

The COVID pandemic

A **pandemic** (from Greek *pan*, "all" and *demos*, "people") is an epidemic of an infectious disease that has spread across a large region, like multiple continents or worldwide, affecting a substantial number of people.

Beginning in December 2019, in the region of Wuhan, China, a new ("novel") coronavirus began appearing in human beings. It has been named Covid-19, a shortened form of "coronavirus disease of 2019." the structure of COVID-19 (SARS-CoV-2) consists of a spike protein (S), hemagglutinin-esterase dimer (HE), a membrane glycoprotein (M), an envelope protein (E) a nucleocapsid protein (N) and

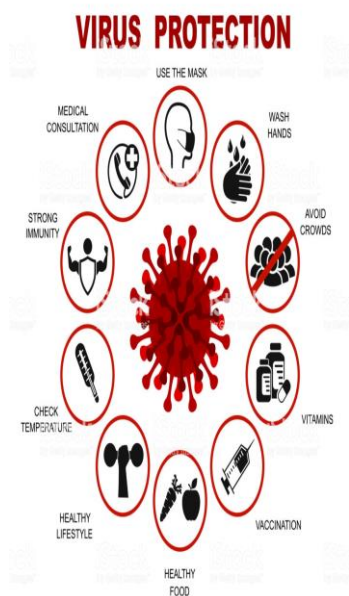
RNA.

The disease rapidly spread around the world, posing enormous health, economic, environmental and social challenges to the entire human population severely disrupting the global economy. Amongst this chaos there was also a positive effect of COVID 19 on revival of environment.

Apart from following distancing and sanitization measures one has to Self-monitor for signs of illness for an early detection.

Research on vaccine production is underway

Dr. P. Usha Shri



Immune boosters



Healthy immune function starts with what you feed your body. Certain plants can support your immune system on a long-term basis. Plant foods tend to be anti-inflammatory, so consuming lots of fruits, vegetables and whole grains is an important aspect of good immune function. Plants provide plenty of fibre, which helps

feed the good bacteria in your gut and regularly flush your GI tract of harmful bacteria. Studies have linked obesity with impaired immune. So a plant-based diet can support immune function by also helping you maintain a healthy weight.

S. Kedarini

Terrarium

A **terrarium** (plural: **terraria** or **terrariums**) is usually a glass container containing soil and plants. Terraria are often kept as decorative or ornamental items. Terraria create a unique environment for plant growth, as the transparent walls allow for both heat and light to enter the terrarium

Terrariums allow for easy, low-maintenance, indoor gardening. They bring nature inside which is a considerable benefit for apartment dwellers who might not have access to a yard or garden and even business offices that lack

windows.

Indoors plants provide man health and wellness benefits to the people that are in the same vicinity. They are known to reduce stress, lower heart rate, and bring blood pressure levels to more normal ranges. Exposure to plants is also linked to decreased anger, a fall in tension and anxiety, a drop in depression, and increased energy levels.

A sale of terrariums made by our students will be organized during this academic year. All the plant lovers can avail this facility.

Dr. P. Usha Shri



Alumni- heart-to-heart

My personal view on education is that "knowledge is more important than getting a degree". It has been a great experience throughout three years of my graduation. Botany Department of St. Ann's has got very experienced faculty members, who've inspired us every time to aspire more and achieve more. All the lectures have provided guidance. We've got the best labs with all the equipment required which were maintained so well and neat.

I'm what I'm today is because of the curriculum, the teaching methodology adopted by the lecturers. All thanks to my HOD- Mrs. Margaret ma'am and all other madams Mrs. Angela, Mrs. Usha Shri, Mrs. Neeraja, and Mrs. Roja and lab attender Mrs. Stella aunty for all the immense support & guidance throughout.

Ms. K. Harsha Deepthi

Our commitment - our success



Styrene – A Mephitic

The calamitous leak of a destructive chemical killed many people and left about hundreds sick in Vizag, Andhra Pradesh which startled many, during this COVID – 19 pandemic.

This unexpected man made chemical disaster led to the loss of many lives who were residents of Gopalapatnam which is near to LG Polymer plant, as poisonous styrene gas

streaked through the area at night. About 1000 were exposed directly, this situation was assisted by NDRF for evacuation and neutralizing the chemical situation.

The Styrene vapors not only affected humans and animals but also plants. The CSIR – National Environment Engineering Research Institute (CSIR- NEERI) team which assessed the impact of styrene

vapor leak recommended people not to consume standing crops of vegetables and fruits within 3km radius of LG Polymers Plant. The team also recommended not to source fodder for livestock within the perimeter.

This gas leak has been a toxic killer in which the exact cause at the facility has yet to be determined.

Mrs. S. Roja

Achievements of the Department

Research Award – SARA, Consultancy - TCS to Dr. P. Usha Shri, for content creation in the field of Botany – Plant Sciences from 2019 to 2022,

Ms. Kedarini, Member of BOS, St. Francis, Begumpet.

Online courses attended - 2 Seminars / Webinars attended – 37, Student's

research project - 15
FDP – 6, Workshops – 1,
Publications international – 2
presentations – 1,

MOU – Atlantis Pytotech, Param

“Editorial Board”

Dr. P. Usha Shri, Mrs. P. V. Neeraja
Mrs. Roja, Mrs. Kedarini, Mrs. Anitha
MS. Zoha – III NCB

science and Technologies, SETWIN

Innovations

Garden sale - *Ann Garden fresh*, Sale of herbal products by COC students, Nursery plants sale



Botany - Future Prospects

BOTANY, ‘the science of plants,’ offers innumerable career prospects for both graduates and postgraduates. The most eminent job sectors would include working as Professors in educational and research institutes, as a Forensic Botanist, Pharmaceutical companies and writing medical content, Farming Consultants, Plant Pathologists and

Molecular Biologists, Ecologists by varied organisations, ranging from multi-nationals to research and development institutes. They are also required by various botanical gardens and plant museums as plant health specialists. Hydroponics and plant tissue culture are in high demand. Furthermore, a Botanist is also required to

tackle the problems of forest agriculture, agro tourism, artificial environments and many other research related areas. In terms of further studies, a Botany graduate can opt for B. Ed or M.Sc. degrees, proceeding further to doctoral and post-doctoral levels.

MS. Zoha III NCB

Department 2019-2020



Mrs. P.V. Neeraja

We thank our Principal for her constant support and encouragement

Medicinal Plants & Home Remedies

Trachyspermum ammi –Carom/Ajwain

Carom seeds are incredibly nutritious, being rich in fiber, antioxidants and other vitamins and minerals. These seeds have powerful antibacterial and antifungal properties. Carom seeds are commonly used as household remedy for digestive issues. This may prevent cough and improve airflow to the lungs and reduce inflammation in the body



Allium Sativa - Garlic

Garlic is one of the most commonly used ingredients across the globe. It is universally recognized for its health promoting benefits such as lowering blood pressure, fighting heart diseases, elimination of toxins. Garlic oil is antibiotic in nature and can be used to treat cold and cough and also used for relieving ear infection. “Allium” the active compound of garlic helps reduces tooth pain and inflammation



Mrs. Anitha
