



पंचायत



PEOPLE'S EFFORT BRINGS SUSTAINABILITY

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Role of Panchayat in Conserving Medicinal Plants



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The views expressed in the articles are of the writers and not of the IES. Your views are solicited as a feedback, I.E.S. would be pleased to solve your queries.

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India is clearly known to be the richest source of medicinal plants. As the demand for medicinal plants is increasing, the population of India is also increasing. The increase in population causes encroachment, conversion of rural and forestland for living quarters and other uses. This alarming situation could wipe out some of the medicinal plants unique to this area, (and even completely from the earth inadvertently) unless man intervenes to protect them from extinction. This is our opportunity to act.

The medicinal value of a given plant depends upon the conditions under which it is grown, the season in which it is collected and the methods adopted to harvest it.

For sustaining the medicinal plant products demand for the next 50 years and beyond:-

- *Improve the quality of plant products by standardization.*
- *Educate the people in harvesting and wild crafting procedures.*
- *Conserve and cultivate rare and endogenous species of the local area.*

Orient the government organizations and scientists to devote time and effort.

Articles are invited on the topic of “Role of Panchayats in Sustainable Consumption” for the next issue of this Newsletter “PANCHAYAT”

Editorial

I am glad to present before you the newsletter entitled “Role of Panchayat in Conserving Medicinal Plants” by the ENVIS Centre.

In the world today, there are still a lot of people who do not have adequate access to basic needs such as food, water, education, health services and clean environment among others. This is a major concern being addressed by many governments at all levels amidst the rapidly growing population on one hand and a deteriorating environment on the other hand. Medicinal plants address not only the need for access to medicine as a component of health services but also to the need for increased income for farmers and as a significant contribution to the national economy. And, yet, a basic foundation to effectively bring about these contributions is to be able to collect, characterize, evaluate the genetic resources that a country has from animals, plants, insects and microorganisms which can serve this purpose.

While there have been constraints in exchanges of materials and technology for pharmaceuticals derived from biological organisms, largely because of its very significant commercial value and questions on intellectual property rights, there is no doubt that a critical human need such as access to medicine which determines quality of life of human society will remain as a concern that will require a concerted effort among countries and peoples all over the world.

It may be noted that India is one amongst those nations which possess a historical track record of having made a significant global contribution by virtue of its traditional knowledge of the medicinal plants. History of herbal remedies is very old. Since old times before modern medicine, people became ill and suffered from various ailments. In absent of modern medicinal remedies people relied on herbal remedies derived from herbs and spices. There are many medicinal herbs and spices, which find place in day-to-day uses, many of these, are used as herbal remedies.

Recently, the demand for medicinal plant products has increased significantly and it will continue to grow in the coming years. Physicians in the western world are looking for alternative methods when they can't find a cure for ailments for a suffering patient. Herbal drugs are one of the avenues scientists are using to look for new treatments. For example, scientists recently investigated the *Phyllanthus amarus* plant for anti-viral therapy.

Increase in the population causes encroachment, conversion (deforestation) of rural and forestland for living quarters and other uses. This alarming situation could wipe out some of the medicinal plants unique to this area unless man intervenes to protect them from extinction. This means NGOs and government share some of my thoughts on plant species of the organization must work towards re-forestation to provide opportunities to make a good living. Thus there is an urgent need to conserve the wild populations of medicinal plant diversity in prioritized forest regions of India. Conservation of medicinal plants will contribute to self-reliance of millions for India's own health needs. The demand for medicinal plants is growing at a rapid pace.

We are sure, this issue of the newsletter “PANCHAYAT” will sensitize the people about the importance of medicinal plants.

Dr. Desh Bandhu
President

Ayurveda and its Origin

India has a large number of valuable medicinal plants naturally growing mostly in fragile ecosystems that are predominantly inhabited by rural poor and indigenous communities. Forest have been source of invaluable medicinal plants since the time man realized the preventive and curative properties of plants and starting using them for human health care. India's traditional medical systems are part of a time-honored and time-tested culture that still intrigues people today.

Medicinal plants, herbs, spices and herbal remedies are known to Ayurveda in India since long times. The value of medicinal plants, herbs and spices as herbal remedies is being lost due to lack of awareness and deforestation. The result is many valuable medicinal herbs are becoming rare and precious information is lost. Less pollution we make, more ecological balance we maintain which will add to happiness of humankind. Preserve the knowledge of medicinal plants, herbs, spices and herbal remedies, which humankind has received from the past generations for posterity.

The present revolution in the field of medicine towards Ayurveda, Naturopathy, Unani and such system is not new but a revival and reassertion of our traditional medical practices is. Though we are

turning back to the traditional methods of treatment, there is a huge amount of ancient knowledge which is yet to be explored and documented. To achieve this goal, sustained and well directed effort is required.

As the demand for medicinal plants is increasing, the population of India is also increasing. The increase

in population causes encroachment, conversion of rural and forestland for living quarters and other uses. This alarming situation could wipe out some of the medicinal plants unique to this area, (and even completely from the earth inadvertently) unless man intervenes to protect them from extinction. This is our opportunity to act.



Introduction: Medicinal Plants

Medicinal plants are those plants that provide people with medicines - to prevent diseases, maintain health or cure any ailments. In one form or another, they benefit virtually everyone on Earth. **Aromatic plants** are used for their aroma and flavor.

There is nothing in this universe which is non-medicinal, which cannot be made use of for many purposes and by many modes.

This definition rightly suggests that in principle, all plants have a potential medicinal value although 'in practice' a plant is referred to as medicinal when it is so used by some system of medicine or any plant which provides health-promoting characteristics, temporary relief or symptomatic problems or has curative properties.

Importance: Medicinal Plants

Medicinal plants play a significant role in the subsistence of the people, especially living in the rugged impoverished hills, mountains and rural interiors. Medicinal plants have the potential to provide green health alternatives and a number of other eco-friendly products of domestic and industrial usage. When traditional allopathic treatments fail to cure an ailment, western trained Medical doctors turn to alternative medicines. Nowadays, more and more doctors are turning towards plant derived products to treat their patients. Clearly the demand for plant derived products has increased all over the world. This means that

scientists, doctors and pharmaceutical companies will be looking at countries like India, China and Egypt for their needs.

