

SRR & CVR Government Degree College (A)

An Autonomous & ISO 9001: 2015 Certified Institution:: Ranked by NIRF in 101-150 band at NIRF-2020 & 151-200 band in NIRF 2019 NAAC accredited Institution with grade B+ with C.G.P.A 2.6 during March, 2017

Machavaram, Vijayawada, Krishna District, AP-520 004

BEST PRACTICES



DEPARTMENT OF BOTANY

CRITERIA VII - BEST PRACTICES

DEPARTMENT OF BOTANY

Best Practice - I

Title of the practice : Medicinal Plants Drive

The Context that required the initiation of the practice:

Herbal medicine is eco-friendly, bio-friendly, cost-effective and relatively safe and moved to the mainstream with increased research in the field of traditional medicine. Medicinal plants are an integral component of alternative medical care.

For small health issues which people face daily like common cold, cough, fever, sore throat, headache, indigestion problems people consume herbal medicine. For maintaining good health herbal products are being used. For skin care and beauty care also plant products have been used since ages.

Medicinal plants will be useful for Maternal and Child health care, as essential drugs, in food and nutrition, for common illnesses and injury, for endemic infectious diseases, mental health and oral health.

World is facing a pandemic and people are facing a lot of stress and emotional trauma and daily being affected with a lot of health problems. So based on all the situations the world is currently facing, being aware about commonly available medicinal plants in our surroundings, growing medicinal plants, knowing their medicinal and curative properties is a must. The Department of Botany decided to bring awareness to students, faculty, and common people by conducting Medicinal plants drive, as a best practice from 2021-2022.

Objectives of the Practice:

- Creating awareness on the significance of Medicinal plants and their uses in students and faculty.
- Making Public aware about the significance of medicinal plants
- Educating the people about the need of conservation of endangered medicinal Plants
- Increasing the use of medicinal plant products as herbal medicine is much safer and won't cause any side effects.
- Increasing the herbal medicine usage useful for Maternal and Child health care, as essential drugs, in food and nutrition, for common illnesses and injury, for endemic infectious diseases, mental health and oral health.

The practice :

The practice started from the 2021-2022 academic year . Students distributed Medicinal plants information and their uses in the form of Pamphlets to the public and created awareness among them about the role of these medicinal plants in curing normal ailments in daily life .

Students were divided into batches and visited all the departments in the college premises and Machavaram surrounding areas and distributed Plant seeds material , herbs, pamphlets and explained to the people about the significance of those medicinal plants and the need for the conservation of plants .

Students Brought awareness on medicinal uses especially for Maternal and Child health care, as essential drugs, in food and nutrition, for common illnesses and injury, endemic infectious diseases, mental health and oral health. Students organized small stalls in College premises with the collected plant material and seeds and explained to the college students about the significance of medicinal plants .

Students took feedback from the public at the same time in Machavaram areas on Medicinal and aromatic plants and on this Medicinal plants drive and collected their suggestions and inputs

Obstacles : No Specific Constraints or obstacles observed in implementing this practice

Impact of the Practice : The drive was received well by the faculty and students in the college and public from areas in Machavaram. Students and faculty , Public got much information about the significance of plants . College Students , faculty and Machavaram area people appreciated this effort from students and gave suggestions .

Evidence of the Practice: Link below is the evidence of the practice.



