



**RAMAIAH
UNIVERSITY**
OF APPLIED SCIENCES



SANJEEVANI

GARDENING

A SAVIOR DURING
DARK TIMES

VĀṬIKĀ IN VICINITY

PAGE 22

RECIPE

FLIP TO PAGE 13

IT'S PUZZLE TIME!

HOW WELL DO YOU
KNOW?

**VOLUME 1 • ISSUE 1
PHARMACOGNOSY
NEWSLETTER
JANUARY-MARCH 2022**

Blessings of Lord Dhanvantari



Here's a beautiful description of Lord Dhanvantari in the Bhagavad Gita:

kasyasya kasis tat-putro
rashtro dirghatamah-pita
dhanvantarir dirghatamasa
ayur-veda-pravartakah
yajna-bhug vasudevamsah
smrita-matrarti-nasanah

Wrapped around the majestic Mandara mountain, was the serpent Vasuki. With its one end held by the Devtas and the other end held by the Asuras, the mountain churned the Ocean of Milk as the procedure of Samudramanthana was nearing its end.

For a brief moment, a celestial figure rose. A tall man, clad in white robes, having a mind that was the epitome of intelligence, was holding firmly, the pot of divine nectar or Amrit.

This divine being, was Lord Dhavantari, the King of Kashi, the God of ancient Indian Medicine and obviously, the one who revealed the knowledge of Ayurveda to the world.

It was Dhanvantari's sharp mind, which divided the complexity of Ayurvedic sciences into 8 ashtangas or divisions so that everyone could comprehend it.

It is with the blessings of Shri Dhanvantari that we commence our humble initiative to disperse knowledge through our newsletter, Sanjeevani.



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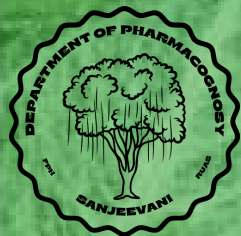
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SANJEEVANI

PHARMACOGNOSY NEWSLETTER

DEAN'S MESSAGE

At the outset wishing everyone a Happy, healthy, and prosperous New year 2022!!

It's my great pleasure to extend my earnest greetings to the readers of the first issue of the quarterly E-Newsletter "Sanjeevani" from the Department of Pharmacognosy, Faculty of Pharmacy, Ramaiah University of Applied Sciences.

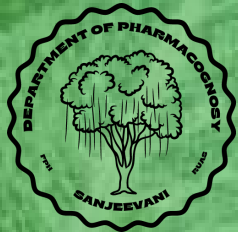
The herbal system of medicine is the fulcrum of complementary and alternative medicine, which in recent times is increasingly gaining widespread popularity all over the world. The application of science and technology especially in areas of conservation and cultivation, production, analytical techniques, quality control & regulation, clinical trials, and information resources must be promoted. These efforts will boost benefits, confidence, and safety in the use of herbal medicine toward integration into the mainstream healthcare systems. It has recorded history in the present COVID -19 pandemic as many herbs found to be effective in subsiding symptoms of various viral, bacterial infections, etc.

The contents of this inaugural issue seem to be very interesting and promising. I would like to congratulate all the members for their effort and contribution in bringing out this inaugural issue.

Best wishes for the success of "Sanjeevani"
Stay safe and be healthy!!!



Dr. S. Bharath
M. Pharm., Ph. D., M.B.A.
Dean - Faculty of Pharmacy



Jan - Mar 2022 | Issue 1

SANJEEVANI

PHARMACOGNOSY NEWSLETTER

PROFESSOR - RESEARCH MESSAGE

In the allopathic system of medicine, most of the drug molecules used for various ailments are synthetic drug molecules. The 'precursors' for designing synthetic molecules are derived from the knowledge gained from herbal drugs used in various systems of traditional medicine like Ayurveda and Siddha. The specialization 'Pharmacognosy' gives comprehensive insight on such herbals in regard to identification and various methods of evaluation, laying the foundation for advanced research leading to new drug discoveries.

The 'Department of Pharmacognosy' at this Institution commenced such advanced research activities on herbal drugs from the year 2004. Since then assessment and standardization of 22 herbal drugs covering 27 species used in Ayurveda & Siddha have been carried out and more than 160 research publications have been made in indexed journals. Now the department is adding one more feather to its cap by bringing out a 'Quarterly Departmental Newsletter -Sanjeevani' showing various activities carried out relating to Pharmacognosy by the students and staff and also to highlight the recent happenings in this field. The need of the hour is such an effort to make the students aware of the importance of herbal drugs research.

I wish the entire team all the very best in their endeavour.



Dr. V. Madhavan
M. Pharm., Ph. D., D.B.M
Professor-Research
(Former Dean and HOD
Pharmacognosy)



EDITOR'S NOTE

Dr Ashoka Babu VL
Editor - Sanjeevani

Hello Readers,

I take immense pleasure and privilege in presenting the inaugural issue of the quarterly E-Newsletter "Sanjeevani" from the Department of Pharmacognosy, Faculty of Pharmacy, Ramaiah University of Applied Sciences. I would like to thank our Hon'ble Vice-Chancellor Prof. Kuldeep K Raina and Dr Krishnamurthy Jayanna Pro-Vice-Chancellor for their exceptional motivation in bringing this news letter. I am awfully indebted to Dr S. Bharath, Dean (I/C), Faculty of Pharmacy and Chairman, Sanjeevani and Dr.V. Madhavan, Professor Research for their constant encouragement and support in the release of this E-Newsletter.

Department of Pharmacognosy is primarily concentrated on herbal drug research as herbs have been used traditionally as well as in the modern health care systems to treat diverse ailments. In the current scenario, herbal drugs have been playing a major role in subsiding the symptoms of an array of viral and bacterial infections. In this milieu, the Department of Pharmacognosy released its first issue of quarterly E-Newsletter Sanjeevani to cater the knowledge and importance of herbal drugs to students and researchers. The contents of the inaugural issue include herbal gardening, traditional formulation Kabsura Kudineer, healthy recipe, veganism, Cocos nucifera - a tree of life, Vāṭikā in the vicinity', and various departmental activities.