Medicinal plants play an important role in supporting healthcare system in India. According to the World Health Organization (WHO), 80% of the rural population in developing countries utilizes locally available medicinal plants for their primary healthcare needs. About 8000 species of medicinal plants are in current use by local communities all over India.

The medicine from plants i.e. herbal medicines are safe, efficient,

culturally acceptable and have lesser side effects. The chemical constituents present in them are a part of the physiological functions of living flora and hence they are believed to have better compatibility with the human body. Increased local benefits from medicinal plants through validated uses, enhanced production, and improved share of market value will encourage sustainable use of the resource. Medicinal plants serve local health as well as national primary health care; local income as well as broader economy based on extraction, trade and production. The plant based therapeutics is natural products, being non-narcotic, having no side effects, easily available at affordable prices and sometimes the only source of health care available to the poor. Medicinal plants sector has traditionally occupied an important position in the socio-cultural, spiritual and medicinal arena of rural and tribal lives of India.

States like Madhya Pradesh is a veritable niche of growing healing herbs, which are used in Indian systems of medicine like Ayurvedam, Siddha and Unani. Remedies based on these plants often have minimal side effects and the relatively high cost of synthetic medicines often makes traditional herbal medicines an affordable choice for the poor in these areas. In absent of modern medicinal remedies people relied on herbal remedies derived from herbs and spices.





For Example:-


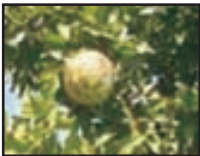







- There are many medicinal herbs and spices, which find place in day-to-day uses, many of these, are used as herbal remedies. Many cooked foods contain spices. Some minor ailments like common cold, cough, etc. may be cured by herbal remedies with use of medicinal properties of spices.
- Herbal remedies can be taken in many forms. Infusions are steeping herbs or spices, with parts like leaves and flowers with boiling water for some time. Filtered or unfiltered use this water extracts of spices as herbal remedies.




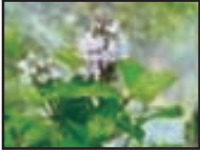





Medicinal Plants : List and its Uses

Indian medicinal plants or the herbs in Ayurveda have age old benefits. Various parts of plants like leaves, flowers, roots and bark have served to cure wide range of health related issues. Sometimes products from herbal plants like gum, resins, metabolites and latex have been used to cure physical problems. Their products are commercialized today in the form of powders, pills, oils, tablets, creams, etc. There is a growing focus on the

importance of medicinal plants and traditional health systems in solving the health care problems of the world. Because of this awareness, the international trade in plants of medical importance is growing phenomenally, often to the detriment of natural habitats and mother populations in the countries of origin. The following are some of the most popular Indian plants having medicinal properties.

PLANT	COMMON NAME	BOTANICAL NAME/FAMILY	PARTS USED	USES
	Amla	Emblica officinalis	Fruit	Vitamin-C, Cough, Diabetes, cold, hyperacidity.
	Ashok	Saraca Asoca	Bark Flower	Menstrual Pain, uterine, disorder, Diabetes.

PLANT	COMMON NAME	BOTANICAL NAME/FAMILY	PARTS USED	USES
	Ashwagandha	WithaniaSomnifera	Root,Leafs	Restorative Tonic, stress, nerves disorder
	Bael	Aegle marmelous	Fruit, Bark	Diarrhoea, Dysentery, Constipation.
	Bhumi Amla	Phyllanthousamarus	WholePlant	Anemic, jaundice, Dropsy.
	Brahmi	Bacopa,Monnieri	Wholeplant	Nervous, Memory enhancer, Mental Disorder.
	Tulsi	Ocimum sanctum	Leaves/Seed	Cough, Cold, bronchitis
	Neem	Azardirchata –indica	Rhizome	Sedative, analgesic, epilepsy, Hypertension.
	Dalchini	Cinnamomum Zeylanicum	Bark, Oil	Bronchitis, Asthma, Cardiac, Disorder, Fever.
	Sandal Wood	Santalum Album	Heartwood, oil	Skin disorder, Burning, sensation, Jaundice, Cough.
	Gritkumari	Aloe Vera	Leaves	Wound healing, Skin burns & care, Ulcer.

PLANT	COMMON NAME	BOTANICAL NAME/FAMILY	PARTS USED	USES
	Turmeric	<i>Curcuma longa</i>	Rhizome, Root	Antioxidant, promoting liver health, anti-bacterial action against many skin infections.
	Long pepper	<i>Piper longum</i>	Fruit, Root	Appetizer, enlarged spleen, Bronchitis, Cold.
	Sada Bahar	<i>Vinca rosea</i>	Whole Plant	Leukemia, Hypertensive.
	Peppermint	<i>Mentha piperita</i>	Leaves, Flower, Oil	Digestive, Pain Killer.
	Chiraita	<i>Swertia Chiraita</i>	Whole Plant	Skin Disease, Burning, sensation, fever, Gout, Pile, general debility, fever, Jaundice.
	Guluchi	<i>Tinospora Cordifolia</i> Fam	Stem	Gout, Pile, general debility, fever, Jaundice.
	Sarpa Gandha	<i>Ranwolfia Serpentina</i>	Root	Hyper tension, insomnia.
	Senna	<i>Casia augustifolia</i>	Dry Tubers	Rheumatism, general debility tonic
	Sitaphal	<i>Annona squamosa</i>	Leaves, Bark, Seed	Treatment of prolapse of anus of children, boils, ulcers

(Source- Orissa Forest Development Corporation.)