ఔషధ మొక్కలపై అవగాహన

మధురానగర్(విజయవాడ సెంట్రల్):ఔషధ మొక్కలపై అవగాహన పెంచుకోవటంతో పాటు విరివిగా పెంచాల్సిన అవసరం ఎంతైనా ఉందని ఎస్ఆర్ఆర్ అండ్ సీవీఆర్ ప్రభుత్వ డిగ్రీ కళాశాల ప్రిన్సిపాల్ డాక్టర్ కె. భాగ్యలక్ష్మి తెలిపారు. మాచవరం ఎస్ఆర్ఆర్ అండ్ సీవీఆర్ ప్రభుత్వ డిగ్రీ కళాశాలలో వృక్ష శాస్త్ర విభాగం ఆధ్వర్యంగా ఔషధ మొక్కలు గురించి

సోమవారం అవగాహన కల్పించారు. ఈ సందర్భంగా ఆమె మాట్లాడుతూ ఏయే మొక్కలును ఏయే రోగాలకు వినియోగించవచ్చో ప్రజల్లో అవగాహన కల్పిస్తున్నామని చెప్పారు. అనంతరం మాచవరం పుర వీధుల్లో తిరుగుతూ ఔషధ మొక్కల గురించి అవగాహన కల్పించటంతో పాటు విత్తనాలు పంపిణీ చేశారు. కార్యక్రమంలో వృక్షశాస్త్ర విభాగాధిపతి ఎంఎస్ జి.స్వప్న అధ్యాపకులు నాగపద్మావతి, డాక్టర్ సీహెచ్ శ్రీనివాసరెడ్డి పాల్గొన్నారు.

Best Practice - II

Title of the practice : Herbal Garden

The Context that required the initiation of the practice:

Herbal medicine is eco-friendly, bio-friendly, cost-effective and relatively safe and moved to the mainstream with increased research in the field of traditional medicine. Medicinal plants are an integral component of alternative medical care.

For small health issues which people face daily like common cold, cough , fever, sore throat, headache, indigestion problems people consume herbal medicine . For maintaining good health herbal products are being used . For skin care and beauty care also plant products have been used since ages .

For nearly 3 years COVID-19 has been a rapidly changing and evolving situation. An integrated therapy of modern medicine and ayurveda has benefited Covid-19 patients with faster recovery in mild-moderate Covid-19 according to a study by the Directorate of AYUSH.

Medicinal plants will be useful for Maternal and Child health care, as essential drugs, in food and nutrition, for common illnesses and injury, for endemic infectious diseases, mental health and oral health.

So based on all the situations the world is currently facing, growing medicinal plants , preparing herbal medicine , knowing their medicinal properties , and curative properties is compulsory . The Department of Botany decided to grow and conserve medicinal plants and bring awareness to the student community, Faculty and also Public as a best practice from 20021- 2022.

Objectives of the Practice:

- Creating awareness on Medicinal uses of plants in students and faculty
- Making Public aware about the significance of medicinal plants
- Conservation of Endangered Medicinal Plants
- Increasing the use of medicinal plant products as over usage of drugs causes many side effects and herbal medicine is safer and won't cause any side effects.
- Increasing the herbal medicine usage for Maternal and Child health care, as essential drugs, in food and nutrition, for common illnesses and injury, for endemic infectious diseases, mental health and oral health.
- Preparation of Ayurvedic medicine in small quantities and supplying
- Establishment of a small scale manufacturing unit in the long run with students and making them Entrepreneurs

The practice :

The practice was planned and initiated from the 2021-2022 academic year . Students collected several easily available Medicinal plants and seeds and planted them in some area of our Department Botanical garden .

In the Botanical garden some area was exclusively reserved for Medicinal plants . The plot was prepared , plowed and some medicinal plants seeds were sown and plantlets were planted . Work was divided among students for watering and maintenance of the herbal garden .

Obstacles : Conservation and Maintenance of the saplings and seeds is a main challenge along with some financial constraints.

Impact of the Practice : Impact yet to see as the herbal garden is in its initial stages and we expect the herbal garden products will be consumed well by faculty and students in the college and hopefully public . We hope Students,faculty and Public will start to consume herbal medicine for simple ailments and improve their general health and resistance in a safer way and know the significance and need of conserving these plants in their houses .

Evidence of the Practice: Link below is the evidence of the practice.