I would like to thank all the editorial board members, especially students of the editorial board for their restless effort and contribution in bringing out this inaugural issue. Any criticism, opinion and encouragement from the readers will be highly appreciated.

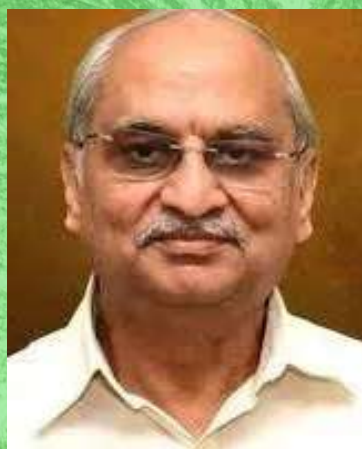
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INTRODUCING THE LOGO OF SANJEEVANI



*Editorial team is very happy to introduce the logo of
Sanjeevani!!!*

Gardening - A Savior During Dark Times



With the pandemic hitting the entire world and COVID - 19 being an infectious disease, it had made people completely devoid of human interaction. The lack of human interaction at a time when everyone was going through fear, anxiety, depression, instability in the professional career, and uncertainty of life definitely worsened the mental health. The feeling of loneliness hit a peak during the phase of complete lockdown. In this period of being stuck at home, people took up to new activities to keep themselves occupied, amongst which one of them was gardening. It started out with buying just a plant or two to increase the aesthetics of the house and went on to become a hobby. Gardening has definitely had a major positive impact on people's mental health. What was once just a plant, now has become a source of positive energy and peace.

Science Behind Gardening Affecting Our Mental Health

You guys must be wondering how gardening can actually impact a person's mental health to such a large extent. Here are some studies that we have come across.

1 A study showed that *Mycobacterium* found in the soil can improve brain function while boosting moods. This is because *Mycobacterium vaccae* found in the soil increases serotonin which in common words is called the "happy hormone". Also, a constant contact with these microorganisms can boost our immunity and reduce stress and risk of inflammatory diseases.

2 While gardening, regular exposure to sunlight has a positive impact on blood pressure and increases vitamin D levels. Vitamin D activates the gene which is responsible for the release of neurotransmitters - dopamine and serotonin which in turn help in our mood regulation.

3 In a Korean research study, it was found that gardening activities may increase the amount of brain nerve growth factors associated with memory and therefore reduce the risk of dementia by 36%.



4 In a study conducted in 2011, people with depression were made to participate in gardening activities for a period of 12 weeks and it was noted that their mental health including depression symptoms improved significantly for a prolonged time.

5 A study on post-operative patients who were exposed to greenery at regular intervals showed a reduced requirement of the analgesic dose, reduced post-surgical complications, and faster recovery.

6 Gardening was found to be an effective rehabilitation tool in patients overcoming alcohol addiction and also enhanced psychosocial well-being and reduced recidivism rates amongst prisoners.

We ourselves experienced the positive effects of gardening on our mental health. The results were astonishing! Our concentration was enhanced and it helped us keep our hands busy. Our neighbours were inspired by the fruits of our gardening effort and this led to the development of a healthy competition with them, which occupied our empty and anxious minds and calmed us down during this stressful pandemic. The healthy interaction with our neighbours during gardening helped us deal with the social isolation and loneliness of the lockdown.

Certain people also explained how gardening helped

them with their eco-anxiety which is basically the feeling of not being able to contribute to the environment's well-being.

We would like to conclude that gardening has helped people get through this crisis and come out of the dark places in their minds. It has acted as a healthy coping mechanism during the pandemic. We would like to encourage more people to get into gardening as time and activity in nature have given full-spectrum sensory experience!



-J M Srushti, Aarti Krishnan, Janhavi Bhargava
(III PharmD)



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Kabasura Kudineer – A review of its composition and benefits

According to the World Health Organization, conventional medicines are still used by 80% of the world's population. Overpopulation, scarcity of pharmaceuticals, expensive treatment alternatives, bad effects of counterfeit drugs, and drug resistance are all linked to the widespread use of phytoconstituents for a wide range of human diseases in underdeveloped countries. The limits of several useful medications, such as aspirin, phenylbutazone, and indomethacin, have necessitated the development of novel and safer treatments. Antibiotic resistance rises as a result of new antibiotics being developed, leading to the development of other chronic diseases. WHO has recommended that herbal remedies be used as the major source of healthcare in a number of nations, including India (Meshram GG et al., 2016).

Traditional Systems of Medicine such as Ayurveda, Siddha, Unani, Homeopathy, Yoga, and Naturopathy are used to treat a variety of ailments in India. Plant-based products are becoming more popular in industrialised countries, owing to changes in lifestyle and the current population's inability to purchase allopathic care. The philosophy of Ayurvedic medicine is centred on the utilisation of plant-based compounds, special diets, and other unique health routines. The increased preference for traditional treatments is owing to financial and time constraints (Senthilkumar CS et al., 2020).

COVID-19 and influenza (Flu) are both infectious respiratory infections caused by distinct viruses. Infection with a novel coronavirus (named SARS-CoV-2) causes COVID-19, while influenza is caused by infection with influenza viruses (Bchethnia M et al., 2020).

COVID-19 appears to be more contagious than flu and can cause more serious complications in certain people. It may also take longer for patients to develop symptoms, and they may be contagious for an extended period of time. COVID-19 has been linked to a wide spectrum of symptoms, from minor aches and pains to serious sickness. Symptoms might emerge anywhere from 2 to 14 days after being exposed to the virus. Symptoms might range from moderate to severe. The symptoms are

COVID 19 has drawn interest from researchers all around the world, but there isn't a lot of research on how to treat it with organic items. It was an airway disorder-related communicable disease that resulted in acute respiratory distress syndrome and severe pneumonia. However, no specific treatment has been demonstrated. There is an immediate need for coronavirus prevention and treatment. Organic compounds were shown to have a variety of biological functions as well as antiviral characteristics. In silico screening was performed utilising biscoclaurine, amentoflavone, myricetin, norreticuline, and licoricidin, 30 phyto-compounds from diverse plants that had antiviral activity against coronavirus.