Role of Medicinal Plants in Rural and Tribal Economy

Human communities, and particularly rural ones, possess environmental knowledge and beliefs that allow their survival through a particular management of natural resources and these facilitate their integration to natural surroundings. Medicinal plants, since times immemorial, have been used in virtually all cultures as a source of medicine. The widespread use of herbal remedies and healthcare preparations, as those described in ancient texts such as the Vedas and the Bible, and obtained from commonly used traditional herbs and medicinal plants, has been traced to the occurrence of natural products with medicinal properties.

In India the native people are exploiting a variety of herbals for effective curing of various ailments. The plant parts used, preparation, and administration of drugs vary from one place to other. However, the knowledge of herbal medicines is gradually perishing, although some of the traditional herbal men are still practicing the art of herbal healing effectively. These plants are frequently used by the local inhabitants of the area for treatment of various diseases. Local communities, especially, older age class, including women heavily use these traditionally available medicinal plants for health and believe that these are easily available, less expensive, and have no side effects. Indigenous remedies are typically made from plant preparations, some plants are used to treat one disease, while others are used in as mixtures. People in India have long known of the benefits of medicinal and aromatic plants, which provide raw materials for both the pharmaceutical industry and traditional forms of medicine. Besides basic health care, the plants generate income and employment but also have implications for the preservation of biodiversity and of traditional knowledge.

There are several advantages to such systems: the plants involved are readily available, are easy to transport, and do not spoil quickly. Remedies based on these plants often have minimal side effects, and the relatively high cost of synthetic medicines often makes traditional herbal medicines an affordable choice for the poor in these lands. India's traditional medical systems are part of a time-honored and time tested culture that still intrigues people today.

A very common and well known medicinal plant of India is Neem or Margosa (*Azadirachta indica*). Neem is being used by Ayurvedic practioners in India for thousands of years for such a wide range of ailments that in Sanskrit it is often called sarva roga nibarak ("healer of all ailments"). Poor villagers use the chewed

Neem twig to brush their teeth. The Neem oil is used to prepare cosmetics like soaps, shampoos, balms, creams, toothpastes etc.

Use of Medicinal Plants by Rural Households in Karnataka: Some Interesting Highlights

The sample survey related to medicinal plant usage by the rural households in Karnataka, in addition to yielding quantifiable data about the consumption of plant material for their healthcare needs, also brought out many interesting facets related to such use.

- i. Use of many botanicals in very specific and quite unusual forms came to notice during survey e.g.
 - A glassful of watery sap carefully collected from a hole augured the previous night into the trunk of a well-grown country fig tree,
 - A handful of fibrous peels scraped from the inside of the bark of a wild Diospyros tree,
 - A cup of greenish juice squeezed from the fibrous mesocarp of a hard-ripe coconut,
 - A foot long piece of a rhizomatous root of an aromatic grass,
 - Spiny calyces of a wild species of Barleria bush,
 - Sticky droplets of gum scraped from the root surface of a wild tree,
 - Tender shoot tips nipped from the branchlets of a bush, and the list goes on.
- ii. The households also seem to employ innovative methods in prospecting the available plant diversity for the medicinal use, e.g. many plants predominantly known for their food value also find medicinal use in many rural households. Even within these plants the part put to medicinal use is the one that is generally discarded as non-edible. Thus, the root pieces of Coconut, seeds of Papaya, roots of Ash gourd, seeds of Tamarind, Seeds of Gooseberry, and cotyledons of Mango, etc. were reported to be used by these households in many specific primary healthcare recipes.
- iii. It was also noticed that generally the plant material used was region-specific and village-specific, being easily available in the nearby areas. However, very interestingly, the use of plants to address same primary health care condition varied even from one household in the village to the other as

different set of plants were found to be used by even adjacent houses for the purpose. It indicates that a household level specificity also exists in the health care traditions in the country.

- iv. The survey also revealed that households located in the western ghats, where fresh plant material is available almost round the year, have a distinct preference for the green herbage in the form of leaves, tender shoots, bark, flowers and fruits for medicinal purposes. On the other hand,

households located in the drier eastern plains seem to rely more on the dried plant material viz. dried roots, seeds and dry fruits for their healthcare needs.

The above highlights, while bringing out the high diversity in our folk health traditions, also bring out the innate complexities in quantification of household consumption of botanicals. This sample survey is, thus, just a starting point and holds a definite promise for further studies on the subject.

(Source : National Medicinal Plants Board)

Traditional Practices

People living in rural areas lack adequate transport facility and communication with the urban centers and hence, derive a substantial portion of their income and products for their basic healthcare needs, through medicinal plants gathered from their surroundings. Trade in medicinal plants forms a significant component of rural economy, especially in remote areas and has a high degree of involvement by women, other socially disadvantaged group and children. As such local value added to medicinal plants through enhanced production quality will provide a sustainable source of income for rural populations.

People who live in rural areas of the Asia-Pacific are familiar with the medicinal properties of plants, growing close to their homes, in the open fields, water margins, waste lands, both inside and outside the nearby forest areas and under different growth conditions. Most of the plant materials collected is used fresh either to obtain the extract from the whole plant or parts thereof, whether they are leaves, roots, flowers or fruits. In case of woody forms, mostly the bark, roots and other parts are used.

Carminatives like ginger, cloves and coriander are also usually added as fresh or dried materials.

Though dried plant parts are frequently used, often the easy availability of fresh material is a critical point and the herbal doctor in the village is well familiar with various plants he/she needs, their growth patterns, seasonality, habitat and other details. Such details were usually passed on in the past from parent to offspring in the family and uses of plants and the various combinations or mixes made were kept as a family secret. Along with the development of knowledge at family level, tremendous progress has been made at using the plant products at professional level in different societies, which have grown into branches of science in their own right. Refinement of such practices lead to the well established Asian systems of medicines including Ayurveda and Siddha of India, Unani system of middle and Far East Asia, Ying and Yan principles of Chinese herbal medicines, Jamu of Indonesia.

NEEM : India's Miraculous Healing Plant

A comprehensive look at the many therapeutic and ecological uses of Neem :

- Used in India for over 4,000 years, neem is one of the most popular therapeutic plants in the Indian Pharmacopoeia.
- Effective in the treatment of fever, malaria, skin diseases, dental problems, diabetes, arthritis and jaundice.
- A natural pesticide hailed by many for its diverse ecological benefits.