Best Practice - III

Title of the practice : QR Tagging

The Context that required the initiation of the practice: In this digital world , This work is an effort to create a means to establish environmental sustainability through QR code tagging to trees. With increased usage of smartphones, tablets and the availability of these devices at a lower cost motivated us to adopt QR code tagging for obtaining detailed information about the flora collection available in our college.

QR Codes are 2D barcodes occupying little space that are easily scannable via a smartphone. They are already being used in Botanical gardens, Parks and Nature trails . QR Codes can link detailed information like text, website URL, an image, or a video. Hence, they can be easily placed on a small size sapling to a big tree . We can also add design to QR Codes by adding a background color or an image and show how a plant looks when it blooms and can then print this QR Code on the tag placed on every plant in the College .

The Department of Botany at the SRR and CVR Govt Degree College has started tagging trees in the College Campus area with QR code from 2019-2020 with the help of students and faculty and now wishes to extend the initiative by completely tagging the trees in and beyond the campus like machavaram area. It is an effort to save the local plant species in and around College as a part of Natural Conservation .

Objectives of the Practice:

- To tag each tree in the campus with QR Code and enable the students and faculty to be aware of all the scientific and preliminary information and IUCN Status of the plants.
- To Know the tree information like scientific name , medicinal significance, IUCN Status along with other interesting information.
- To gain knowledge about the College campus plants taxonomy and their ecological significance .
- To increase awareness in faculty, students and public on significance of plants and their role in day to day life .
- To increase awareness in people about the dire need of conservation of plants.

The practice :

This Practice started in 2019-2020 and after Pandemic since this academic year continuing this Practice . These codes can be easily accessed by anyone in the college faculty and students .

The college grounds also has an herbal garden with up to 50 different varieties of medicinal plants. Other than these, there are many different types of plants, like flowering plants from nearly 30 Families .

The Department of Botany generated QR codes and displayed them on the plants. Anyone with a smartphone can download a QR code scanning app, scan the code and see the scientific name and family of the plant. After finding basic information , there is massive amounts of information one can find on the internet .

QR Codes are damage resistant and can resist slight damage upto 30%. This is especially useful in a wear-and-tear environment. QR Codes are readable from any direction. That is, even if you place a QR Code upside down, it will still be scannable. Latest QR Coding technology allows us to scan from Left to right also .

Obstacles : There were No specific constraints for this Practice except financial .

Impact of the Practice :

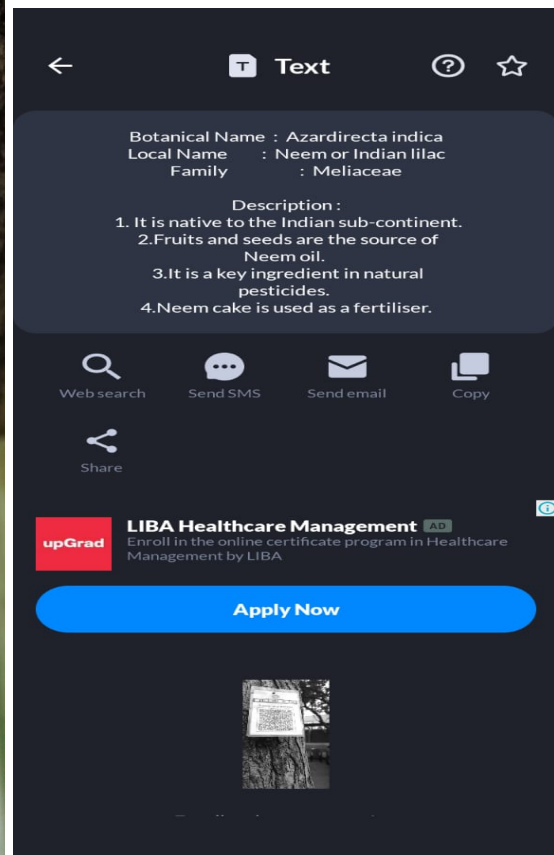
Visitors of SRR & CVR Govt Degree College , Vijayawada started to take a look at the trees and are learning more about their nature and uses. Walkers who use the grounds in the morning are also seen scanning the codes and knowing more about trees in which they are interested .