Siddha, one of the oldest traditional systems of medicine, started in Tamil Nadu, in the southern region of India. Siddha medicines are categorised as external or internal depending on how they are consumed, and they are further subdivided into 32 types based on their shape, durability, application technique, and other factors. The Indian government recommends two internal medicines to treat viral infections namely Kabasura Kudineer chooranam (for swine flu) and Nilavembu Kudineer chooranam (for chikunguniya and dengue) (Mekala P et al., 2020)

Both were recommended to reduce febrile episodes during an earlier outbreak of dengue, chikungunya, and swine flu in Tamil Nadu. The current global epidemic has heightened public awareness about the Kabasura Kudineer in Tamil Nadu. As a result, gaining a better knowledge of people's attitudes on the use of Kabasura Kudineer will aid in raising immunity. (Pitchiah Kumar M et al., 2019)

Kabasura kudineer not only treats viral infections but also helps to treat bacterial infections. It also aids in the treatment of lung inflammation and digestive issues. It not only treats viral infections but also helps to treat bacterial infections. It also aids in the treatment of lung inflammation and digestive issues. Allopathic medicine was more expensive than kabasura kudineer. Despite the government's efforts to develop many vaccines and treatments, kabasura kudineer may be recommended as a home remedy to avert major sickness. The government began using nilavembu kudineer to prevent dengue and chikungunya virus infections, and kabasura kudineer can be used to prevent covid-19 infection (Shanmugavelu M, 2014).



- Anusha M

M. Pharm., (Pharmacognosy)
Alumni (2019-2021 batch)

HEALTHY RECIPE

Pirandai Chutney

Pirandai commonly called **Vajravalli** (Vajram means diamond, a plant which strengthens the body like a diamond) in Tamil is a miracle plant with a lot of medicinal properties. As it is rich in calcium, it is mainly used for bone fractures, weak bones (osteoporosis), scurvy, cancer, upset stomach, haemorrhoids, peptic ulcer disease. **Pirandai thuvaial** or chutney is easy to make and taste delicious with hot rice topped with a tsp. of sesame seed oil.

Ingredients

- Pirandai - a cup (cleaned and chopped)
- Urad dal - 3 tablespoon
- Green chilies - 3
- Coriander leaves - $\frac{1}{4}$ cup (cleaned and Chopped)
- Tamarind (small piece)
- Grated coconut - 3 tablespoon
- Salt needed

Course: Side Dish
Cuisine: South Indian

Botanical name: *Cissus quadrangularis*

Vernacular Names

- English: Devil's Backbone
- Sanskrit: Asthisamharaka
- Hindi: Hadjod
- Kannada: Mangarahalli
- Telugu: Nalleru, Nelleratiga, Vajravalli
- Malayalam: Cannalamparanta, Peranta



Prep Time
5 mins

Cooking Time
5 minutes

Total time
10 minutes



Method of Preparations

- First, grease your hands with sesame oil before handling Pirandai as it causes itching. Choose tender stems, scrap or peel the sharp angular edges and discard the nodes and leaves. Wash and cut them into small pieces and keep them aside.
- Heat a tbsp of oil in a kadhai, roast urad dal, green chillies, tamarind, grated coconut, and Pirandai stems separately.
- Allow to cool and grind it with little water
- Pirandai chutney is ready
- Add to hot rice with a tablespoon of sesame oil and enjoy it hot.

- Dr. R. Gowri

M. Pharm., Ph. D., Assistant Professor, Department of Pharmacognosy

Veganism- An alternate way of guilt-free eating!

What is Veganism?

Veganism is a relatively new diet in which there is no involvement of animals, for food, clothing, product testing, entertainment, rituals, and more. One of the fastest-growing lifestyle movements, it has been proven to be a sustainable diet choice. This new diet form has grown several-fold in the past ten years or so and is showing no sign of declining. Even popular athletes like cricketer Virat Kohli, world-famous tennis player Novac Djokovic have adopted a vegan diet.



Why is there a greater shift towards Veganism?

Since the vegan diet is completely plant-based thus there is no involvement of animal cruelty. Furthermore, it helps to contribute towards the conservation of our environment by adopting a more sustainable diet. It also has a number of health benefits:

- Helps reduce cholesterol levels hence the risk of heart diseases significantly even more than the vegetarian diet.
- For those with Type 2 diabetes mellitus, it helps in glycemic control more effectively than vegetarian and non-vegetarian diets.
- Vegans have a better sex life
- Helps boost your mood and energy levels



- Moreover, the most common myth is that a plant-based diet lacks good quality protein which is not true. There are a number of options from which good quality proteins can be obtained; namely tofu, chickpeas, lentils, spirulina, soybeans, etc.

Why More and More are Athletes Moving Towards Vegan Diet?

