D (lucanthone) inhibit plasmodia and schistosomes, respectively by intercalating into the DNA and thereby to inhibit further nucleic acid·

synthesis. Acridine dyes such as proflavine act by intercalation mechanism, but because they are

toxicity and carcinogenicity in mammals they are not used as antibacterial agents.

ACTING ON CELL WALL

Inhibit synthesis of mycolic acids. Isoniazid (bacteriostatic).

Inhibition of Bacterial Cell Wall Synthesis: Peptidoglycan synthesis occurs in three stages.

The first stage takes place in the cytoplasm, where the low-molecular-weight precursors UDP-GlcAc

and UDP-MurNAc-L-Ala-D-Glu-mesoDap-D-Ala-D-Ala are synthesized. Many antibiotics affect this stage.

UTP and N-acetylglucosamine α-1-P are converted to UDP-N-acetylglucosamine, which is ○

subsequently converted by the enzymephosphoenolpyruvate: UDP-GIcNAc-3-

enolpyruvyltransferase. Fosfomycins block this transfer by a direct nucleophilic attack on the enzyme.

Three amino acids are added to the muramyl peptide to yield a tripeptide. The dipeptide Dalanyl-D-alanine is synthesized from two molecules of D-alanine by the enzyme D-alanyl-

Dalanine synthetase. D-Alanine is produced from L-alanine by an alanine racemase.

Cycloserine inhibits both alanine racemase and D-alanyl-D-alanine synthetase, owing to the

structural similarity cycloserine binds to the enzymes better than the D-alanine.

AFFECTING THE 2ND AND 3RD STAGE OF CELL WALL SYNTHESIS

2nd stage is catalyzed by membrane-bound enzymes. The precursor molecules are atransferred sequentially to a carrier in the cytoplasmic membrane. This carrier is a phosphorylated undecaprenyl alcohol. The lipid carrier functions as a point of attachment to the membrane forthe precursors and allows for transport of the subunits across the hydrophobic interior of the cytoplasmic membrane to the outside surface. Bacitracin, a peptide antibiotic, specifically

interacts with the pyrophosphate derivate of the undecaprenyl alcohol, preventing further transferof the muramylpentapeptide from the precursor nucleotide to the nascent peptidoglycan.

The third stage of cell wall synthesis involves polymerization and the attachment of nascent peptidoglycan to the cell wall. Polymerization occurs by transfer of the new peptidoglycan chain from its carrier in the membrane to the nonreducing N-acetylglucosamine of the new

saccharide-peptide that is attached to the membrane. The new peptidoglycan is attached to preexisting cell wall peptidoglycan by a transpeptidase reaction D-alanyl-D-alanine terminus

D-alanine residue. This final reaction can be inhibited by β-lactam antibiotics. These antibiotics undergoes an acylation reaction with the transpeptidases that cross-link the peptide polymers. Penicillins (penams), Cephalosporins (oxacephems and cephamycins), Penems, Thienamycins (carbapenems), and Aztreonam (monobactams)

ACTING ON CELL MEMBRANE

Permeabilizes cell membranes for sodium and potassium ions: Ionophore antibiotics. Valinomycin permeabilizes membranes for K^+ of both prokaryotic and eukaryotic cells for potassium and therefore cannot be used for antimicrobial chemotherapy. However, Monensin (in cattle) and salinomycin (in pigs) are used exclusively in veterinary practice can inhibit bacteria, protozoa (coccidia) and metazoan parasites.

Binds to the cytoplasmic membrane and then forms oligomeric pores viz., permeabilization of liposomes by Lipopeptide antibiotics. Daptomycin permeabilizes liposomes only when they contain phosphatidylglycerol (PG) thus active on GPBs, outer membrane of GNBs lacking PG interferes its activity.

Binding to LPS to disrupts outer membrane, Cyclopeptide antibiotics, polymyxin B and E (colistin). LPS contains several negative charges interacting with positively charged polymyxins, besides several hydrophobic interactions between the two molecules also disrupts outer membranes. Amino groups in polymyxin B pairs with the phosphates of lipid A in LPS.