The IUCN (International Union for Conservation of Nature) categorizes the status of every plant species every year. We mentioned the status in the QR code in some plants so that one can know whether a plant species is vulnerable, or endangered, or nearing extinction, threatened or in the red list already; it will encourage people to know about the plant status and also help in Plant Conservation .

In future we are going to link QR Code to important details about the plant including plant care tips, fertilizers to be used, how and when to prune it, and what ailments is the plant prone to. And some interesting facts about the plant or parent family.

The Department of Botany is going to put forward a proposal with the Vijayawada Municipal Corporation to allow the students and teachers of the Botany department to put up the codes in the surrounding area of Machavaram as well.

Evidence of the Practice:



Best Practice - IV

Title of the practice : Feather Friendly Nosh

The Context that required the initiation of the practice:

In Current era , Bird feeding is variously advocated as an essential conservation activity, a simple way for people to connect with nature in an urbanizing world, and a means for enhancing environmental awareness and psychological well-being .The physical, psychological, educational, and social benefits from interaction with nature through a wide variety of means like bird feeding are being increasingly recognized nowadays.

Objectives of the Practice :

- Feeding Birds and Pets in the Institute
- Conservation of Biodiversity
- It can inspire people to engage in environmental advocacy and conservation action to help the many species that need more than seeds.
- increasing Humanity and Human values in students by creating awareness about the significance of Birds and Animals and their role in Nature and Food Cycles .
- Creating awareness in students practically about Ecosystem and Ecological Components and their interdependence .
- Protecting the Feather friends from Hunger and Thirsty
- Practical way of realizing the interdependence among birds and trees as Birds play an important role in pollination and fertilization of plants.
- Making students more engaged with the natural world and the wildlife around them and realizing their responsibility of conserving the life forms

The practice :

Obstacles :

- Bird feeders can be unsanitary and Cleaning can be yucky.
- Attract unwanted attention and feed the wrong birds
- Potential waste of time.
- Expense with no return.
- Feeders sometimes are noisy.
- Feeders and seeds are expensive.
- Feeders require ongoing maintenance.
- Unwanted wildlife visits feeders.

Impact of the Practice :

- ★ Helping endangered bird species to survive.
- ★ Helps to relieve the birds and pet hunger and thirst in college campus
- ★ Helping birds sustain their population.
- ★ Positive effect on the breeding behavior of birds.
- ★ Helps to maintain ecological balance.
- ★ Lowers stress levels reduces the risk of serious mental problems in students
- ★ Helps to bring awareness about the significance of birds in Plant and Human life .

Evidence of the Practice:

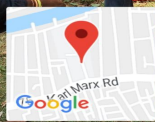
పక్షుల దాహార్తి తీర్చడం బాధ్యత

మాచవరం, న్యూస్టుడే : వేసవిలో పక్షుల దాహార్తి, ఆకలి తీర్చాల్సిన బాధ్యత ప్రతి ఒక్కరి పైనా ఉందని ఎస్సారార్ ఆండ్ సీవీఆర్ ప్రభుత్వ డిగ్రీ కళాశాల ప్రిన్సిపల్ డాక్టర్ కె. భాగ్యలక్ష్మి పేర్కొన్నారు. వృక్షశాస్త్ర ఉద్యాన వనంలో 'ఫెడర్ ఫ్రెండ్లీ నోష్' అనే కార్యక్రమాన్ని గురువారం చేపట్టారు. ఈ సందర్భంగా ఆమె మట్టి పాత్రలో నీళ్లు, గింజలు వేశారు. ఇలాంటి కార్యక్రమాలు ఎంతో ఆదర్శవంతంగా ఉంటాయని చెప్పారు. ప్రకృతి నుంచి పొందడమే కాకుండా మనవంతు ప్రకృతికి తిరిగి ఇవ్వాలన్నారు. మూగ జీవుల పట్ల కరుణ, ప్రేమ చూపాలని విద్యార్థులకు సూచించారు.