Here are the following Reasons:

1. Athletes have a lower risk for heart disease: One study suggested that most professional cyclists and runners had coronary plaques. A plant-based diet keeps an athlete's heart strong by reversing plaque.
2. Eating meat exacerbates inflammation, resulting in pain and delay in recovery

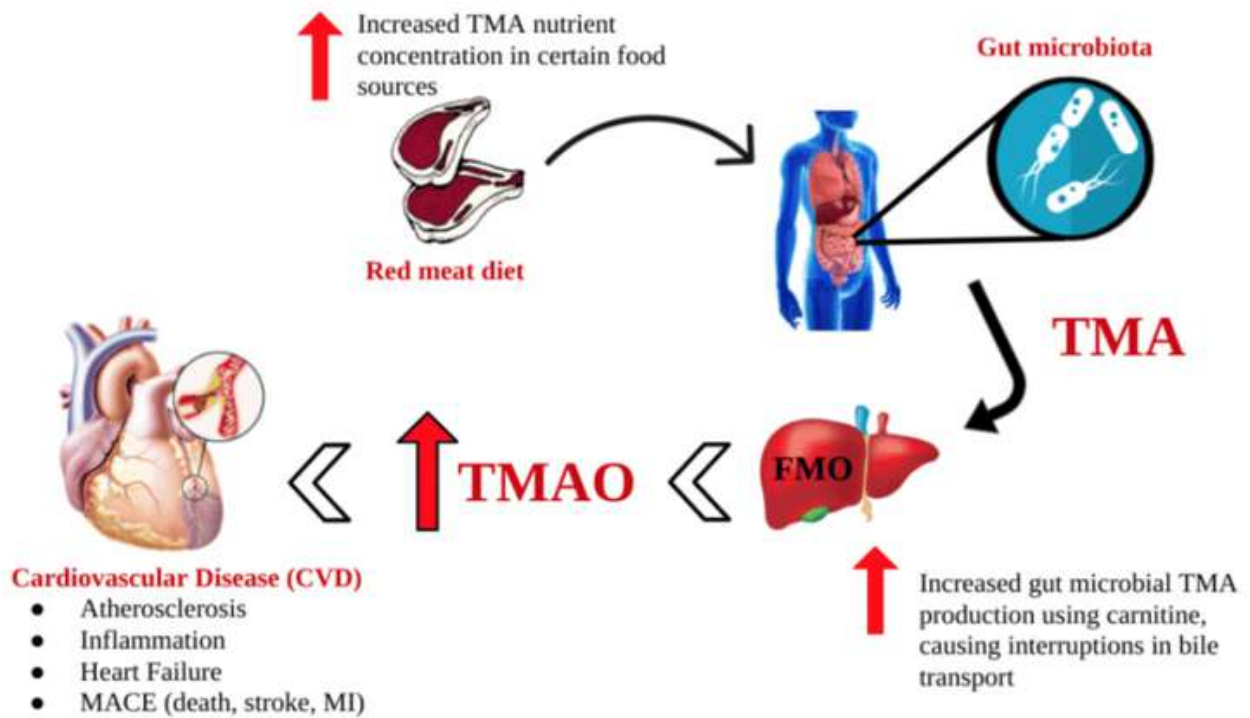
Will I get all the necessary nutrients from plants?

Generally, vegetarian diets include large amounts of cereals, pulses, nuts, fruits, and vegetables. There is a general misconception that a plant-based diet does not provide all the necessary nutrients required for proper growth for the body. With good planning and an understanding of a balanced vegan diet, you can get all the nutrients that your body needs.

In terms of nutrients, vegetarian diets are usually rich in carbohydrates, n-6 fatty acids, dietary fibre, carotenoids, folic acid, vitamins and comparatively low in protein, saturated fat, long-chain n-3 fatty acids, vitamin B 12; vegans may have particularly low intakes of vitamin B 12 and Ca.

- Studies of vegetarians and vegans have shown that they have a relatively low BMI and low plasma cholesterol concentration and higher plasma homocysteine concentrations as compared to non-vegetarians.





Trimethylamine N-oxide (TMAO), trimethylamine(TMA), Flavin-Containing Monooxygenase(FMO)

3. A plant-based diet helps with the greater supply of oxygen to muscles and hence in muscle growth.

4. Vegan diet makes the arteries more flexible and the lumen clearer for smoother passage of blood. For instance, one study found that after eating sausage the arteries got impaired for hours.

5. Plant-based diet helps get more antioxidants, neutralizing free radicals. There is an increased muscle fatigue ness when there are higher levels of free radicals.



Is it trouble-free?

Although a vegan diet sounds promising in terms of better health and conserving our natural environment, it has some challenges. In a country like India, there is a lack of general public awareness due to which many Vegan food-producing companies are sceptical about expanding their reach in India. They fear that their business won't survive in the Indian market. Moreover, it is not cheap and it is difficult to find stores that keep vegan products and there is a lack of professional help who specialize in vegan nutrition.

In terms of health it has challenges too:

- Legumes may increase the risk of a leaky gut.
- Protein from the soybean plant cause disruption of estrogen and thyroid hormones
- There is a higher risk of anaemia since the vegan diet lacks heme iron
- May cause deficiency of vitamin B12

However, there is greater acceptance of veganism amongst Indian athletes and the common public is getting inspired to adapt to it. There is still a lot of research to be done in this field. However, the health benefits outweigh the disadvantages of a vegan diet.



-Anshaj Sharma (III Pharm D)

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Cocos nucifera - The Tree of Life



As a result, pregnant women are not permitted to break open a coconut because doing so is equivalent to killing a living being, and the vibrations from breaking a coconut may harm the fetus in the womb. The hard shell of a coconut is covered by undesired hair like coir, the eyes are covered by hard and sharp coir duplicating our pride, the hard shell donates egoism and selfishness, the sweet water implies human nature, and the white sweet layer denotes the pure soul.

Coconut is ubiquitous throughout Indian culture, regardless of religion. In Hinduism, no puja is complete without coconut and rightly regarded as Kalpavriksha as every portion of it can be used. A coconut tree can live on an average of 70 years to 120 years.

According to astrology, a human's life span is 120 years, hence the Vimsottari Dasa of all the 9 planets will take 120 years to complete. As a result, the coconut tree becomes human-like. A coconut tree can absorb any kind of water from sweet groundwater too salty seawater, but the fruit is always sweet. This is comparable to the life of a monk or a mother because they are the only ones who give good things to their followers and children.