Quasi-ionophore antibiotics that include channel-forming agents such as gramicidin and the

polyene antibiotics. The polyeneantibiotics, which act by binding to membrane sterols, contain a rigid hydrophobic center and a flexible hydrophilic section. They interact with fungal cells to produce a membrane-polyene complex that alters the membrane permeability, resulting in internalacidification of the fungus with exchange of K^+ and sugars; loss of phosphate esters, organic acids, nucleotides; and eventual leakage of cell protein.

Interfering with the synthesis of lipid membranes. Imidazoles: miconazole, ketoconazole,

clotrimazole, and fluconazole. These compounds inhibit the incorporation of subunits intoergosterol and may also directly damage the fungal

RESISTANCE

Clinical Resistance: The MIC of the drug for a particular strain of bacteria exceeds threshold of safetyin vivo. It is due to:

By mutation in the gene that determines sensitivity/resistance to the agent ○ By acquisition of extrachromosomal DNA (plasmid) carrying a resistance gene.

Cross Resistance: A single mechanism confers resistance to multiple antimicrobial agents, commonly seen with closely related antimicrobial agents.

Multiple Resistance: It implies to multiple mechanisms involved for resistance to one or more antibiotics, seen with unrelated antimicrobial agents.

MECHANISMS OF RESISTANCE

Altered permeability of the antimicrobial agent: Altered permeability may be due to the inability of the antimicrobial agent to enter the bacterial cell or alternatively to the active export of the agent fromthe cell.

Inactivation of the antimicrobial agent: Resistance is often the result of the production of an enzyme that is capable of inactivating the antimicrobial agent.

Altered target site: Resistance can arise due to alteration of the target site for the antimicrobial agent.

Replacement of a sensitive pathway: Resistance can result from the acquisition of a new enzyme to replace the sensitive one.

Excretion or exclusion of antibiotics (Efflux pump mediated resistance).

Vikash Sharma and et.al.

Neem is the most useful traditional medicine as a source of many therapeutic agents in the Indian culture and grows well in the tropical and semi-tropical countries. In indigenous system of medicine, every partof neem tree is used, viz. bark, leaves, fruits, seeds and extracts. Its extracts have antiviral, antibacterial, antifungal, anthelmintic, antiallergic, antidermatic and anti-inflammatory properties. Neem is also termed as "free tree of India", "wonder tree", "Nature's drug store", Village dispensary", "Divine tree", "heal all" and "Panacea of all Diseases". In modern era, special emphasis should be on control of diseasesof human as well as animals using non-toxic herbal products. There is lot of scope for the better utilization of this wonder plant.

Shridevi Adaki, et. al.

Garlic is one of the components, which have effects on reducing the risk of cancer. Including garlic in the diet helps for the betterment of the health. Medicinal effects of the garlic were known since 5,000 years. Recently, studies were carried out to known its effect on the cancer cell lines. Many studies have shown its effects not only on carcinomas, but also on the cardiovascular system and immune system. Functions of the each component of the garlic were studied to know exactly, which component has got beneficial effect. So this review has been carried out to know about the component, functions of each component, mode of action, and beneficial effects of the garlic. **3] Boris K.G. Azantsa ,et.al.**

Objective: To determine antioxidantpotentials of Allium sativum and Persea americana seeds extracts and three formulation-based extracts in vitro, and to evaluate the effects of the best formulation on oxidative stress and dyslipidemia on rats fed with high fat and high sucrose diet (HFHSD). **4] Dr. Md Khorshed Alam, et.al.**

Garlic Allium sativum the Liliaceae family, is among the oldest of all cultivated plants. It has been used as a medicinal agent for thousands of years. Garlic is one of the most important bulb vegetables, which is used as spice and flavoring agent for foods Garlic adds to taste of foods as well as it helps to make them digestible. Garlic contains different useful minerals, vitamins and many other substances used for health of human beings. It is rich in sugar, protein, fat, calcium, potassium, phosphorous, sulfur, iodine fiber and silicon in addition to vitamins. It possesses high nutritive value. Furthermore, garlic has pharmaceutical effects and used to cure a vast conditions including blood pressure and cholesterol, cancer, hepatoprotective, anthelmintics, anti-inflammatory, antioxidant, antifungal and wound healing, asthma, arthritis, sciatica, lumbago, backache, bronchitis, chronic fever, tuberculosis, rhinitis, malaria, obstinate skin disease including leprosy, leucoderma, discoloration of the skin and itches, indigestion, colic pain, enlargement of spleen, piles, fistula, fracture of bone, gout, urinary diseases, diabetes, kidney stone, anemia, jaundice, epilepsy, cataract and night blindness. Garlic products are used as sources of medicine in many ways in human beings in their day today life. As a result, researchers from various disciplines are now directing their efforts towards discovering the medicinal values of garlic on human health. The main interest of researchers in the medicinal values of garlic is its broad-spectrum therapeutic effect with minimal toxicity. **5] Marina R. Wylie, et.al.**