In India, where it has been used for more than 4,000 years, the neem tree has such a variety of medicinal applications that it is sometimes referred to as Village Pharmacy. Now modern research is proving what has been long known by Ayurvedic Medicines practioners : neem is one of the most effective plant medicines in the world. An extremely powerful blood purifying agent and detoxicant, neem is also effective in the treatment of fever, malaria, skin diseases, dental problems, diabetes, tumours, arthritis and jaundice. It has gained particular attention from scientists seeking a cure for AIDS.

नीम : एक अद्भुत औषधीय वृक्ष

भारत प्राकृतिक संपदा की दृष्टि से अत्यन्त समृद्धशील है। आज से हजारों वर्ष पूर्व आयुर्वेद के ऋषियों ने इन प्राकृतिक वनस्पतियों के गुणों-अवगुणों का विश्लेषण कर लिया था। वायु को शुद्ध रखने में वृक्षों का योगदान अत्यधिक है जो जीवन का आधार है। आज भी भारत के गाँवों और जंगलों में रहने वाले लोग जड़ी-बूटी के द्वारा अपना सफल इलाज करते हैं। स्वयं गाँधीजी भी प्राकृतिक चिकित्सा की बात पर बल दिया करते थे।

हजारों वर्ष पूर्व महर्षि चरक ने कहा था : “नानौषधि भूतम् जगति किञ्चित् द्रव्यम् उपलभ्यते” अर्थात् संसार में ऐसा कोई द्रव्य नहीं जो औषधि न हो। आज चिकित्सा क्षेत्र में बदलाव आ रहा है। समूचे विश्व के लोग आधुनिक चिकित्सा पद्धतियों के दुष्परिणामों से भलिभाँति अवगत हो चुके हैं और अब आयुर्वेदिक और यूनानी चिकित्सा पद्धति की ओर आकर्षित हो रहे हैं। गत वर्षों में नीम, हल्दी इत्यादि औषधियों के पेटेन्ट विदेशों में लिए जा चुके हैं। प्रकृति ने नीम के रूप में मानव जाति को एक अद्भुत वृक्ष उपहार स्वरूप प्रदान किया है।

बहुउपयोगी वृक्ष जातियों में नीम का स्थान सर्वोपरि है, नीम को इसीलिए आधुनिक युग में कल्पतरु की संज्ञा दी जा रही है। सभी प्रकार की जलवायु एवं प्राकृतिक परिस्थितियों से तालमेल स्थापित कर लेने की क्षमता के कारण यह वृक्ष अपने उद्गम स्थल दक्षिण व दक्षिण पूर्व एशिया के अतिरिक्त विश्व के अन्य भू-भागों में भी तेजी से फैल रहा है। यह वृक्ष भारतीय उपमहाद्वीप के शुष्क व अर्द्धशुष्क भागों में मिलता है। हल्की मिट्टी वाले इलाके इसको उगाने के लिए उपयुक्त स्थान है, हालांकि नीम का पेड़ गंगा के मैदान में भी भलिभाँति उगता है। यह तेजी से बढ़ता है और कुछ वर्षों में ही निबौरियां लग आती हैं।

नीम के उपयोगी रसायनिक यौगिकों का पता लगाने का श्रेय डा. एसप्रधान को जाता है। वे उन दिनों पूसा इन्सटीट्यूट के कीट विज्ञान विभाग में काम कर रहे थे। उनका शोध प्रबंधन 1962 में प्रकाशित डा. अनन्त कृष्णन और डा. रामन द्वारा संपादित किताब में इन खोजों का विस्तृत विवरण दिया गया है। यह एक विश्वप्रसिद्ध वृक्ष है और इसका श्रेय इसके औषधीय गुणों को जाता है। इस वृक्ष से अनेक हर्बल प्रोडक्ट्स भी तैयार किए जाते हैं। नीम में मार्च से मई के मध्य में प्रजनन होता है तथा मई से मध्य जुलाई के बीच इसके फल पक जाते हैं। इस वृक्ष को बीज के द्वारा लगाया जाता है।

उपयोग

नीम अनेक गुणों से मिश्रित वृक्ष है। इसके पत्ते, फल, फूल, छाल, रस सभी औषधिक गुणों से भरपूर हैं और निम्न प्रकार से उपयोग में आते हैं :

- लकड़ी को ईंधन के रूप में
- हरी पतली शाखा को दातून के रूप में



- पत्तियों का धुँआ मच्छरों को भगाने के लिए
- फसलों की कीटों से रक्षा के लिए
- गोदाम में

नीम के बीजों में सबसे अधिक कीटनाशक गुण होता है

- इसकी गुठली को सुखाकर पीसा जाता है, उसके उपरान्त कपड़े में बाँधकर रात भर पानी में भिगोकर रख दिया जाता है, इसके उपरान्त जो घोल प्राप्त होता है उसे कीटनाशक के रूप में प्रयोग में लाया जाता है।
- नीम के बीज को अल्कोहल में डुबोकर रखने के पश्चात् भी कीटनाशक बनाया जाता है।
- नीम के बीजों में करीब 40% तेल होता है और इसका प्रयोग कीटनाशक, दवाईयाँ, साबुन आदि बनाने में होता है।
- नीम के बीजों में उपस्थित निम्बिन, निम्बीडीन व एजाडिरेक्टिन नामक रसायनों की गंध के कारण ही यह एक प्रभावशाली पर्यावरण मित्रा व सुरक्षित कीटनाशक सिद्ध हुआ है।

नीम का उपयोग कई घरेलू एवं अन्य औषधियों में होता है।

नीम के विभिन्न औषधीय उपयोग निम्न प्रकार से हैं :