During puja, one break opens the coconut to symbolize ego, selfishness, and greed to reveal one's soul to the god. Lord Shiva is represented by the coconut, which has three eyes. This is why, in each ceremony, coconut is used as a witness to show that it takes place in the presence of Shiva. According to the legend, Vishvamitra was moved after witnessing a Hindu practice involving animal or human sacrifice. He introduced splitting open a coconut, which resembles a life form to halt such life sacrifices.

DID YOU KNOW?

Do you have a stressed life?

Several pieces of research have suggested that consuming a Magnesium-rich diet might aid in stress relief. Its acts on the parasympathetic nervous system, which keeps you calm and relaxed. Foods rich in magnesium are

- Spinach
- Almond
- Whole grains
- Tofu
- Fatty fish like salmon, mackerel, and halibut
- Avocado

Breaking coconuts has been a part of Hindu rituals since then.

Coconuts, also known as "The Tree of Life" in the Philippines and "The Tree of a Thousand Usage" in the Malaya language have a long history of essential uses around the world. The coconut palm is grown in over 80 nations throughout the world, but it thrives in the tropics particularly in the Philippines and Indonesia followed by India and Brazil, which together produce around 80% of the world's coconuts.



- They've been used to make toys, brooms, and lime by burning them to ash.
- The ribs on the leaves have also been used to make toothpicks and satay skewers.
- Coconut tree trunks are utilized in the construction of buildings and boats, as well as bridges, furniture, drums, and canoes.
- Coir is a fibre found on the outside of the husk that is used in ropes, doormats, potting compost, mattress filling, brushes, and other products.
- In Brazil, husk fibres are used to make a tea that is supposed to help with inflammatory illnesses.
- The Coconut Husk and Shell – the outer part of the coconut have been used for buffing floors, fuel, charcoal, handicrafts, buttons, drinking vessels, sponges, musical instruments, theatrical sound effects, burned to ward off mosquitoes and the husk is used in cosmetics as a skin exfoliant
- Bird feeders, a shelter for little birds and rodents.

Coconut Tree Benefits

Coconut has a variety of therapeutic uses and nutritional value which makes it one of the superfoods of India. No portion of the tree goes to waste because every layer has or has had a use somewhere in the world, earning it the label of "tree of life."

- The roots have been used to create pigments, toothbrushes, and mouthwash.
- Coconut leaves were once utilised as a roofing material and are now used to wrap rice, cook and store food.

Benefits of Coconut water

- When coupled with olive oil and garlic, it relieves earaches
- Aids in the prevention of Alzheimer's disease
- Calcium and magnesium absorption is improved, resulting in stronger bones

- During menopause, it helps to balance female hormones and reduces hot flushes and vaginal dryness



Benefits of Coconut Oil

- Coconut Oil is a type of vegetable oil used for medicinal and nutritional purposes.
- Acid reflux is relieved and gallbladder disease is alleviated
- Blood sugar levels and insulin production are stabilized
- Anti-viral agent
- Protect against colon and breasts cancers
- Aids in the prevention of gastrointestinal problems
- Reduces pain and inflammation in inflammatory disorders like arthritis
- Strengthen the liver
- Relieves the symptoms of Chronic Fatigue Syndrome.

- **Anusha M**

M. Pharm., (Pharmacognosy) Alumni (2019-2021 batch)

Vāṭikā In Vicinity



Scientific Name: *Samanea saman* (Jacq.). Merr

Synonyms:

Albizia saman (Jacq.) F.Muell,
Inga saman (Jacq.) Wild,
Pithecellobium saman (Jacq.)
Benth, *Mimosa saman* Jacq,

Vernacular names:

English: Monkey Pod, Rain tree.
Kannada: Male mara
Tamil: Thoongumanji mara
Telugu: Thella turai
Bengali: Rendi koroi

Geographical source:

Central America, Northern South America, Fiji, Brazil, Peru, Carrabian island etc

Family: Fabaceae

Sub family: Caesalpinioideae

Cultivation:

Rain Tree is a multi-purpose tree, often cultivated for its timber, medicine, and gums. It can grow in heavy clay and nutritionally poor soils, also in varying very acidic/alkaline and saline soils. It can grow in semi-shade or no shade region. It prefers dry moist or wet soil and can effectively tolerate drought.

Morphological characteristics:

It has a distinctive umbrella-shaped crown, typically broad and domed, reaches a height of 15–25 m (49–82 ft), leaves are bipinnate with 3-9 pairs of pinnae each with 2-10 pairs of leaflets, oblique-ovate to elliptical or subrhomboid, Inflorescence: Solitary globose heads.

Flowers: rose-coloured,

Fruits: Pods large, Black thick.

Chemical constituents: Epilupeol, Lupeol, Lupenone, α - Spinasterol, α -Spinasterone, Unsaturated triglycerides, etc

Medicinal uses:

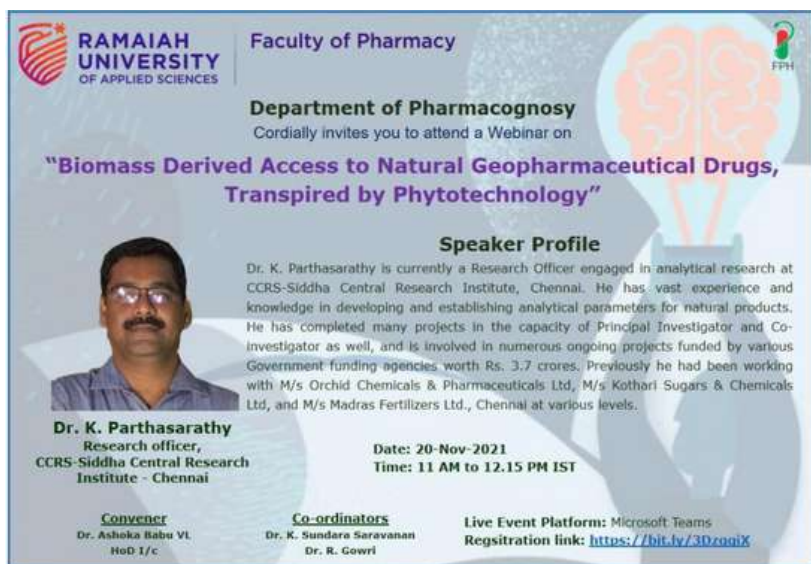
- A crude aqueous or alcoholic extract of the leaves is observed to have an inhibiting effect on *Mycobacterium tuberculosis*.
- A decoction of the inner bark and fresh leaves is used to treat diarrhoea, whereas fruit decoction is used as a CNS-sedative.
- A small section of the bark is brewed to treat stomachache.
- The alkaloid fraction of the leaves is effective on the CNS and PNS.
- An infusion of the leaves is used as a laxative. The seeds are used as chewable for treating sore throat.