Aim and objective

- ✓ To formulate polyherbal syrup.
- ✓ To evaluate it's antimicrobial activity.
- ✓ To produce safer dosage form.
- ✓ To develop polyherbal formulation with higher therapeutic activity.
- ✓ To formulate dosage form with lower side effects.
- ✓ Garlic-It is collected from medicinal garden situated at Dr.Vedprakash Patil Ayurvedic MedicalCollege,Jalna.
- ✓ Clove-It is collected from medicinal garden situated at Dr.Vedprakash Patil Ayurvedic MedicalCollege,Jalna.
- ✓ Black Pepper -It is collected from medicinal garden situated at Dr.Vedprakash Patil Ayurvedic Medical College,Jalna.
- ✓ Neem-It is collected from medicinal garden situated at Dr.Vedprakash Patil AyurvedicMedical College,Jalna.

Selection of method

Decoction
Clove.

Garlic.

Black pepper.

Neem Leaves.

Apparatus

Extraction Apparatus.
Beaker
Stirrer
Funnel
Water Bath

Microbial Assay

Nutrient Agar : As a Culture.
Bacterial Strains : E.coli, S.aureus.
Sulphonamide : As a Standard.

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Microbial Assay

Nutrient Agar : As a Culture.
Bacterial Strains : E.coli, S.aureus.
Sulphonamide : As a Standard.

Extraction from Dried Clove Bud using Decoction Method :

Dried clove bud is crushed with the pestle and mortar, to provide greater surface area . 5gm of crushed clove is added to 80ml of water and boiled upto 40ml. and filtered.

Extraction from Black pepper seed using Decoction Method :

Black pepper seed is crushed with the pestle and mortar, to provide greater surface area . 5gm of crushed clove is added to 80ml of water and boiled upto 40ml and filtered.

Extraction from Neem leaves using Decoction Method :

Neem leaves is crushed with the pestle and mortar, to provide greater surface area . 5gm of crushed clove is added to 80ml of water and boiled upto 40ml.and filtered.

Extraction from Garlic using Decoction Method :

Garlic is crushed with the pestle and mortar, to provide greater surface area . 5gm of crushedclove is added to 80ml of water and boiled upto 40ml. and filtered.

EVALUATION OF ANTIMICROBIAL ACTIVITY OF FORMULATION :

In vitro antibacterial activity was performed on isolated colonies. The agar well diffusion technique was used to determine the zone of inhibition. The strain of Streptococcus aureus and
E. coli were inoculated in glass agar plate. Plates were dried and 4 wells were made with the help of 6mm agar well cutter. 20µl & 40µl of prepared leaf formulation was loaded in all respective wells. The agar plates were kept undisturbed to allow the passive diffusion of herbal formulation into agar culture medium. Then the plates were incubated at 37º C for 24 hrs. Therefore, further zone of inhibition was calculated.
The method was adopted for preparation of formulation. The media used for used for antimicrobial test was agar. The culture medium was inoculated with micro-organism separately suspended in nutrient. The antimicrobial activity was evaluated by measuring the diameter of zone of inhibition observed.

Reference:

https://www.nhp.gov.in/introduction-and-importance-of-medicinal-plants-andherbs_mtl

https://www.researchgate.net/publication/330739859_Introductory_Chapter_Introducti on_to_Herbal_Medicine

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Open Journal of Plant Science ISSN: 2640-7906 A Brief Review of Traditional plants as Sources of Pharmacological interests Mohiuddin AK.https://www.pharmacy180.com/article/garlic. 6] https://www.pharmacy180.com/article/clovehttps://gpatindia.com/black-pepper-biological-source-morphology-chemicalconstituentsuses

https://www.researchgate.net/publication/338817633_Pharmacological_activities_of_neem_Azadirachta_indica_A_review

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Evaluation of Ginger Macerated Honey Base Herbal Cough Syrup”.