మట్టి పాత్రల్లో గింజలు వేస్తున్న భాగ్యలక్ష్మి

వృక్షశాస్త్ర విభాగాధిపతి జి.స్వప్న, అధ్యాపకులు వి.నాగపద్మావతి, డాక్టర్ సి. హెచ్. శ్రీనివాసరెడ్డి, ఐ.ప్రశాంతి తదితరులు పాల్గొన్నారు.



Vijayawada, Andhra Pradesh, India
GJ9X+PH9, Machavaram, Vijayawada, Andhra Pradesh
520004, India
Lat 16.519473°
Long 80.648995°
28/04/22 01:15 PM



Best Practice - V

Title of the practice : Azolla Culture

The Context that required the initiation of the practice:

Our college is situated in a semi urban area. Most of the students are from farmer house and agricultural backgrounds. Aware farmers and such students with the use of Azolla as a Biofertilizer and bio feed. Azolla is a protein rich pteridophyte and very useful as a biofertilizer and feed for domestic stocks. Its practices help to reduce use of chemical fertilizer and pollution.

Objectives of the Practice :

- To cultivate prepare pure culture of Azolla
- To disseminate the information to local farmers and students
- Boost use of Biofertilizers and bio feed

The practice :

Azolla is an aquatic pteridophyte. Grows naturally in river water. Cultivation tank of 8x5x1 is fitted in the Botanical garden. Soil, cow dung and phosphate is mixed in a cultivated tank. Pure culture of Azolla is spread over the surface of water. After month crop is ready. It is harvested and dried and distributed to Farmers.

Obstacles :

Impact of the Practice :


- Local farmers and students are given demonstrations of cultivation.
- Pure culture is disseminated to them to practice them on their farm.
- Farmers like and prefer this biofertilizer.

ఔషధ మొక్కలపై అవగాహన

మధురానగర్ (విజయవాడ సెంట్రల్): ఔషధ మొక్కలపై అవగాహన పెంచుకోవటంతో పాటు విరివిగా పెంచాల్సిన ఆవనరం ఎంతైనా ఉందని ఎస్ఆర్ఆర్ అండ్ సీవీఆర్ ప్రభుత్వ డిగ్రీ కళాశాల ప్రిన్సిపాల్ డాక్టర్ కె. బాగ్యలక్ష్మి తెలిపారు. మాచవరం ఎస్ఆర్ఆర్ అండ్ సీవీఆర్ ప్రభుత్వ డిగ్రీ కళాశాలలో వృక్ష శాస్త్ర విభాగం ఆధ్వర్యంగా ఔషధ మొక్కలు గురించి

సోమవారం అవగాహన కల్పించారు. ఈ సందర్భంగా ఆమె మాట్లాడుతూ ఏయే మొక్కలును ఏయే రోగాలకు వినియోగించవచ్చో ప్రజల్లో అవగాహన కల్పిస్తున్నామని చెప్పారు. అనంతరం మాచవరం వుర వీధుల్లో తిరుగుతూ ఔషధ మొక్కల గురించి అవగాహన కల్పించటంతో పాటు విత్తనాలు పంపిణీ చేశారు. కార్యక్రమంలో వృక్షశాస్త్ర విభాగాధిపతి ఎంఎస్ జి.స్వప్న ఆధ్యాపకులు నాగపద్మావతి, డాక్టర్ సీహెచ్ శ్రీనివాసరెడ్డి పాల్గొన్నారు.


PRINCIPAL
SRR & CVR GOVT. DEGREE COLLEGE
(Autonomous)
Machavaram, VIJAYAWADA-520 004


Signature of Incharge.
LECTURER IN CHARGE
Dept. of Botany
SRR & CVR GOVT. DEGREE COLLEGE
VIJAYAWADA-4, Krishna Dist.