Reference:

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DEPARTMENTAL ACTIVITIES

Webinar



RAMAIAH UNIVERSITY
OF APPLIED SCIENCES

Faculty of Pharmacy

Department of Pharmacognosy
Cordially invites you to attend a Webinar on

"Biomass Derived Access to Natural Geopharmaceutical Drugs, Transpired by Phytotechnology"

Speaker Profile

Dr. K. Parthasarathy is currently a Research Officer engaged in analytical research at CCRS-Siddha Central Research Institute, Chennai. He has vast experience and knowledge in developing and establishing analytical parameters for natural products. He has completed many projects in the capacity of Principal Investigator and Co-investigator as well, and is involved in numerous ongoing projects funded by various Government funding agencies worth Rs. 3.7 crores. Previously he had been working with M/s Orchid Chemicals & Pharmaceuticals Ltd, M/s Kothari Sugars & Chemicals Ltd, and M/s Madras Fertilizers Ltd., Chennai at various levels.

Dr. K. Parthasarathy
Research officer,
CCRS-Siddha Central Research
Institute - Chennai

Date: 20-Nov-2021
Time: 11 AM to 12.15 PM IST

Convener
Dr. Ashoka Babu VL
HoD I/c

Co-ordinators
Dr. K. Sundara Saravanan
Dr. R. Gowri

Live Event Platform: Microsoft Teams
Registration link: <https://bit.ly/3DzqqiX>

Dr. K. Parthasarathy, Research officer, CCRS-Siddha Central Research Institute - Chennai delivered a talk on "Biomass Derived Access to Natural Geopharmaceutical Drugs, Transpired by Phytotechnology" in a webinar on 20-November-2021 emphasizing drugs derived from mineral and marine sources and their benefits in the healthcare sector.

A virtual webinar was organized on 26-Feb-2021 in collaboration with Institution's Innovation Council. Mr Shankarnarayanan, Co-founder and Director, ZeusHygia Lifesciences Private Ltd, Hyderabad shared his experience as a first-generation entrepreneur. Around 150 students participated in the webinar and were motivated by the entrepreneur.



RAMAIAH UNIVERSITY
OF APPLIED SCIENCES

Faculty of Pharmacy

Department of Pharmacognosy & Institution's Innovation Council
Invites for a session on

"My Entrepreneurial Journey"

Speaker Profile

Mr. Shankarnarayanan, a first generation entrepreneur co-founded ZeusHygia Life-sciences. He has been instrumental in adhering to the company mission of exploring unexplored Indian herbal extracts and bringing out scientifically proven therapeutic benefits to the public. Shankar has been a key force in guiding the Zeus team with product ideas, portfolio selection and managing the technical operations. Shankar, a pharma post graduate comes with strong subject expertise and experience of 18 years in the nutraceutical research space. He started his career with well-known Indian Pharma major Sun Pharma and later was part of Cipla. His passion for nutraceuticals ignited during the long association with Omniactive health technologies, one of the global leaders in nutraceutical research. He has been a key contributor for various development projects with Omniactive during his career span. He has published several papers in peer reviewed international journals and presented his research work in several national and international conferences. He has more than 10 patent applications filed to his credit.

Mr. Shankarnarayanan
Co-founder and Director
ZeusHygia LifeSciences Private Ltd
Technocrats Industrial Estate
Balanagar, Hyderabad
info@zeushygia.com

Date: 26-Feb-2021
Time: 10:45 AM to 12 PM

Convener
Dr. S. Bharath
Dean, FPH

Co-ordinators
Dr. Ashoka babu VL
Dr. K. Sundara Saravanan

Live Event Platform: Microsoft Teams
Event link:

Field Visit



A field visit was organized by the Department on 12-March-2021 to the “Medicinal Plant Conservation Area” (MPCA), Savanadurga. As an initiative measure, B Pharm VII Semester students and postgraduate students of the Department of Pharmacognosy were involved in this field visit. A total number of 41 students were part of this field visit. The visit was planned with an intention to expose the students’ community to understand the natural habitat of various wild plant species and also to impart the significance of the conservation of medicinal plants. Plant specimen for herbarium preparation was also collected for future reference.

Mr Muthaiah, the person in charge of MPCA addressed the participants regarding MPCA, its total area coverage, number of species available, etc.,



Field Visit



After his formal address, he took into the MPCA which is spread across 250 Hectares. The journey started with the identification of the two worldwide personalities, Charaka, the physician, and Sushruta, the Surgeon. This was followed by locating the wild species and a discussion on the same. Mr Muthaiah discussed the available species correlating to its history, properties, etc.,

Students were very much interested in listening to the history of those species and this led to much more interaction with the guide.

All the participants enjoyed and were wholeheartedly involved in exploring the plant species as learning science from first-hand information and through observation makes it interesting, unforgettable, and life-long understanding.

Relishing in mind the time spent and knowledge gathered during this visit, we travelled back towards the Faculty of Pharmacy.