- **पथरी में** : करीब 150 gm. पत्तियों को अच्छी तरह पीस लें और फिर उसे 2 लीटर पानी में उबालें, इसे पीने से पथरी का निदान संभव है।
- **बवासीर में** : मूँग की दाल और नीम की पत्तियों को पीसकर महीन कर लें और इसकी लुब्दी बना लें, इन्हें तलकर खायें। नियमित आहार में छाछ व चावल लेने से भी आराम मिलता है।
- **पायरिया में** : नीम की पत्तियों को पानी में उबाल लें और ठंडा होने के पश्चात् खाएँ, प्राचीन काल से ही नीम की पतली टहनी को दातून के रूप में प्रयोग में लाया जाता है, आजकल नीम से निर्मित कई प्रकार के मंजन भी बाजार में उपलब्ध हैं।
- **कब्ज में** : नीम के फल को गर्म पानी में डालकर मसल ले, छानकर इसका सेवन करें, सोते समय इसका सेवन करें, पेट के कीड़े मारने के लिए नीम की पत्तियों को शहद अथवा कालीमिर्च के साथ लेने पर असर होता है।
- **ज्वर में** : नीम का चूर्ण सुबह-शाम सेवन करने से आराम मिलता है। चूर्ण नीम की अर्न्तछाल से बनता है।
- **प्लीहा वृद्धि में** : कई दिनों तक ज्वर रहने या फिर भारी भोजन करने से प्लीहा व यकृत के बढ़ जाने पर नीम का चूर्ण पानी के साथ सेवन करने पर लाभ मिलता है।
- **बेवची में** : यह त्वचा रोग है जो एग्जीमा से मिलता जुलता है, यह रोग घुटने व टखनों के बीच पैर पर होता है। इसमें जलन व खुजली होती है। नीम के पत्तों का रस अथवा पत्तों को जलाकर राख छिड़कने से राहत मिलती है।
- **केश रोगों में** : नीम की पत्तियों को उबालकर ठंडा कर लें। इसे बालों पर लगाने पर बालों का झड़ना रुकता है तथा सिर में होने वाली फुंसियों में राहत मिलती है। रात को सोने से पहले बालों की जड़ों में नीम का तेल लगाकर उँगलियों से मालिश करने व सुबह नीम के साबुन से बाल धाने पर जुएँ व लीक नष्ट होजाते हैं।
- **बिच्छू काटने में** : नीम की पत्तियों को पीसकर उसका लेप बनाकर लगाने से राहत मिलती है।

ग्रामीण समुदाय के लिए इसकी महत्त्वता

नीम अभी तक ग्रामीण समुदाय का अंग नहीं बना है लेकिन बीजों की माँग बढ़ने पर यह गरीब किसानों के लिए खजाना साबित हो सकता है। जब देश के विभिन्न राज्यों में सूखे की स्थिति उत्पन्न होती है तो तमाम फसलें और पेड़-पौधे प्यासे मर जाते हैं लेकिन नीम फिर भी हरा रहता है। यद्यपि नीम की निबौरियों की बीज के लिए माँग बढ़ेगी तो गरीब किसान और पर्यावरण



इससे लाभान्वित होंगे। नीम के अतिरिक्त शायद ही कोई ऐसी फसल हो जो कम साधनों और देखभाल के बावजूद मुनाफे का सौदा साबित होती है।

पंचायत का महत्व

नीम का उपयोग बढ़ने से कीमतें बढ़ेगी। हमारे देश में नीम खूब उगता है। क्योंकि पंचायत भारतीय गाँवों का एक अभिन्न अंग है इसलिए उनका कर्तव्य है कि वे इस क्षेत्र में अपना योगदान दें। बरसात के दिनों में वन महोत्सव के दौरान अगर नीम लगाये जाएँ तो ग्राम पंचायतें इसकी निबौरियों को बेचकर अत्यधिक लाभ कमा सकती है। दूसरा उनके द्वारा नीम के औषधीय गुणों के बारे में चर्चा होनी चाहिए और ग्रामीणों को इसकी बहुउपयोगिता से अवगत कराना चाहिए। इसके लिए पंचायतें अनेक माध्यमों जैसे टी.वी., रेडियो, पोस्टर, शिक्षा आदि के द्वारा जन प्रचार-प्रसार कर सकती है। तीसरा इसका संरक्षण अत्यधिक जरूरी है और इसे अवैध रूप से कटने से बचाना होगा।

आज के युग में जहाँ सम्पूर्ण वातावरण प्रदूषित हो चुका है, बीमारियाँ अत्यधिक हैं और आधुनिक चिकित्सा प्रणाली के परिणामों से डरकर लोग आयुर्वेद को अपना रहे हैं।

सफेद मूसली की खेती

सफेद मूसली लिलिएसी कुल का पौधा है। यह हमारे देश में जंगलों में प्राकृतिक रूप से उगता है। इसे संस्कृत में मुशली, तालमूली, हेमपुष्पा, भूताली, दीघे कान्दिका, तालपत्री, महावृष्पा, तालमुलिका, महावृष्पा, तालमुलिका, अशोधी आदि नामों से जानते हैं। गुजराती में धौली मूसली, उत्तर प्रदेश में खेरूआ, अरब फारसी में शकाकुले तथा अंग्रेजी में *Chlorophytum borivillianum* कहते हैं। इसकी जड़ों का प्रयोग विभिन्न औषधियों में होता है। आर्युवेद के मतानुसार यह गर्म एवं रूखी है। यह पित्त की गर्मी को शान्त करती है। शरीर को हृष्ट पुष्ट, बलवान एवं मोटा बनाती है। धातु को बढ़ाती है एवं उत्तेजित करती है।