The practice :

The practice was planned and initiated from the 2021-2022 academic year . Students collected several easily available Medicinal plants and seeds and planted them in some area of our Department Botanical garden .

In the Botanical garden some area was exclusively reserved for Medicinal plants . The plot was prepared , plowed and some medicinal plants seeds were sown and plantlets were planted . Work was divided among students for watering and maintenance of the herbal garden .

Obstacles : Conservation and Maintenance of the saplings and seeds is a main challenge along with some financial constraints.

Impact of the Practice : Impact yet to see as the herbal garden is in its initial stages and we expect the herbal garden products will be consumed well by faculty and students in the college and hopefully public . We hope Students,faculty and Public will start to consume herbal medicine for simple ailments and improve their general health and resistance in a safer way and know the significance and need of conserving these plants in their houses .

Evidence of the Practice: Link below is the evidence of the practice.



Principal
Principal
SRR & CVR GOVT. DEGREE COLLEGE
(Autonomous)
Machavaram, VIJAYAWADA-520 004

Gopu
Signature of Incharge
LECTURER IN CHARGE
Dept. of Botany
SRR & CVR GOVT. DEGREE COLLEGE
VIJAYAWADA-4, Krishna Dist.

Impact of the Practice :

- ★ Helping endangered bird species to survive.
- ★ Helps to relieve the birds and pet hunger and thirst in college campus
- ★ Helping birds sustain their population.
- ★ Positive effect on the breeding behavior of birds.
- ★ Helps to maintain ecological balance.
- ★ Lowers stress levels reduces the risk of serious mental problems in students life.
- ★ Helps to bring awareness about the significance of birds in Plant and Human life.

Evidence of the Practice:

పక్షుల దాహార్తి తీర్చడం బాధ్యత

మాచవరం, న్యూస్టుడే : వేసవిలో పక్షుల దాహార్తి, ఆకలి తీర్చాల్సిన బాధ్యత ప్రతి ఒక్కరి పైనా ఉందని ఎస్సార్ అండ్ సీవీఆర్ ప్రభుత్వ డిగ్రీ కళాశాల ప్రిన్సిపల్ డాక్టర్ కె. బాగ్యలక్ష్మి పేర్కొన్నారు. వృక్షశాస్త్ర ఉద్యాన వనంలో 'పెదర్ ప్రెంజీ నోడ్' అనే కార్యక్రమాన్ని గురువారం చేపట్టారు. ఈ సందర్భంగా ఆమె మట్టి పాత్రలో నీళ్లు, గింజలు వేశారు. ఇలాంటి కార్యక్రమాలు ఎంతో ఆదర్శవంతంగా ఉంటాయని చెప్పారు. ప్రకృతి నుంచి పొందదమే కాకుండా మనవంతు ప్రకృతికి తిరిగి ఇవ్వాలన్నారు. మూగ జీవుల పట్ల కరుణ, ప్రేమ చూపాలని విద్యార్థులను సూచించారు.



మట్టి పాత్రల్లో గింజలు వేస్తున్న బాగ్యలక్ష్మి

వృక్షశాస్త్ర విభాగాధిపతి జి.స్వప్న, అధ్యాపకులు వి.నాగపద్మావతి, డాక్టర్ సి.హెచ్. శ్రీనివాసరెడ్డి, ఇ.ప్రశాంతి తదితరులు పాల్గొన్నారు.



Principal
PRINCIPAL
SRR & CVR GOVT. DEGREE COLLEGE
(Autonomous)
Machavaram, VIJAYAWADA-520 004

Gara
Signature of In Charge
LECTURER IN CHARGE
Dept. of Botany
SRR & CVR GOVT. DEGREE COLLEGE
VIJAYAWADA-4, Krishna Dist.