RECENT RESEARCH PUBLICATIONS



International Journal of Botany Studies
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Volume 6, Issue 4, 2021, Page No. 421-429

Pharmacognostical and phytochemical studies on roots of *Smilax perfoliata* – Alternate source for the ayurvedic drug chopachinee

R Gowri¹, Manoj Kumar D²

¹ Assistant Professor, Department of Pharmacognosy, M S Ramaiah University of Applied Sciences, Bangalore, Karnataka, India

² PG Scholar, Department of Pharmacognosy, M S Ramaiah University of Applied Sciences, Bangalore, Karnataka, India

Manoj Kumar et al. *Futur J Pharm Sci* (2021) 7:173
<https://doi.org/10.1186/s43094-021-00319-y>

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RESEARCH

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Pharmacognostical evaluation and anti-convulsant property of *Annona reticulata* Linn. (Annonaceae) root

S. Manoj Kumar¹, Mohammad Azamthulla² and Kamatchi Sundara Saravanan^{1*}

ISSN 0975-2366

DOI: <https://doi.org/10.31838/ijpr/2021.13.01.541>

Research Article

Maerua oblongifolia (Forsk.) A. Rich. Extract Loaded Floating Microballoons: Advance Therapy to Treat and Manage Gastric Ulcer

RANJITHA M¹, UMA¹, NITHYASHREE RS², SHOUVIK KUMAR D², SASIPRIYA SVS³, TANMOY GHOSH², KAMATCHI SUNDARA SARAVANAN⁴, MOHAMMAD AZAMTHULLA^{1*}

¹Department of Pharmacology, ²Department of Pharmaceutics,

³Department of Pharmaceutical Chemistry, ⁴Department of Pharmacognosy, Faculty of Pharmacy, M. S. Ramaiah University of Applied Sciences, MSR Nagar, Bangalore - 560 054, Karnataka, India

Tamarindus indica. Linn leaves ameliorates experimental induced heart failure in Wistar rats

Hajira Banu Haroon , Nausheen Ahmed, Manoj Kumar Sampath, Supritha Dinesh, Mohammed Azamthulla, Gowri Radhakrishnan and Swathi Govindappa

From the journal *Journal of Basic and Clinical Physiology and Pharmacology*

<https://doi.org/10.1515/jbcpp-2020-0338>

BOOK CHAPTERS

K. Sundara Saravanan Co-authored a chapter “Phytoconstituents as Lead Compounds for Anti-Dengue Drug Discovery” in “Antiviral Drug Discovery and Development” by “Springer Singapore””, 2021, DOI: 10.1007/978-981-16-0267-2

CONFERENCE PRESENTATIONS

Anusha P / Ashoka Babu VL. Isolation of Endophytic Fungi from *Eclipta alba* L HASSK Leaves. Indian Society for Study of Xenobiotics (SSX) virtual conference, 14-17 July 2021, Bangalore

Enugurthi HariKrishna / K. Sundara Saravanan. Pharmacognostical, Phytochemical and in vitro anti-inflammatory activity studies on *Ziziphus rugosa* Lam. (Rhamnaceae) leaf, 8th International Congress of Society for Ethnopharmacology, 2021, 27-29 August 2021, Pune

Alumni Note

Hello readers!

I'm Manoj Kumar S. currently working as a Junior Associate Scientific Writer in Indegene Enterprise Medical for the past 1 year. I am part of a group that develops scientifically accurate content for super-speciality doctors of different therapy areas like neurology, respiratory, ENT, and rheumatology.

I graduated from M S Ramaiah University of Applied Sciences, Faculty of Pharmacy, with a Master's degree in Pharmacognosy in the year 2020, after completing my Bachelor's in Pharmacy from the same university.

Going back into the past, when I decided to pursue a Master's degree, the first thought was obviously, which department do I choose? I was aware that I can weigh my decision based on the trend, scope, opportunity, or personal interest. Out of all other fields, the profound interest that I had in the subject of Pharmacognosy during B. Pharm influenced my decision. Later, that interest turned into passion and perseverance which successfully helped in completing my Master's degree in the Department of Pharmacognosy.

The beginning of a new journey was exciting, eager to gain knowledge and develop skills required to build my career ahead. The curriculum included a lot of new concepts and information that provided insight into the field of pharmacognosy. The syllabus made us fundamentally strong which helped me to understand the advanced topics efficiently. I was always looking forward to the practical classes, as it was fun, informative, and was structured in a way to make us understand the subject better. The long duration of practical classes helped us in performing challenging procedures and learning new techniques possible. The pivotal assistance given by the professors of the department played a significant role. Various qualities of professors such as effective teaching style, passion, knowledge of the subject, sharing not only the knowledge but also the experience with it, resourceful, respecting the students, going beyond the call of duty, etc., made the whole journey of postgraduation complete with a lot of memories to look back.

I feel that the academic curriculum structure which included assignments, seminars, and project work (Although I was not fond of these concepts at that time) has helped me immensely in standing out among the co-workers in the company. I am sure that I have not yet fully utilized the knowledge, skill set, and experience gained in my postgraduation. Looking forward to elevating my career with the knowledge and experience obtained in M-Pharm.