हमारे देश में इसकी करीब 15 प्रजातियाँ पायी जाती हैं। जिसमें क्लोरोफाईटम बोरीविलिएनम, क्लोरो फाईटम ट्यूबरोजम, क्लोरोफाईटम अरूडीनेशियम, क्लोरोफाईटम एटेनूएटम प्रमुख हैं। परन्तु उत्तर प्रदेश के जंगलों में अधिकांश क्लोरोफाईटम ट्यूबरोजम पायी जाती है। सफेद मूसली एक महत्वपूर्ण वनोषधी है। जिसका विभिन्न प्रकार की औषधियों में प्रयोग किया जाता है। जिस कारण यह एक बहुमूल्य जड़ी बूटी बन गयी है तथा अन्तराष्ट्रीय स्तर पर इसकी अत्यधिक कमी हो गयी है। इसकी खेती के लिए उ०प्र०, मध्य प्रदेश, बिहार, राजस्थान, पंजाब, हरियाणा, महाराष्ट्र आदि प्रदेशों की जलवायु बहुत ही उपयुक्त है।

भूमि एवं जलवायु

सफेद मूसली के लिये बलुई दोमट जिसमें प्रचुर मात्रा में जीवांश तथा पानी निकासी का अच्छा प्रबन्ध होना चाहिये। इसकी फसल को गर्म नमीयुक्त जलवायु की आवश्यकता होती है और इसकी उत्तम बढ़वार के लिए भूमि की नमी के साथ हवा में नमी 60-70 प्रतिशत आवश्यक है। भूमि अधिक नरम नहीं होनी चाहिये इससे कन्दों का आकार पतला रह सकता है। जिस भूमि का पी उच्च मान 7 से 7.5 के बीच हो वह इसकी फसल के लिये उत्तम है। क्षारीय एवं अम्लीय भूमि इसकी खेती के लिये बाधक है।

खेत की तैयारी

खेत की गहरी जुताई कर उसे समतल कर देना चाहिये। जिससे मिट्टी भूरभूरी हो जाये। सफेद मूसली की फसल के लिये दो प्रकार से बीजाई की जाती है।

बेडस बनाकर : अच्छी फसल के लिये स्ट्राबरी की तरह बेडस बनाना आवश्यक है। इसके साथ-साथ पानी को निकासी के लिये उचित प्रबन्ध होना चाहिये।

मेढ़ बनाकर : उत्तर प्रदेश में बेडस की अपेक्षा आलू की तरह मेढ़ पर सफेद मूसली बोकर अच्छी पैदावार ली जा चुकी है।

प्रयुक्त होने वाला बीज

इसमें पूर्ण फसल के निकाले गये कन्दों का ही प्रयोग किया जाता है। प्रत्येक कन्द के ऊपर डिस्क या क्राउन का कुछ भाग रहना आवश्यक है तथा कहीं से भी कन्द क्षतिग्रस्त नहीं होना चाहिये। कन्दों को बीज के लिये प्रयुक्त किया जाता है। एक कन्द का वजन अच्छी फसल के लिये प्रायः 2 से 5 ग्राम होना चाहिये। अच्छी फसल के लिये अच्छी गुणवत्ता के प्रमाणित कन्द किसी भी अच्छे फार्म या संस्था से लेना आवश्यक है। वैसे तो सफेद मूसली को बीजों द्वारा भी उगाया जा सकता है। ये काले रंग के होते हैं। लेकिन बीजों से पौधे तैयार करने में करीब एक वर्ष या इससे अधिक समय लग जाता है। अतः अच्छी फसल के लिये इसके कन्द/फिंगर से ही फसल तैयार की जाती है।

समय

सफेद मूसली के लिये सबसे अच्छा समय 15 मई से लेकर 15 जून है। लेकिन कभी-कभी इसके मूल कन्द/फिंगर्स अप्रैल के आखिरी सप्ताह में ही उगने शुरू हो जाते हैं। लेकिन इसकी अच्छी फसल लेने के लिये इसको 15 जून से पहले खेतों में लगा देना चाहिये।

बुआई की विधि

खेत में बेडस पर या मेढ़ पर लगाने के लिये पेड़ से पेड़ की दूरी 15-30 सेंमी. तथा लाईन से लाईन की दूरी 30 सेंमी. होनी चाहिये। यह व्यवसायिक खेती के लिए उत्तम है तथा इसके लिये प्रति एकड़ करीब 150 से 180 कि.ग्रा. फिंगर्स की आवश्यकता होती है। इसको मक्का की फसल के साथ भी अच्छी प्रकार से उगाया जा सकता है तथा सर्दियों में मक्का के बाद सरसों की फसल भी ली जा सकती है।

बीज उपचार

सफेद मूसली के मूल व्रन्तों/कन्दों/फिंगर्स का शोधन किसी भी फफूंदी नाशक के द्वारा किया जाता है। जिससे उसमें उगने के समय किसी प्रकार का रोग न लगे। इसके लिये अगर ट्राईकोड्रिमा का प्रयोग भी करें तो अति उत्तम रहता है। इसके अतिरिक्त गौमूत्रा का प्रयोग भी कर सकते हैं।

खाद एवं सिंचाई

इसके लिये रासायनिक खाद का प्रयोग कम किया जाता है। परन्तु 15.20 टन गोबर की खाद नीम/अरण्डी की खली 2.3 कुन्तल/वर्मी कम्पोस्ट 2.3 कुन्तल प्रति एकड़ डालना आवश्यक है। इसी प्रकार बुआई के 45 दिन बाद भी वर्मीकम्पोस्ट आदि का प्रयोग कर सकते हैं।

बोने के बाद पानी की एकदम आवश्यकता पड़ती है। जून, जुलाई, अगस्त में पानी की इतनी आवश्यकता नहीं पड़ती। कम वर्षा होने पर थोड़ी सिंचाई आवश्यक है। जिससे नमी बनी रहे। वर्षा के उपरान्त हल्की सिंचाई नमी बनाने के लिये करते रहना चाहिये। नवम्बर के बाद पौधों के सुखने पर भी हल्की सिंचाई करते रहना चाहिये। विशेषतया यह ध्यान रखने योग्य बात है कि सफेद मूसली के खेत में पानी नहीं रूकना चाहिये।

बढ़त एवं उत्पादन

अक्टूबर, नवम्बर के पश्चात पौधे पूर्ण रूप से विकसित होकर सूखने लगते हैं। लेकिन कन्द भूमि में रह जाते हैं। मूसली का उत्पादन में सबसे अधिक उसके बीज का महत्व होता है। इसलिये बीज साफ सुथरा एवं फफूंदी लगा नहीं होना चाहिये। औसतन एक पौधे में 10 से 15 तक कन्द/फिंगर्स/गूलबन्द होते हैं। इसका उत्पादन 5 से 10 गुना तक हो सकता है।

कन्दों/फिंगर्स को उखाड़ना

पत्तियों के सूख जाने के पश्चात भी खेत में हल्की हल्की सिंचाई करते रहें। कच्चे कन्द सफेद होते हैं तथा पूर्णतया पकने पर इनका रंग गहरा भूरा हो जाता है। अतः कन्दों को फरवरी या मार्च में सावधानी के साथ निकाला जाता है। जिससे वे टूट न जायें।

कन्दों की सफाई व प्रसंस्करण

कन्दों को खोदने के पश्चात पानी से अच्छी प्रकार धोकर साफ करें।

From Print Media

Govt maps areas hit by malaria

Kounteya Sinha, THE TIMES OF INDIA, NEW DELHI

Monday, March 10, 2008

Identifies 60 Districts That Report Over 50% of The Disease In Country

New Delhi : A map, which pin-points the location of India's remote villages worst affected by malaria, will now spearhead the country's war against the vector-borne disease. After almost here months of extensive re-search, using the state-of the art geographic information system, India's National Vector-Borne Disease Control Programme is now armed with the country's first malaria map, that helps identify populations most at risk besides telling public health experts the areas, however remote, that need immediate and aggressive control measures. The map first identified India's 60 most malaria endemic districts that report over 50% of the country's malaria cases. Most of them are in north eastern states, Orissa, Chhattisgarh, Jharkhand, Madhya Pradesh and Andhra Pradesh, Villages in these districts were then divided into low, medium, high and very high prevalence categories, using a simple mathematical model. Villages recording Annual Parasite Incidence (API-number of cases per 1,000 population) of more than five with 50% of the cases being P falciparum-the most deadly type of malaria infection –were graded as very high prevalence and those with API greater than three with 30% 50% of the cases being P falciparum as low prevalence. “We now have GIS maps of all these 60 districts that also pinpoints the villages which need aggressive control and containment strategies immediately. Through this new tool, we have identified our

targets. It will help us maximize our resources, as we will now focus our malaria eradication efforts in these endemic villages,” NVBDCP director.

GPS Dhillon told ToI. Health minister A Rama doss told TOI, Malaria is one of India's foremost public health threats. With the help of the GIS maps, we will now be able to better control and contain it. We have been reporting around two million malaria cases while the number of deaths have remained around 1,000. “According to Dhillon, experts have already started control and containment operations in the villages categorized as very high prevalence. “They are our first priority,” he said. Houses in these high-risk villages are being sprayed with DDT and synthetic pyrethroids. Long-lasting insecticidal bed nets are being distributed to those living in the country's most in accessible villages. Accredited Social Health Activists (ASHAs), who are part of India's National Rural Health Mission, are being trained and equipped in using rapid diagnostic kits. Until now, India's malaria detection programme depended on collection of blood slides which was time consuming. Now ASHAs are taking blood samples on the spot testing them and in minute confirming the results.

MCD to develop nine herbal parks by month-end

EXPRESS NEWSLINE, NEW DELHI

Tuesday, March 17, 2008

THE Municipal Corporation of Delhi will develop nine herbal parks in nine of its zones by the end of this month. This was announced by MCD Garden Committee Chairman Ved Parkash Gupta at the inauguration of the first such park by BJP leader Vijay Goel at Priya Darshini Park in Gujranwala Town in the presence of Director (Horticulture) M.R. Tewatia.

The herbal park has the first ever Rudrakesh sapling planted by the corporation. It has more than 70 different species of plants. Officials of the Horticulture Department told Newsline that the purpose of these herbal parks is to spread awareness about

various kinds of herbs that can be used for medicinal purposes.

“There are a number of herbs like *ajwain*, *Kapoor*, *gwarpatha*, *bhang*, *mulethi* and *isabgol* that will be planted in the parks along with trees like sheesham, chmeli, peal and ashok, People can visit the parks free of cost and learn to recognize these plants and their positive as well as negative effects,” Gupta said that the corporation has decided to give top priority to these plants as they not only have medicinal value but would also contribute to the greening of the city.

Rosehips protect joints from arthritis: Study

THE STATESMAN, NEW DELHI

Tuesday, September 23, 2008

LONDON, Sept. 22: Suffering from rheumatoid arthritis? Well, your doctor might not agree but you could try out rosehips as an alternative treatment.

A new study by Swiss researchers has suggested that a herbal medicine made from rosehips may regenerate joints in people who are crippled by arthritis it can protect the cartilage cells which facilitate joint movement.

In fact, according to them, the rosehips are one of nature's richest sources of vitamin C and as a result improve activity levels by damping down an herbal medicine made from rosehips may regenerate joints crippled by arthritis over-active immune system, the study, the *Daily Mail* reported.

In their study, the researchers from the department of human nutrition and health in Basel actually looked at the action of the sugary fatty acid GOPO, the active ingredient in the rosehip supplement LitoZin.

They measured the effects of different doses on human cartilage cells and found GOPO switched off genes responsible for producing proteins and enzymes which have been implicated in inflammatory joint destruction.

It also switched on genes that help produce collagen and cartilage, essential components of a healthy joint, the study revealed.

The findings have been presented at the Osteoarthritis Research Society's International World Congress in Rome.

Kitchen garden now at a mall

Ruchira Hoon, HINDUSTAN TIMES, NEW DELHI

Sunday, March 21, 2010

HEARTY CULTURE

Herbs, earlier imported, are now being grown and sold locally by enthusiasts

The windowsill above the sink in web designer Surbhi Agarwal's kitchen always manages to bring a smile to her face. It's a spot of green in her otherwise drab apartment that smells and looks good. This 29-year-old web designer grows her own oregano, thyme and peppermint; use them to cook and bask in their fresh fragrance.