Thank you,

Manoj Kumar S
Junior Associate Scientific Writer,
Indegene Enterprise Medical

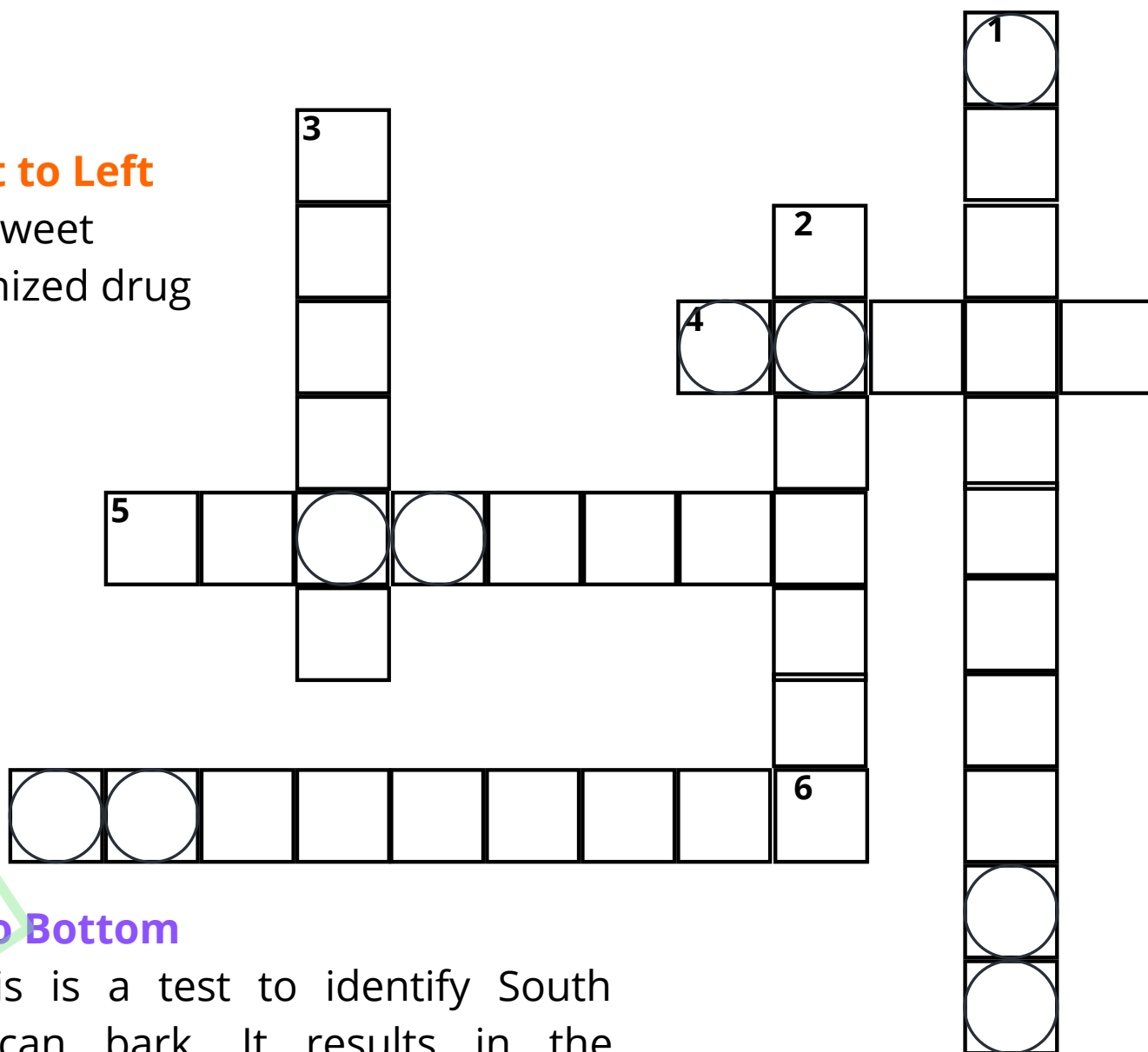


IT'S PUZZLE TIME!

I am a Famous Poly Phenolic Compound. Identify Me!

Right to Left

6. A sweet organized drug



Top to Bottom

1. This is a test to identify South American bark. It results in the formation of an Emerald green colour. Name the test.

2. Dental Analgesic

3. Possess a funnel-shaped flower, used as Mydriatic

Left to right

4. I am a shape of a bark

5. Test to identify a CNS Stimulant drug

* **Link for Submitting Answer:**

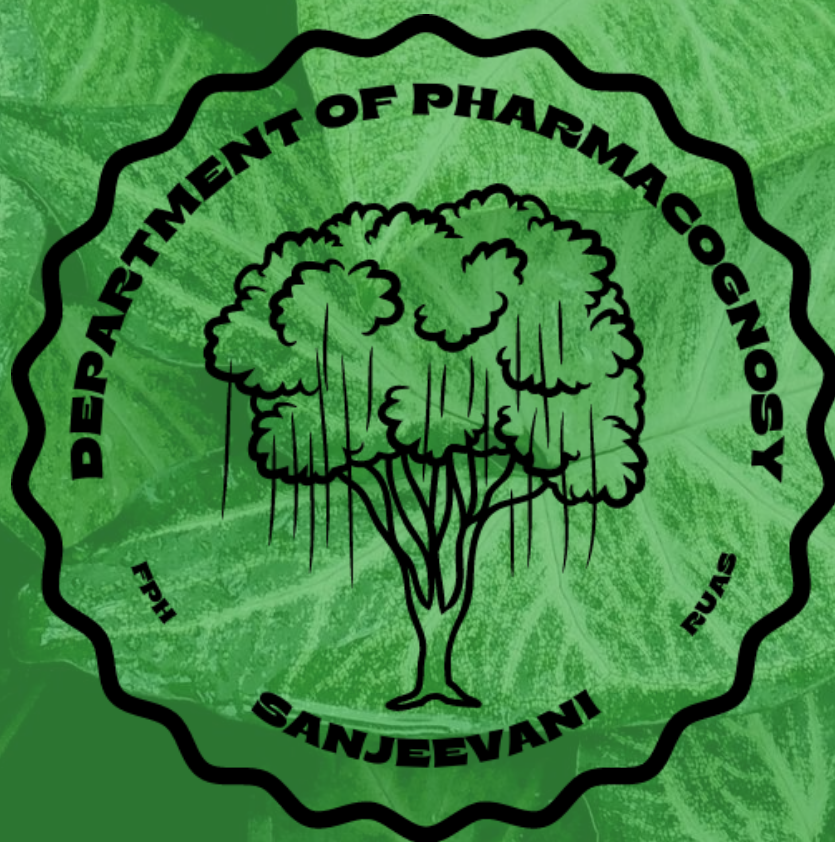
<https://forms.gle/taUyzk1s6vRLaarGA>

Exciting prizes to be won!

E-certificates will be provided for all the participants



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