Surbhi isn't the only one. As more and more potted herbs are finding their way into supermarkets, herb-lovers across the National Capital Region (NCR) are quickly moving these pots off the shelves. Thanks to them, the seeds for fresh herbs like rosemary, oregano, sage and basil needn't be brought from European countries. They are available at your neighborhood nurseries and grocery stores.

Tarun Mal (24) has just begun cultivating herbs such as chives, parsley and many varieties of basil. "I love using herbs in food and wanted to do something that could promote my hobby into a business," says this filmmaker-turned-horticulturist, who runs his company under the name Nature wise Herbs and sells them at Modern Bazar. "Initially I was only potting in small batches, now I've converted my entire roof into a green house."

Priced between Rs. 200 Rs. 500, most of these herbs are

inexpensive buys since they have a lifespan of about three years. Anju Srivastava, who owns Wingreen, a herb company that retails out of malls such as Spencers and Reliance Fresh, says that there are annual and perennial plants—those that have to be re-sown every year and those which last for three to five years. "Thyme, marjoram, lemongrass and oregano will last you year after year. They have a rest period but they grow back on the same plant. But plants like lettuce, celery, parsley, rocket and pok choy have to be sown every year and only in winters," says Anju. However it's mostly the expat crowd and the upper middle class who're buying these plants.

As a former advertising and marketing executive, Anju has a definite strategy planned. She supplies these herbs to restaurants such as Turquoise Cottage in Delhi and also does consultancy for hotels. "You weren't getting fresh herbs for love or for money in India. Now we are teaching the farmers around Mansard how beneficial and profitable these herbs can be."

Thanks to local sourcing, plants such as stevia—the only known natural sweetener and a cure for diabetes—is now easily available. Bringing it closer is Pallavi Jain of Greensomethings. In who stocks plants at her nursery and ships them across NCR. "People have suddenly woken up to the novel idea of gifting a plant. During the festive season the demand for certain herbs like basil and oregano shoots up and we just can't keep up with the demand," says Pallavi.

Messages

Rural development schemes and role of Panchayati Raj Institutions is very good for the awareness among rural public through this magazine.

R.N. Dwivedi, Secretary, St. Peters Educational Society, Kanpur.

यह पत्रिका समाज के लिए उपयोगी है, जिससे पर्यावरण के बारे में जानकारी प्राप्त होती है।

विमला देवी, अध्यक्ष, रानीअवन्तीबाईग्रामोंउद्योगसमीती

This is a wonderful and valuable magazine for educational institutions.

K.C. Dixit, Manager, Sri Amedakar Shri Kishan Evam Samaj Sewi Sansthan, Kanpur

इस पंचायत पत्रिका से पर्यावरण के विभिन्न समस्याओं एवं समाधान संबंधित जानकारी उपलब्ध हो रही है।

अभय यादव, हरीशचंद्रसिंहस्मारकसेवासमिति

The magazine is very good and general public of villages can get a lot of information from it.

Roop Chandra Secham, Manager, Saraswati Shiksha Vikash Samiti, Kanpur

आपके द्वारा पंचायत पत्रिका समय पर उपलब्ध हो रही है।

गिरधारी लाल, सेक्रेटरी, शिक्षाविकाससभा

The publication is very relevant and useful covering articles on environment, agriculture etc.

D.M. Paul, CEOEDECON, Swaraj Sampus, F 159-160, Industrial Institutional Area, Sitapur, Tank Road, Jaipur

The journal is very useful for farming and agriculture development.

Dr. M. Abbas Ali Khan, Environment Science Lab, Environmental Conservation Society

Panchayat is very useful to aware about the environment's various aspects to the common people.

Deep Kumar Pandey, Secretary, Chandra Shekhar Azad Sewa Samiti, U.P.

Role of Panchayats in Environmental Management

ENVIS Newsletter

Glimpse of the Website

www.iesenvis.nic.in

ENVIS CENTRE ON ROLE OF PANCHAYATS IN ENVIRONMENTAL MANAGEMENT

The website has compiled all the relevant data and comprehensive information on different components of Panchayati Raj and Environment. The website contains information on databases developed; geographical distribution of Panchayats; success stories, areas of Panchayati Raj co-operation; elections, finance, query services; bibliography; resource repository etc.

We hope that the information contained in the website will suffice your requirements.

We would appreciate your comments & suggestion about the website so that we can update it as per the requirements of our browsers.

Wish you a Happy browsing on www.iesenvis.nic.in

The Centre invites for Publications :

- Reports on Panchayati Raj (specially related to environment) and rural development
- Short report on seminars/workshops on the related topics are also invited. Those found suitable will be published in the newsletter.
- Articles for the newsletter "Panchayat" are invited.

Forthcoming Events

- **GLOBE Teacher's Training Program**, at Conference Room, Delhi Secretariat, Delhi during February 17-19, 2011.
- **Celebration of World Forestry Day**, on March 21, 2011
- **Celebration of World Water Day 2011**, on March 22, 2011
- **GLOBE Teacher's Training Program**, at Conference Room, Delhi Secretariat, Delhi during April 18-20, 2011.
- **GLOBE Teacher's Training Program**, at Shimla, Himachal Pradesh during May 2011.
- **Celebration of World Environment Day**, on June 5, 2011
- **Second Ecology Learning Expedition to Kathmandu**, Nepal, Kathmandu, Nepal during June 9-12, 2011.
- **Conference on Earth Science and Climate Change Research**, at the International Centre, Goa, India during September 25-28, 2011.
- **Train the Trainer Workshop on Carbon Cycle**, at Delhi during August 17-19, 2011

Book Post

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Indian Environmental Society

U-112 (3rd Floor) Vidhata House

Vikas Marg, Shakarpur

Delhi - 110092 INDIA

Phone : 22450749, 22046823, 22046824 Fax : 22523311

E-mail : iesenro@vsnl.com

Website : www.iesglobal.org • www.iesenvis.nic.in

To
